# Machine－building sector profile． Moldova 

PREPARED FOR：International Trade Centre，Eastern Partnership： ＂Ready to Trade－an EU4Business initiative＂Project
BY：Dumitru Slonovschi and Irina Batiri
August－December， 2018

## TABLE OF CONTENTS:

SUMMARY .....  .5
INTRODUCTION ..... 8
0.1 Scope of the research ..... 8
0.2 Applied methodology .....  8
0.3 Limits and barriers of the research .....  9
LIST OF ACRONYMS ..... 11
CHAPTER I: DESK RESEARCH ..... 12
1.1 Macroeconomic overview of the sector ..... 12
1.2 Investments in long-term assets ..... 13
1.3 Number of companies and employees in the analysed machine-building industry sub-sectors. 1 ..... 15
1.4 Geography of the companies in the analysed industries ..... 17
1.5 Type of property in the machine-building sector ..... 19
1.6 Rubber, plastic metal products ..... 20
1.7 Machine-building industry ..... 21
1.8 Companies rendering services adjacent to machine-building ..... 22
1.9 Production volumes, Republic of Moldova ..... 23
1.10 Exports and imports in the sector ..... 24
1.11 Human resources ..... 28
CHAPTER 2: SURVEY RESULTS ..... 31
2.1 Respondent profiling ..... 31
2.2 Membership in associations ..... 33
2.3 Governmental assistance and assistance from international organizations ..... 33
2.4 Exports ..... 35
2.5 Marketing ..... 37
2.6 Staffing ..... 39
2.7 Company development ..... 42
CONCLUSIONS ..... 43
APPENDIX ..... 45

## Figures:

Fig. 1.1: Manufacturing industry value added share of GDP .......................................................................... 12
Fig. 1.2: Investments in long-term assets ............................................................................................................ 13
Fig. 1.3: Investments in long-term real assets. Rubber, plastic and metal products (RPM products) ......... 13
Fig. 1.4: Investments in long-term assets. Machine-building industry ............................................................. 14
Fig. 1.5: Investments in long-term assets. Services adjacent to machine-building industry ......................... 14
Fig. 1.6: Number of reporting companies............................................................................................................. 15
Fig. 1.7: Number of personnel ............................................................................................................................... 15
Fig. 1.8: Mean number of personnel per company............................................................................................. 15
Fig. 1.9: Number of companies having a certain number of employees, companies..................................... 16
Fig. 1.10: Origin of the company depending on the number of staff................................................................. 16
Fig. 1.11: Structure of industries by company size............................................................................................. 16
Fig. 1.12: Geography of companies in the analysed industries ......................................................................... 17
Fig. 1.13: Structure of the industry per regions ................................................................................................... 17
Fig. 1.14: Number of machine-building companies per rayon, number of companies ................................... 18
Fig. 1.15: Area where the companies are situated .............................................................................................. 18
Fig. 1.16: Type of property ...................................................................................................................................... 19
Fig. 1.17: Average number of employees per sub-industry and ownership of the company ........................ 19
Fig. 1.18: Number of companies RPM products sub-industry .......................................................................... 20
Fig. 1.19: Number of companies in machine-building industry ......................................................................... 21
Fig. 1.20: Number of companies rendering adjacent services.......................................................................... 22
Fig. 1.21: Value of production (2-digit NACE codes)......................................................................................... 23
Fig. 1.22: Dynamics of external trade flows........................................................................................................ 25
Fig. 1.23: Dynamics of export and import, by type of product........................................................................... 25
Fig. 1.24: Export structure, HS-2........................................................................................................................... 26
Fig. 1.25: Imports structure, HS-2 ......................................................................................................................... 27
Fig. 1.26: Number of employees in different sectors of Moldovan economy from 2013 to 2017.................. 29
Fig. 1.27: Number of employees in machine-building industry from 2013 to 2017........................................ 29
Fig. 2.1: Type of enterprise, N=50......................................................................................................................... 31
Fig. 2.2: Ownership in the interviewed companies, $\mathrm{N}=50$................................................................................. 32
Fig. 2.3: Local/ foreign capital of the company, N=50........................................................................................ 32
Fig. 2.4: Company establishment.......................................................................................................................... 32
Fig. 2.5: Company sales, N=50 .............................................................................................................................. 33
Fig. 2.6: Types of aid needed by companies (besides grants and financial aid), N=50................................ 34
Fig. 2.7: Preferred source of assistance............................................................................................................... 34
Fig. 2.8: Export in 2017, N=50 ............................................................................................................................... 35
Summary ..... 4
Fig. 2.9: Export in the past 3 years (2015-2017), N=50 ..... 35
Fig. 2.10: Export destinations, $\mathrm{N}=50$ ..... 36
Fig. 2.11: Trademarks for products / services sold on the local market and on the external market ..... 37
Fig. 2.12: Methods for client-needs assessment, $\mathrm{N}=50$ ..... 37
Fig. 2.13: Promotion channels for products/ services on the local market, N=50 ..... 38
Fig. 2.14: Promotion channels for products/ services on the foreign market, $\mathrm{N}=35$ (exporting comp.) ..... 38
Fig. 2.15: Setting objectives for the following 1-3 years, N=50 ..... 39
Fig. 2.16: Number of employees, people ..... 39
Fig. 2.17: Level of difficulty employing new staff for the analysed positions, $\mathrm{N}=50$ ..... 40
Fig. 2.18: Share of operational process employees per type of educational background, $\mathrm{N}=50$ ..... 40
Fig. 2.19: The extent to which the diploma of the trained staff corresponds to the specialization needed by the company, $\mathrm{N}=39$ ..... 41
Fig. 2.20: Universities, whose graduates work in the interviewed companies, $\mathrm{N}=50$ ..... 41
Fig. 2.21: Top 3 barriers for company development, $\mathrm{N}=50$ ..... 42
Tables:
Table 0.1: Sub-sectors analysed .....  8
Table 1.1: Amount of production ..... 24
Table 1.2: Top 10 3-digit NACE codes in terms of production value, million \$ ..... 24
Table 1.3: Exports of domestic goods. Top 10 positions, 2016 ..... 26
Table 1.4: Exports of domestic goods. Top 10 positions, 2017 ..... 27
Table 1.5: Imports of domestic goods. Top 10 positions, 2016 ..... 28
Table 1.6: Imports of domestic goods. Top 10 positions, 2017 ..... 28
Table: 2.1: Number of vacancies per employee level ..... 40
Appendix:
Appendix 1: Number of companies for analysed NACE rev. 2 codes, depending on the number of employees ..... 45
Appendix 2: Value of production, Republic of Moldova, thousand MDL ..... 48
Appendix 3: Export amount on the level of four-digit code, 2016-2017 ..... 49
Appendix 4: Import of foreign commodities, trade value, 2016-2017 ..... 63

## SUMMARY

This report presents an overview of the Moldovan machine-building sector and is based on secondary data, collected via 1) desk research, and 2) primary data, collected via a survey.

The desk research was conducted based on the information from the National Bureau of Statistics and the UN Comtrade website and includes data on the three sectors - 1) rubber-plastic-metal products, as potential components for the machine-building industry, 2) the machine-building industry and 3) the sector of companies rendering adjacent services.

The survey was conducted with the goal to collect information from the top representatives of the machinebuilding sector in order to present the companies in a brochure meant to inform potential foreign investors. The survey does not include foreign companies and only covers large-sized local companies. The firms for the sample frame were selected by experts and therefore the sample is not representative of the population of companies described in the desk research.

## Desk research results

Macroeconomy indicators. According to the data from National Bureau of Statistics, share of processing industry from GDP has oscillated between 11-12\% between 2012 and 2017. Based on older data available for machine-building industry in particular, its share from GDP was around 1.5-2.4\% between 2010 and 2014.

Back in the Soviet past the output of the machine-building industry was almost entirely intended for the Soviet market. After Moldova gained independence, many of the commercial relations with former partners were lost but starting with 2005 the exports of the machine-building industry products increased and since then, they continue to grow, and so do the imports. Electrical machinery, equipment and parts thereof are the main export category, being the product of the numerous foreign capital companies producing cables in Moldova.

Machine-building has become an important direction of foreign direct investments recently. The foreign investors engage into capital construction, open up large plants mainly in the free economic zones and contribute to the sector development from several perspectives: financial investment, job creation, investment into human resources.

Analysis of the population of companies registered under relevant NACE codes. One of the main findings of the combination of the two methods - desk research and survey, is that the population of companies now registered in National Bureau of Statistics under codes relevant for the matter of this research, includes 1) inexistent / non-active companies, 2) companies mainly occupied in other spheres rather than their NACE code.

Overall, there are 1816 companies registered under NACE codes, relevant for the study (843 specialized in RPM, 799 - in adjacent services and 174 - in machine-building), however, 664 companies have 1 employee, 226 - 2 employees and 383 from 3 to 5 employees. Thus, majority are micro-enterprises, and one can doubt that the companies with 1 employee are active.

The largest companies engage in machine-building sector (not in RPM or adjacent services) and out of the 22 companies with more than 150 employees, 8 are foreign-capital and 3 - mixed-capital companies. Even though 1593 of 1816 companies are local companies of private property, still the largest employers in the country are cable-production companies with foreign capital (Draexlmaier - over 3000 employees, Fujikura - over a thousand employees, Sammy Cablaggi - over seven hundred, SEBN - half a thousand employees) and in fact these companies drive the industry trends.

The majority of the analysed companies are placed in Chisinau municipality - 1202, other 256 are placed in the central region, and 212 - in the northern region, southern rayons host 146 companies. In case of each of the three analysed sectors, companies are predominantly situated in urban areas.

Production volume in 2016 equalled $\$ 13,221$ million, processing industry value of production equalled $\$ 2,997$ million, therefore its share was of $22.7 \%$. The production value of the analysed categories of machine-building sectors, sum up to $\$ 492$ million, therefore their share from the overall production was 3.7\%.

Survey results. The machine-building in Moldova includes several segments of companies. Overall there can be identified two large segments - Soviet time companies and companies that were opened after 1990. There are two directions in the first segment - companies that managed to cope with the changes that came after Moldova gained independence and those companies that did not. Several legends of Soviet machine-building industry have practically ceased their professional activity and now only rent their huge manufacturing spaces. The other direction includes companies that did their best to cope with the crisis and looked for new opportunities for development. Still, quite often these companies have to deal with lack of new equipment, dependence on a limited number of clients and lack of infrastructure - a lot of supplies need to be purchased abroad, while lack of local market means that the final products also need to be exported.

An important direction of machine-building industry includes agricultural transportation, for which there is a relatively developed local market. Overall it can be stated that machine-building industry is mainly working on the B2B market and is mainly oriented towards export.

Quite many companies occupied in RPM industry appeared after 1990s. However, it needs to be specified that RPM in fact mainly stands for "plastic" and "metal", there are few "rubber" companies. The RPM companies in their turn are oriented towards both - B2C and B2B markets.

Strategic management is important for company development. This aspect was assessed with the help of several questions related to planning, marketing and staff management. The sphere for which majority of companies noted that they have written plans - is production, with $66 \%$ of respondents specifying that they have written plans and monitor their performance against these plans. As for exports, marketing, staff, and sales, companies are less inclined to have a written plan.

Working with existent clients, preserving the status-quo is a trait of many of the interviewed companies. Survey data show that only five of the fifty interviewed companies are members of associations, only two companies mentioned that they received Governmental aid and nine companies - received assistance from international organizations. These data give a new-angle interpretation to the survey result showing that $68 \%$ of interviewees would appreciate visits to plants abroad, $48 \%$ - visits of international experts to their plant and the same percentage - assistance in finding foreign suppliers of equipment. Companies say they are interested, but the data show that the interest does not materialize in concrete actions.

The top three barriers for company development include small dimension of the local market, scarce financial resources of the companies for investment and lack of HR. Companies often need many ordinary employees for operational processes, they are ready to employ them and teach them on-spot.

The main promotion channel for both local and foreign market is participation in exhibitions and fairs. Quite many companies noted that their clients find them on their own. Most likely it is word-of-mouth promotion, since a lot of companies, even large in terms of number of staff, do not have a web-site, and might not even be found on the internet besides information on their address and administrator name.

B2B sales even do not require companies to have a trademark. Thus, $57 \%$ of the interviewees, that export, noted that they do not have a trademark for the external market and $64 \%$ of the 50 companies do not have a trademark for the local market.

In terms of exports, majority of the interviewees do export their products (64\%), the highest share of exporting companies was registered in case of machine-building companies $-79 \%$ and the lowest share in case of RPM companies that can address B2C market and have a local potential. The main partners for importing supplies of raw materials and for exports of own production are the historical partners - Russian Federation, Ukraine and Romania. Among EU partners the most evident are Germany and Italy.

## INTRODUCTION

This research has been carried out by Dumitru Slonovschi and Irina Batiri in the framework of the project "Eastern partnership: Ready to Trade - an EU 4 Business initiative".

### 0.1 Scope of the research

The objective of this study is to provide a further understanding of the machine-building sector in Moldova, by identifying the main challenges faced by the companies in the sector and opportunities for growth.

### 0.2 Applied methodology

In order to have a deeper understanding of machine-building in Moldova, the sector for the matter of this research can be categorised into three sub-sectors: RPM products for machine-building industry (this subsector includes rubber, plastic and metal products - RPM), machine-building industry as such and adjacent services. The other reports ${ }^{1}$ on Machine-building industry in Moldova focus on machine-building sub-sector only.

In order to have a comprehensive understanding of the machine-building sector in Moldova, the report analyses the sector using secondary data and primary data.

## Secondary data

An assessment of the machine-building sector, using data from the National Bureau of Statistics data and UN Comtrade database, provides an insight into the sector and its potential for growth. In particular, the following codes were taken into consideration.

The machine-building sector is defined, according to the following codes of the Classifier of Activities in Moldova Economy (CAEM rev. 2 - Clasificatorul Activităţilor Economice a Moldovei - in Romanian http://www.statistica.md/public/files/Clasificatoare/Grupe ind Rev.2.pdf), which have been harmonized to the European standard NACE Rev. 2. The codes coloured with green are entirely included into the research, while the 2-digit codes marked with red are included only partially (as presented in the footnote).

Table 0.1: Sub-sectors analysed ${ }^{2}$

| Rubber, plastic and metal products (RPM products) | C22 | Manufacture of rubber and plastic products |
| :---: | :---: | :---: |
|  | C23 | Manufacture of other non-metallic mineral products (C2390 Manufacture of abrasive products and non-metallic mineral products n. e. c.) |
|  | C24 | Manufacture of basic metals (all except for C2440 Basic precious and other non-ferrous metals) |
|  | C25 | Manufacture of fabricated metal products, except machinery and equipment |
| Machinebuilding industry | C26 | Manufacture of computer, electronic and optical products |
|  | C27 | Manufacture of electrical equipment |
|  | C28 | Manufacture of machinery and equipment n. e.c. |
|  | C29 | Manufacture of motor vehicles, trailers and semi-trailers |
|  | C30 | Manufacture of other transport equipment |
|  | C32 | Other manufacturing (C3299 Other manufacturing n. e. c.) |
| Services adjacent to machine- | C33 | Repair and installation of machinery and equipment |
|  | M71 | Architectural and engineering activities; technical testing and analysis (M7112 Engineering activities and related technical consultancy, M7120 Technical testing and analysis) |

[^0]building industry

Scientific research and development (M7211 Research and experimental development on
M72
biotechnology, M7219 Other research and experimental development on natural sciences and
engineering)

In order to analyse external trade flows, data from UN Comtrade database was used. Particularly, the following codes were taken into consideration: 80 - Tin and articles thereof, 81 - Other base metals, cermets, articles thereof, 82 - Tools, implements, cutlery etc. of base metal, 83 - Miscellaneous articles of base metal, 84 - Nuclear reactors, boilers, machinery etc., 85 - electrical, electronic equipment, 86 Railway, tramway locomotives, rolling stock, equipment, 87 - Vehicles other than railway, tramway, 88 Aircraft, spacecraft, and parts thereof, 89 - ships, boats and other floating structures, 90 - optical, photo, technical, medical, etc. apparatus.

The Moldovan National Bureau of Statistics data was used to analyse the share of machine-building from GDP, volume of production and size of investments in the sector.

## Survey Results

A survey was carried out to identify key firms engaging in the machine-building sector in Moldova.
Sample size: 50 respondents (general director/ executive director/ head technologist).
Data collection method: face-to-face interviews.
Geography: no limits were set for the survey - the companies were selected regardless of their location in Moldova.

## Selection criteria:

The sample was selected by the research team based on several criteria:

1. Company size. The companies with the largest number of employees were selected, since smaller companies, and particularly those that only have 1 employee most often are not active. The largest companies also have a larger export potential. For this reason, the database of the companies has been sorted by the number of employees per company and for each category the top companies were included in the sampling frame. There was no such criterion as exact minimum number of employees, since it varies a lot depending on the sub-sector. Therefore, only micro companies were excluded.
2. Company capital origin. Predominantly local companies were selected ( $51 \%+$ of local capital).
3. Company products and services. Companies that manufacture products for machine-building industry (companies producing products/ rendering services related to transportation or equipment) were included in the research. Companies that manufacture products that are not related to machinebuilding, that are highly specialized and not related were not selected. Thus, companies that produce double-glazed windows did not enter the sample.

### 0.3 Limits and barriers of the research

1. Information obtained from the National Bureau of Statistics was presented on the level of 2-digit codes, thus it also includes irrelevant information on some 4-digit codes that do not enter the scope of this research. Data for long-term real estate assets have been obtained from the National Bureau of Statistics on the level of 2-digit codes, the fact that means that all 4-digit codes inside the 2-digit codes were included in the data.

In case of data on production volumes, 3-digit code aggregates were obtained from the National Bureau of Statistics, that means that again, all 4-digit codes that are included in these 3-digit codes entered the analysis.
2. Desk research related to the information on companies was conducted based on data from National Bureau of Statistics, representing companies selected by their NACE code. Many of these companies only have 1 employee that makes the authors believe that these are inexistent/ non-active companies.
3. Up-to-date information on the share of machine-building sector from GDP was not possible to obtain from the National Bureau of Statistics (NBS) since NBS declared that the human resources of the

Bureau are limited and the Bureau cannot offer this information, thus older information (2010-2014) from the NBS web-site has been used.
4. The survey presented in this report is not representative of the industry, since the sample was not probability, but conventional. The data need to be analysed with caution.

## LIST OF ACRONYMS

| ADR Nord | North Region Development Agency |
| :---: | :---: |
| APIP | Association of Employers from the Manufacturing Industry (Asociatia Patronala din Industria Prelucratoare) |
| ATEX | Certification that describes equipment and work space allowed in an environment with an explosive atmosphere |
| CIS | Commonwealth of Independent States |
| EBRD | European Bank for Reconstruction and Development |
| FEZ | Free economic zone |
| GAV | Gross added value |
| GDP | Gross domestic product |
| GOST | (Russian: ГOCT) stands for a set of technical standards from the Euro-Asian Council for Standardization, Metrology and Certification (EASC) |
| ISO | International Organization for Standardization |
| NACE | Statistical classification of economic activities in the European Community (Nomenclature statistique des activités économiques dans la Communauté européenne) |
| NBS | National Bureau of Statistics |
| RPM | Rubber, plastic, metal products |
| MIEPO | Moldova Investment and Export Promotion Organization |
| OHSAS | Occupational Health and Safety Assessment Series |
| SARD | Support for Agriculture and Rural Development in ATU (Autonomous Territorial Unit) Gagauzia |
| UN | United Nations |
| UNIDO | United Nations Industrial Development Organization |
| USSR | Union of Soviet Socialist Republics |
| VAT | Value added tax |

## CHAPTER I: DESK RESEARCH

The Moldovan machine-building industry is founded on a strong Soviet industrial past. Since then, it has undergone significant changes. Until 1990, the USSR invested into capital construction and the development of large plants in Moldova producing various equipment both for civil and military purposes.

After Moldova gained independence, several Soviet-time leaders of machine-building industry have practically ceased their activity in the sphere of machine-building and have reoriented to other domains, primarily renting the facilities that were used for production purposes in the past. Present industry leaders orient their production to other domains, such as cables and wires.

Even though overall share of citizens employed in the machine-building industry is relatively low as compared to the leading economy activities, however, the companies in machine-building and particularly the ones with foreign capital are the top employers in the country in terms of the number of personnel employed.

International experts emphasize the fact that since Soviet times great majority of enterprises in machinebuilding have been privatised. Overall the level of governmental interference in the industry is assessed as low. One of the most prominent governmental measures aimed at investment attraction and industry development is creation of free economic zones (FEZ). There are seven of them in Moldova and a significant share of FEZ activity is related to machine-building. The most prominent foreign capital companies in machine-building are situated in FEZ: DraexImaier, Coroplast, Gebauer \& Griller, SEBN. The main advantage of activating in a FEZ is related to fiscal incentives (lack of VAT, no export duties for sales to Commonwealth of Independent States (CIS), export duty reduction for some product categories exported to the European Union). Thus, according to a recent report on activity of FEZ in Moldova, in 2018, 88\% of the FEZ production was exported.

### 1.1 Macroeconomic overview of the sector

The share of the manufacturing industry from Gross Added Value (GAV) oscillates between 13.6\% and $14.4 \%$ between 2012 and 2017, while its share in Gross Domestic Product (GDP) is about 11-12\%, remaining relatively stable over the analysed period. Manufacturing industry also encompasses machinebuilding industry.

Fig. 1.1: Manufacturing industry value added share of GDP


Source: chart designed by authors based on data from statistica.md.
Data on the machine-building industry from GDP or GAV is available only till 2014. Based on this data, share in GDP of the following sectors - manufacturing of machines and equipment; manufacturing of office and computing machines; production of electrical machines and apparatus; production of radio and TV equipment and apparatus; production of medical, precise and optical apparatus and instruments; production of road transportation and other transportation - increased from $1.5 \%$ in 2010 to $2.4 \%$ in 2014.

### 1.2 Investments in long-term assets ${ }^{3}$

From 2015 to 2017, investments in the long-term assets have increased in all the three machine-building subsectors. There has been a greater investment in RPM products, followed by the machine-building industry. The trends are rather foreseeable, since the number of companies in RPM business is larger than in the two other machine-building sub-industries. At the same time, RPM and machine-building are production companies that imply usage of specialized equipment, investments in facilities to house the production processes. On the other side, services usually require fewer capital investments both in equipment and in real estate.

Fig. 1.2: Investments in long-term assets


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
In the sub-industry of RPM products, the largest investments in long-term assets are made by companies manufacturing "other non-metallic mineral products". However, it is important to note that C23 is a 2-digit code that comprises several industries that do not belong to the scope of this research, such as C23.1 Manufacture of glass and glass products, C23.2 Manufacture of refractory products, C23.3 Manufacture of clay building materials, C23.4 Manufacture of other porcelain and ceramic products, C23.5 Manufacture of cement, lime and plaster, C23.6 Manufacture of articles of concrete, cement and plaster, C23.7 Cutting, shaping and finishing of stone. All of these industries imply usage of specialized equipment and therefore this data needs to be analysed with attention. There has been a decrease of investments in case of rubber and plastic products from 2015 to 2016.

Fig. 1.3: Investments in long-term real assets. Rubber, plastic and metal products (RPM products)


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

[^1]In the sub-industry of machine-building there is an interesting observation. While long-term tangible investments in C27 "Manufacture of electrical equipment" and C32 "Other manufacturing" have decreased, due to C29 - "Manufacture of motor vehicles, trailers and semi-trailers", the overall trend per machinebuilding is positive, as it could be seen from the Fig. 1.2. As it can be noticed throughout the entire report, C 29 is mainly driven by foreign-capital companies producing cables.

Fig. 1.4: Investments in long-term assets. Machine-building industry


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
Long term investments in the sub-industry of services adjacent to machine-building have increased over the three years, from 2015 till 2017. The increase is mainly explained by the fact that in 2017 there appeared long-term investments in M71 Architectural and engineering activities, technical testing and analysis and M72 Scientific research and development.

Fig. 1.5: Investments in long-term assets. Services adjacent to machine-building industry


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.3 Number of companies and employees in the analysed machine-building industry sub-sectors

Overall, in all three sub-sectors of the industry there are 1816 companies that regularly report to the National Bureau of Statistics (NBS).

The largest share of the analysed industry is represented by companies, producing RPM products (843 of 1816 companies, reporting regularly to NBS) and engaging in adjacent services (799).

Fig. 1.6: Number of reporting companies


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
Most employees are engaging in the machine-building industry - 11,868 employees (or $47 \%$ of the industry employees). This is explained by the fact that the mean number of personnel per company is largest in case of machine-building industry as compared to RPM and adjacent services.

Fig. 1.7: Number of personnel


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
Fig. 1.8: Mean number of personnel per company


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

Meanwhile, it is important to note that in each of the analysed sub-industries, a significant share of companies ( $37 \%$ or 664 companies) only has 1 employee. In some cases, this might be an indicator of the intention of these companies to stop their activity. A similar conclusion can be made about 2-employee companies.

According to the Law Nr. 179 from 21.07.2016, micro-enterprises are those that have at most 9 employees and revenue does not exceed 9 million MDL; small enterprises are those that have 10-49 employees and their revenue does not exceed 25 million MDL; medium enterprises are those that have from 50 to 249 employees and their revenue does not exceed 50 million MDL. However, number of employees is considered the defining criterion.

Fig. 1.9: Number of companies having a certain number of employees, companies


$\square 1$ employee<br>- 2 employees<br>- 3-5 employees<br>$\square$ 6-9 employees<br>- 10-49 employees<br>- 50-149 employees<br>■ 150-249 employees<br>- 250+ employees

Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
It can be observed that while ownership of micro and small companies most often belongs to Moldovan citizens, among the medium companies share of those with foreign ownership is increasing. In case of large companies, even though their number is not so large (11), share of foreign companies is prevailing (55\%).

Fig. 1.10: Origin of the company depending on the number of staff


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
The largest share of 1-person companies engage in adjacent services ( $40 \%$ ). The smallest share of micro companies is in the machine-building sector ( $62 \%$ as compared to $81 \%$ in case of the companies producing RPM products and $86 \%$ in case of companies rendering adjacent services).
Fig. 1.11: Structure of industries by company size


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.4Geography of the companies in the analysed industries

The machine building industry is concentrated in the capital. The majority of the companies (66\%) are registered in Chisinau municipality, in particular - in the capital - Chisinau. The second largest share is registered in other central rayons (14\%), third - in the north (12\%).

Fig. 1.12: Geography of companies in the analysed industries


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
The largest share of machine-building companies can be observed in the Chisinau municipality. In the case of southern region, companies producing RPM products are observably prevailing. The only large machinebuilding company in this region is a foreign company named Coroplast from Causeni, the other two companies are micro - one has only 1 employee and 1 has 5 employees.

Fig. 1.13: Structure of the industry per regions


[^2]The figure below presents information per rayon. The two municipalities - Chisinau and Balti, and Autonomous Territorial Unit of Gagauzia are the top three regions, followed by Orhei and two Chisinau suburbs - laloveni and Straseni.

Fig. 1.14: Number of machine-building companies per rayon, number of companies


Note: blue colour represents machine-building companies, while orange represents the rest of the companies from the analysed industry

Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
A great majority of the companies are situated in urban area. The largest share of rural companies has been registered as engaging in the RPM products sub-industry.
Fig. 1.15: Area where the companies are situated


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.5Type of property in the machine-building sector

The majority of companies in analysed industry are companies with Moldovan capital. Also, the majority of them are in private property. There are 98 purely foreign-owned companies and 81 companies with mixed capital.

Fig. 1.16: Type of property


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
The largest foreign companies in the sub-industry of machine-building companies are the ones producing cables (Draexlmaier - 3062 employees, Fujikura - 1308, Sammy Cablaggi - 743, SEBN - 445, Cables \& Wires - 224, La Triveneta Cavi Development - 168, Coroplast Harness Technology - 120, ACE Cabling 94). However, there also are several foreign companies that do statistical reporting but have only 1 employee - there are 8 foreign companies with 1 employee, 1 company with 2 employees and 1 company with 3 employees.

It is important to keep in mind that while median ${ }^{4}$ number of employees working in machine-building companies with foreign capital in Moldova is 14, average number is 302.

Fig. 1.17: Average number of employees per sub-industry and ownership of the company


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

[^3]
### 1.6Rubber, plastic metal products

Among companies producing RPM products, the largest company is a foreign-owned company called OILTECH, specialized in C2222 (Manufacture of plastic packing goods), based in Chisinau and has 383 employees. The second largest company is also based in Chisinau, it is foreign-owned and is called STEINEL Electronic, it is specialized in Manufacture of other plastic products (C2229), the company has 290 employees. The third largest company is local-owned company COMECOTEH, it has 176 employees, it is also based in capital, specialized in Manufacture of plastic packing goods (C2222). The fourth largest company, employing 175 people, is POLYMER Comert Grup, local-owned company based in Chisinau, specialized in Manufacture of plastic plates, sheets, tubes and profiles (C2221). The last company in the top 5 is ASPA, local-owned company from Orhei, specialized in Machining (C2562), with 174 employees.

Table 1.1: The top five companies engaging in the machine-building sector by number of employees

|  | Company | Locality | No of <br> staff | Industry |
| :--- | :--- | :--- | :---: | :--- |
| 1 | OILTECH | Chisinau | 383 | Manufacture of plastic packing goods |
| 2 | STEINEL Electronic | Chisinau | 290 | Manufacture of other plastic products |
| 3 | COMECOTEH | Chisinau | 176 | Manufacture of plastic packing goods |
| 4 | POLYMER Comert <br> Grup | Chisinau | 175 | Manufacture of plastic plates, sheets, tubes and <br> profiles |
| 5 | ASPA | Orhei | 174 | Machining |

Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.
In the sub-industry of RPM products, the largest number of companies has been registered for the category Manufacture of builders' ware of plastic - 292 companies (out of 843 companies specialized in RPM). The largest company CONSVITRALIU, a local company situated in Chisinau, has 93 employees and produces double-glazed windows and doors (representing brands such as Veka, Aluplast, Salamander).

In the sub-industry "Manufacture of metal structures and parts of structures" there are 159 companies and the largest company is INCOMAS, situated in Chisinau, having 92 employees. There are 87 companies in the sub-industry "Manufacture of other fabricated metal products n. e. c." and the largest is ESPLAN-Lux, local company from Chisinau, employing 145 people.

Fig. 1.18: Number of companies RPM products sub-industry


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.7 Machine-building industry

The largest company engaging in the machine-building industry is called Draexlmaier from Balti and has 3062 employees. The following largest companies are Introscop from Chisinau ( 1833 employees), Fujikura from Chisinau (1308 people), Sammy Cablaggi from Falesti (743 employees) - all top four belonging to the sub-industry of Manufacture of electrical and electronic equipment for motor vehicles - C2931. The last company from the top 5 in the industry is Moldovahidromas from Chisinau with 548 employees, belonging to the sub-industry C2813 (Manufacture of other pumps and compressors).

Table 1.1: The top five companies engaging in the machine-building sector by number of employees

|  | Company | Locality | No of <br> staff | Industry |
| :--- | :--- | :--- | ---: | :--- |
| 1 | DraexImaier | Balti | 3.062 | Manufacture of electrical and electronic equipment for motor <br> vehicles |
| 2 | Introscop | Chisinau | 1.833 | Manufacture of electrical and electronic equipment for motor <br> vehicles |
| 3 | Fujikura | Chisinau | 1.308 | Manufacture of electrical and electronic equipment for motor <br> vehicles |
| 4 | Sammy Cablaggi | Falesti | 743 | Manufacture of electrical and electronic equipment for motor <br> vehicles |
| 5 | Moldovahidromas | Chisinau | 548 | Manufacture of other pumps and compressors |

Source: National Bureau of Statistics, offered upon data request.
The largest number of companies among machine-building enterprises belongs to the sub-industry of "C3250 Manufacture of companies in machine-building industry" - 17 companies, the largest being Republican Experimental Centre of Prosthetics, Orthotics and Rehabilitation, from Chisinau, with 268 employees, followed by Orthoservice with 54 employees.

There are 16 companies working in manufacture of other general-purpose machinery. The largest company in this sub-industry is "Lumea filtrelor" from Chisinau with 60 employees, followed by Berhord with 51 employees.

Fig. 1.19: Number of companies in machine-building industry


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.8 Companies rendering services adjacent to machine-building

Among the companies rendering services adjacent to machine-building, the largest companies include TOPAZ from Chisinau with 231 employees (C3320), followed by Chisinau municipal enterprise Liftservice with 216 employees (C3312), state enterprise from Chisinau, Applied Metrology \& Licensing Centre with 158 employees (C7120), State Institute of Agricultural Equipment MECAGRO (M7211) with 156 employees, Proservice Com Ltd from Chisinau (M7120) with 139 employees, and State Energetical Inspectorate (M7120) with 130 employees.
Table 1.1: The top five companies engaging in the machine-building sector by number of employees

|  | Company | Locality | No of staff | Industry |
| :---: | :---: | :---: | :---: | :---: |
| 1 | TOPAZ | Chisinau | 231 | Installation of industrial machinery and equipment |
| 2 | Liftservice | Chisinau | 216 | Repair of machinery |
| 3 | Applied Metrology \& Licensing Centre | Chisinau | 158 | Technical testing and analysis |
| 4 | State Institute of  <br> Agricultural Equipment <br> MECAGRO  | Chisinau | 156 | Research and experimental development on biotechnology |
| 5 | Proservice Com Ltd | Chisinau | 139 | Technical testing and analysis |

Source: table designed by authors based on data from National Bureau of Statistics, offered upon data request.
The sub-sector of Adjacent services comprises the largest share of state-owned companies/ enterprises / institutions ( $25 \%$ from entities registered in this sub-sector as compared to $0-2 \%$ in the other two subsectors).

In the sub-sector of adjacent services, the share of employees working in state-owned companies/ institutions is the largest as compared to the same share in the sub-sector of Machine-building companies and in the sub-industry of RPM products ( $25 \%$ of employees in this sector are state employees, as compared to $2 \%$ in the case of machine-building industry and $0,04 \%$ in case of RPM products sub-industry). This might be partially explained by a significant share of science institutes and institutions, that have been state owned from the soviet times and still are public property.

Fig. 1.20: Number of companies rendering adjacent services


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

The largest number of companies rendering adjacent services belongs to NACE code M7112 Engineering activities and related technical consultancy (306 companies), the largest being UNIVERSINJ Ltd from Chisinau with 76 employees, followed by State Engineering Institute for Territory Design with 74 employees, State Enterprise Hidro-geological Expedition from Moldova with 63 employees, State Institute for geodesy, Technical Prospects \& Cadastre INGEOCAD with 62 employees.

M7120 Technical testing and analysis sub-industry is the second largest in the sub-industry of adjacent services. The largest company in this sub-industry is state enterprise from Chisinau, Applied Metrology \& Licensing Centre with 158 employees (C7120), Proservice with 139 employees, State Energetic Inspectorate with 130 employees.

In the sub-industry of C3312 Repair of Machinery the only large company is Liftservice mentioned above. The rest have 66 employees and less.

### 1.9 Production volumes, Republic of Moldova

Overall production volume in 2016 equalled $\$ 13,221$ million, of which the processing industry value of production equalled $\$ 2,997$ million, resulting in a share of $22.7 \%$. The production value of the analysed categories of machine-building sectors, sum up to $\$ 492$ million, therefore their share from the overall production was 3.7\%.

Production value over the three analysed years, 2015-2017, has experienced a small decrease in 2016, and an increase in 2017. The largest group of RPM products manufactured is "rubber and plastic products", followed by "manufacture of non-metallic mineral products" and "manufacture of basic metals". In the case of the core group - machine-building codes, the largest value of production belongs to "computer, electronic and optical products, being followed by "manufacture of electrical equipment". It is worth noting that the former group has registered a steady growth trend over the analysed period. A similar trend can be observed in case of "manufacture of other non-metallic mineral products".

Fig. 1.21: Value of production (2-digit NACE codes)


Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

A more detailed information on production is presented in the table 1.1. The increasing production of electrical conductors, ignition spark cables is easily observable. At the same time, the production of centrifugal pumps has decreased since 2005 almost four-fold.
Table 1.1: Amount of production

|  | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electrical conductors, with or without connectors, for voltage <=1000V, thousand pieces | - | - | - | - | - | - | - | - | 3,007 | 8,691 | 10,960 | 10,508 | 16,632 |
| Ignition spark cables and other sets of cables of the type used in transportation vehicles, tones | - | - | - | - | - | - | - | - | - | 11,593 | 13,109 | 12,094 | 13,249 |
| Metal fabrics, grids, nets and girders, of iron or steel wire, tones | - | - | - | - | 7 | 4,489 | 3,747 | 4,034 | 4,564 | 5,514 | 5,143 | 5,403 | 6,010 |
| Personal computers, non-portable, pieces | 4,662 | 5,030 | 3,949 | 3,900 | 3,972 | 5,134 | 10,678 | 9,075 | 7,700 | 6,292 | 5,600 | 5,369 | 4,274 |
| Centrifugal pumps, other pumps for liquids or liquid elevators, pieces | 3,704 | 3,302 | 3,332 | 2,344 | 957 | 1,537 | 2,318 | 2,187 | 1,771 | 1,361 | 910 | 1,180 | 964 |
| Cast iron castings, tones | 2,214 | 1,914 | 1,878 | 1,294 | 784 | 875 | 1,009 | 953 | 898 | 902 | 675 | 651 | 483 |
| Machinery and equipment for the industrial preparation of food or beverages, oils, animal or vegetable fats, not included in other categories | 1,213 | 1,388 | 235 | 103 | 334 | 551 | 571 | 502 | 202 | 559 | 297 | 309 | 457 |
| Plows and disc harrows, pieces | 725 | 514 | 388 | 594 | 397 | 846 | 628 | 438 | 365 | 312 | 227 | 187 | 285 |
| Castings of steel, tones | 173 | 222 | 125 | 109 | 31 | 59 | 73 | 77 | 85 | 46 | 70 | 36 | 53 |
| Castings of light non-ferrous metals, tones | 8 | 8 | 8 | 8 | 6 | 6 | 12 | 12 | 14 | 7 | 10 | - | - |

Note: this table needs to be analysed with caution - the amount of production for different product categories is presented in different units of measure. Thus, this table represents well the trends, but less well - the relative prevalence of the product categories. For instance, the "personal computers" are presented here in "pieces", while the "electrical conductors" - in "thousand pieces".

The colouring was done "per row", thus the colour is the most intense for the highest figures per each row.
Source: chart designed by authors based on data from National Bureau of Statistics, www.statistica.md.

The following table presents the top 10 NACE codes in terms of production value. Plastic products occupy top position with a value of $\$ 125$ million or a share of $25 \%$ from the value of 2017 exports of analysed products. This product category has experienced a steady growth from $\$ 97$ to 125 million.

It is worth noting that over the analysed period, the value of group 29.3 "manufacture of parts and accessories for motor vehicles" has increased from $\$ 8$ million to $\$ 79$ million. The explanation for this phenomenon again lies in the increasing interest of foreign investors in increasing local production capacities for cables.

Table 1.2: Top 10 3-digit NACE codes in terms of production value, million \$

| Code | Name | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 7 \%}$ |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 22.2 | Manufacture of plastics products | $\mathbf{m i l} \mathbf{\$}$ | $\mathbf{\%}$ |  |  |
| 27.3 | Manufacture of wiring and wiring devices | 105 | 125 | 25 |  |
| 29.3 | Manufacture of parts and accessories for motor vehicles | 9 | 64 | 93 | 18 |
| 25.9 | Manufacture of other fabricated metal products | $\mathbf{4}$ | 44 | 79 | 15 |
| 33.1 | Repair of fabricated metal products, machinery and equipment | 27 | 27 | 40 | 8 |
| 25.1 | Manufacture of structural metal products | 28 | 25 | 29 | 6 |
| 26.5 | Manufacture of instruments and appliances for measuring, testing <br> and navigation; watches and clocks | 30 | 26 | 23 | 6 |
| 23.9 | Manufacture of abrasive products and non-metallic mineral products <br> n.e.c. | 20 | 12 | 15 | 3 |
| 28.2 | Manufacture of other general-purpose machinery | 8 | 10 | 15 | 3 |
| 28.3 | Manufacture of agricultural and forestry machinery | 5 | 8 | 10 | 2 |

Source: table designed by authors based on data from National Bureau of Statistics, offered upon data request.

### 1.10 Exports and imports in the sector

Analysis of the external trade flows shows that imports are net superior to exports for the analysed subindustries. Imports' growth is also the most observable: in 2005 the value of imports increased three-fold and by 2010 their grew seven-fold as compared to 2000. Exports decreased from 1995 to 2000 almost in half, but by 2005, they also started an upward trend (+179\% as compared to 2000 or $+34 \%$ as compared
to 1995). Import upward trend is steeper as compared to exports; it somewhat paused in 2010 and rocketed again in 2017. A similar trend can be observed in case of imports over the same period.

At the same time, while the share of re-import is close to non-existent, share of re-export is significant as compared to total exports. Therefore, in order to analyse domestic goods' exports, re-exports are subtracted from export value. The same procedure is carried out for import and re-import. It is worth noting that reimports are close to non-existent over the entire analysed period.

Fig. 1.22: Dynamics of external trade flows


Source: chart designed by authors based on data from https://comtrade.un.org/.
In order to analyse domestic goods exports, the re-exports were subtracted from exports, however, there is no data on re-exports for 1995. In order to analyse foreign goods imports, re-imports were subtracted from the total value of imports, however there is a lack of data for 1995, 2000, 2005 (the chart below presents the result of the subtraction of the re-exports from exports and of the re-imports from imports, and therefore for $1995,2000,2005$ the chart presents the total imports/ exports, since there is no data on reimports/ re-exports). While in the case of re-imports it is not a problem, since their value is not significant compared to the value of imports, in case of exports, this might be considered an issue while interpreting data for 1995.

Overall, machine-building sub-industries international trade exceeds trade flows for RPM products in case of both - imports and exports. Imports of both sub-industries have been increasing over the analysed period. Exports of machine-building industry since 2010 have shown a more prominent increasing trend than exports of RPM products.

Fig. 1.23: Dynamics of export and import, by type of product


Source: chart designed by authors based on data from https://comtrade.un.org/.

The largest share of Moldovan export in the machine-building industry belongs to the " 85 - electrical machinery and equipment and parts thereof, sound recorders, TV image recorders and reproducers, parts and accessories". The second largest export value belongs to "nuclear reactors, boilers, machinery". As it could have been expected, $87 \%$ of the exports in case of the HS 2-digit code 85 , belong to the 4 -digit code 8544 - Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors. The table for 4-digit codes export details are presented in the table below.

Fig. 1.24: Export structure, HS-2


Note: exports of domestic goods were calculated by authors via subtraction of re-exports from exports.
Source: chart designed by the authors based on the data from https://comtrade.un.org/.
Insulated wire cable and other electric conductors (HS code 8544) represented in $201759 \%$ of the value of exports of domestic goods (or $57 \%$ in 2016). This finding adds up to the number of people currently employed in the companies (mostly with foreign capital) that produce cables (Fujikura, SEBN, Draexelmaier and other). At present, the machine-building industry in Moldova is mostly represented by this sub-industry. In 2016 the following largest share ( $7 \%$ ) in the trade value of exports of belongs to gas, liquid or electricity supply or production meters, including calibrating meters. In 2017 the following largest share belongs to plastic goods (6\%).

It is worth noting that aircraft exports that enter the top 5 exports for 2017 are most likely a result of export of some aircraft that has previously been imported by Moldova, but earlier than in the year of 2017. The full detailed table with the exports of domestic goods per 4-digit codes is presented in the Appendix 3.

Table 1.3: Exports of domestic goods. Top 10 positions, 2016

| Year | Commodity | Commodity Code | Trade Value (\$) | \% of the trade value |
| :---: | :---: | :---: | :---: | :---: |
| 2016 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8,544 | 126,389,173 | 57 |
| 2016 | Gas, liquid or electricity supply or production meters, including calibrating meters therefor | 9,028 | 16,475,143 | 7 |
| 2016 | Pumps; for liquids, whether or not fitted with measuring device, liquid elevators | 8,413 | 10,834,458 | 5 |
| 2016 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics | 3,923 | 9,452,523 | 4 |
| 2016 | Copper; waste and scrap | 7,404 | 6,237,916 | 3 |
| 2016 | Navigational instruments and appliances; direction finding compasses | 9,014 | 2,893,627 | 1.3 |
| 2016 | Aluminium; waste and scrap | 7,602 | 2,832,098 | 1.3 |
| 2016 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); capsules for bottles, threaded bungs, bung covers, seals and other packaging accessories, of base metal | 8,309 | 2,425,714 | 1.1 |
| 2016 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8,703 | 2,341,564 | 1.1 |


| 2016 | Waste and scrap of primary cells, primary batteries and electric accumulators; <br> spent primary cells, spent primary batteries and spent electric accumulators; <br> electrical parts of machinery or apparatus, n.e.c. or included elsewhere in <br> chapter 85 | 8,548 | $2,161,863$ | 1.0 |
| :---: | :--- | :--- | :--- | :--- |

Source: table designed by the authors based on the data from https://comtrade.un.org/.
Table 1.4: Exports of domestic goods. Top 10 positions, 2017

| Year | Commodity | Commodity <br> Code | Trade <br> Value (\$) | of the <br> trade <br> value |
| :--- | :--- | :---: | :---: | :---: |
| 2017 | Insulated wire, cable and other electric conductors, connector fitted or not; <br> optical fibre cables of individually sheathed fibres, whether or not assembled <br> with electric conductors or fitted with connectors | 8,544 | $173,441,782$ | 59 |
| 2017 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps <br> and other closures of plastics | 3,923 | $17,118,294$ | 6 |
| 2017 | Gas, liquid or electricity supply or production meters, including calibrating <br> meters therefor | 9,028 | $14,790,174$ | 5 |
| 2017 | Aircraft n.e.c. in heading no. 8801 (e.g. helicopters, aeroplanes); spacecraft <br> (including satellites) and suborbital and spacecraft launch vehicles | 8,802 | $14,004,261$ | 5 |
| 2017 | Pumps; for liquids, whether or not fitted with measuring device, liquid <br> elevators | 8,413 | $8,914,024$ | 3 |
| 2017 | Copper; waste and scrap <br> Waste and scrap of primary cells, primary batteries and electric accumulators; <br> spent primary cells, spent primary batteries and spent electric accumulators; | 8,404 | $8,246,780$ | 3 |
| 2017 | electrical parts of machinery or apparatus, n.e.c. or included elsewhere in <br> chapter 85 | 8,548 | $3,725,190$ | 1 |
| 2017 | Aluminium; waste and scrap | 7,602 | $3,616,348$ | 1 |
| 2017 | Electric transformers, static converters (e.g. rectifiers) and inductors |  |  |  |
| 2017 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); <br> capsules for bottles, threaded bungs, bung covers, seals and other packaging <br> accessories, of base metal | 8,309 | $2,776,673$ | 1 |

Source: table designed by the authors based on the data from https://comtrade.un.org/.
Imports have constantly increased from 1995 to 2017. The largest share of imports belongs to "Electrical machinery and equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers, parts and accessories of such articles" (in 2017 the share of this code equalled to $24 \%$ ), being followed by "Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof" (in 2017 this share equalled $21 \%$ ), the top third category of imports is vehicles ( $16 \%$ in 2017). The 4-digit top of imports is presented below.

Fig. 1.25: Imports structure, HS-2


Source: chart designed by the authors based on the data from https://comtrade.un.org/.
When analysed at the level of 4-digit codes, it can be concluded that the majority of imports in the case of machine-building industry are directed for use by final consumer. Vehicles have the largest share of imports $-8.1 \%$ in 2017. The following category ( $6.2 \%$ ) can be viewed as an input for the future exports - insulated wire and cables that are used for production of cables. The top third category is also most likely directed for B2C market: telephone sets that in 2017 had a share of $5.2 \%$.

It is worth noting that while exports are very concentrated in one category, imports are distributed among many different categories. While in the case of exports, top 10 positions sum up to $85 \%$, in case of imports, top 10 positions cumulatively have a share of $33 \%$ in the total value of imports in 2016 and $42 \%$ in 2017. The full detailed table with the exports of domestic goods per 4-digit codes is presented in the Appendix 4.

Table 1.5: Imports of domestic goods. Top 10 positions, 2016
$\left.\begin{array}{|l|l|c|c|c|}\hline \text { Year } & \text { Commodity } & \begin{array}{c}\text { Commodity } \\ \text { Code }\end{array} & \begin{array}{l}\text { Trade Value } \\ \text { (\$) }\end{array} & \begin{array}{c}\text { \% of } \\ \text { trade } \\ \text { value }\end{array} \\ \hline 2016 & \begin{array}{l}\text { Motor cars and other motor vehicles; principally designed for the transport of } \\ \text { persons (other than those of heading no. 8702), including station wagons and } \\ \text { racing cars } \\ \text { Insulated wire, cable and other electric conductors, connector fitted or not; optical } \\ \text { fibre cables of individually sheathed fibres, whether or not assembled with electric }\end{array} & 8703 & 107,287,801 & 7.4 \\ \hline \text { conductors or fitted with connectors }\end{array}\right)$

Source: https://comtrade.un.org/.
Table 1.6: Imports of domestic goods. Top 10 positions, 2017

| Year | Commodity | Commodity Code | Trade Value (\$) | \% of <br> trade <br> value |
| :---: | :---: | :---: | :---: | :---: |
| 2017 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8703 | 145,722,070 | 8.1 |
| 2017 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8544 | 101,990,214 | 6.2 |
| 2017 | Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of $8443,8525,8527$, or 8528 | 8517 | 81,672,623 | 5.2 |
| 2017 | Copper wire | 7408 | 66,771,388 | 4.5 |
| 2017 | Tractors; (other than tractors of heading no 8709) | 8701 | 52,983,158 | 3.8 |
| 2017 | Motor vehicles; parts and accessories, of heading no. 8701 to 8705 | 8708 | 42,137,233 | 3.1 |
| 2017 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables | 8536 | 41,973,072 | 3.2 |
| 2017 | New pneumatic tyres, of rubber | 4011 | 36,081,832 | 2.8 |
| 2017 | Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included | 8471 | 32,835,665 | 2.7 |
| 2017 | Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415 | 8418 | 31,117,534 | 2.6 |

Source: https://comtrade.un.org/.

### 1.11 Human resources

The top three economic activities in terms of employment in Moldova are education (16\% of employed population worked in 2017 in education sector), wholesale and retail trade (16\%) and manufacturing (14\%). While education is predominantly public sector, the remaining two are private sector employers.

Machine-building belongs to manufacturing industry and its share over the years 2013-2017 has fluctuated between $4.95 \%$ and $5.30 \%$.

Fig. 1.26: Number of employees in different sectors of Moldovan economy from 2013 to 2017


Source: chart designed by authors based on data from National Bureau of Statistics, www.statistica.md.
Analysis of the machine-building sub-sectors in detail reveals a significant increase (6.5-fold as compared to 2013) in employment of personnel in the sub-sector "manufacture of moto vehicles, trailers and semitrailers". The number of employees engaged in manufacture of electrical equipment has been decreasing in 2016 and 2017.

Fig. 1.27: Number of employees in machine-building industry from 2013 to 2017


Source: chart designed by authors based on data from National Bureau of Statistics, www.statistica.md.

## Educational opportunities

Moldova has several technology-oriented educational institutions: Technical University of Moldova, technical colleges and vocational schools. Recently the Government implemented several measures in order to approach the professional education system to labour market expectations and needs.

There was created a Centre of Excellence in Energetics and Electronics, placed in Chisinau (former College of Telecommunications), Centre of Excellence in Transportation (former Transportation College).

In 2014 dual education system has been launched in Moldova ${ }^{5}$. There are several professional schools and colleges that offer technical educational paths and have an established collaboration with private companies that accept students for apprenticeships in real-life conditions. Thus, the educational time is distributed between theory and practical application in proportion 30\% theory $/ 70 \%$ practice.

Both local and foreign capital companies participate in dual education system in Moldova. The following companies offer jobs for dual education in collaboration with the professional schools and colleges: Draexlmaier, Moldagrotehnica, Sammy Cablaggi, Summimoto Electric Bordnetze, Aspa, Arttehmet,

[^4]Oiltech, Liftservice, Baslift, Grandlift, Airons, Coroplast Harness Technology, Bastractor, Grip Engineering. The advantage of dual education is related to the opportunity to acquire qualified personnel at the stage when the students are in the process of obtaining their diploma, thus, the company has the opportunity to spot the students with the highest potential, to educate them according to own processes and needs and to motivate them to continue working for the company.

## CHAPTER 2: SURVEY RESULTS

This chapter presents the results of the survey carried out among 50 companies. The sample is not representative of the entire industry. The detailed methodology of the survey is presented in the introduction to this report.

The goal of the sampling frame was to represent the top machine-building companies from Moldova (only companies with $51 \%+$ local capital were selected, we also tended to select the largest and most prominent companies per each product category). The data need to be analysed with caution, the conclusions based on this research may not be reflective of the entire sector. The reader may understand the industry better due to analysing the top representatives of the sector.

### 2.1 Respondent profiling

Almost half of the interviewed companies engage in manufacturing RPM products, 38\% - from machinebuilding and $14 \%$ engage in adjacent services. The official NACE code represents the main sphere of activity; however, the company can have a range of economic activities. Thus, the majority of those that work in machine-building also provide other services, such as research and design or services of montage and assemblage as well as dismantlement.

Most common product categories are the following: agricultural equipment (including tractors), food industry equipment, hydro-acoustic devices (for navigation and other purposes), pumps, cables, tubes, scales. Some companies in the RPM sector specialize in production of mass-market products from plastic, and some specialize in the production of metallic roofs.

The firms that engage in adjacent service include montage and assemblage as well as dismantlement; repairs, maintenance and monitoring; design, programming, research and product development, consulting; process automatization. Some firms also carry out a range of production processes, such as thermal treatment, injection, mechanical treatment, cutting, stamping, and welding.

Fig. 2.1: Type of enterprise, $N^{6}=50$


Source: calculated based on survey results.

[^5]Great majority of the interviewed companies are private-owned (92\%).
Fig. 2.2: Ownership in the interviewed companies, $\mathrm{N}=50$


Source: calculated based on survey results.
Those 4 companies ( $8 \%$ of the sample) that have a share of foreign capital ( 30 to $50 \%$ of the company capital is foreign), have investments from the following countries: France, Holland, Russia, USA (1 company per each).

Fig. 2.3: Local/ foreign capital of the company, $\mathrm{N}=50$


Source: calculated based on survey results.
Many companies were established during the Soviet Union. For instance, several of them appeared right after the Second World War (Raut, INTEH, Moldagroteh), several in the fifties - seventies (RIFACVAAPARAT, Introscop, ELIRI, Hidrotehnica, Mecagro, Lumintehnica, Moldovahidromas, Incomas, Hidroinpex). Quite a few (fifteen companies) opened in the nineties, majority of which in the sector of RPM products. Seventeen companies were established in the first decade of the current century. The remaining five interviewed companies were established in this decade.

Fig. 2.4: Company establishment


Source: calculated based on survey results.

Out of 50 companies, 23 sell exclusively to B2B and other 14 sell between 90 and $99 \%$ of their products to companies, the remaining $11 \%$ work with natural persons.

Fig. 2.5: Company sales, $\mathrm{N}=50$


Source: calculated based on survey results.

### 2.2 Membership in associations

The survey reveals that only five companies are members of an association. Three firms are APIP members and two of them consider this membership as useful. Two firms mentioned that they are members of Chamber of Commerce and Industry, even though Chamber is not an association (one respondent evaluated membership as very useful, while the other as neither not useful nor useful), one is member of Employers' Association Union of Industrialists and Entrepreneurs from Moldova (assessing it as a little useful), one is member of Association of Businessmen from Moldova (considering it very useful).

As it could be expected, the chances for the firms from Chisinau and Balti to benefit from development opportunities are higher. Two of the companies that are members of any associations are from Balti, the rest three are from Chisinau. All belong to machine-building industry, four of them have private capital and one is with mixed capital, all are $100 \%$ local companies.

Talking about types of assistance expected from membership in the associations, those five respondents, who stated that their company belongs to an association, mentioned the following: participation in legislation changes, help in finding new partners, organisation of seminars, promotion of loyal competition, organization of industry meetings.

### 2.3 Governmental assistance and assistance from international organizations

Nine companies received some type of external assistance from Government or international organizations. They found the aid to be useful.

There only were two companies that mentioned that they received governmental assistance: one of the companies situated in the Northern region mentioned that Governmental aid came for ADR Nord (North Regional Development Agency) for territory improvement, reconstruction of the water system, reconstruction of the electrical networks. Another company mentioned financial aid from the Government: money given yearly for 5 years from 2013 till 2018.

Nine companies received some type of aid from international organizations and development agencies (UNIDO, EBRD (2 respondents), Norway, MIEPO (3 respondents), SARD, Holland):

- Grant (two companies)
- Coverage of marketing and promotion expenses, brand book design (2 companies)
- Financial aid for development of new alloys (1 company)
- Support in participation at international exhibitions (2 companies)
- Equipment (1)
- Recommendation of a client (1 company)
- Setting quality management system (1 company)

When asked about preferred potential aid from Government or international organization (aid other than grants or financial resources), $68 \%$ of the respondents noted that they would prefer study tours to plants abroad. Fifteen respondents noted that they would prefer to visit plants in Germany, seven mentioned Romania, five- Austria, five - Italy, 3 - Turkey, plants and /or research centres in England (2), Japan (2), Bulgaria (2), Russia (2), Hungary (2) Czech Republic (2), France (2), Switzerland (2), Belgium, Ukraine, Denmark, Korea, Saudi Arabia. Four people mentioned EU overall. Some respondents just noted that they would appreciate if they had such an opportunity.

Visit of an international expert was the second most often named type of aid (48\%). For instance, the majority of companies mentioned they would like to receive a visit from experts in their particular industry (assemblage and production of electronic products, pumps construction, electrical works and automatization, metal processing, etc.). There were two who mentioned marketing and international promotion experts, three that mentioned issues related to metrology, certification, quality management. One respondent named companies: COSL and AKER from Norway.

Training subjects solicited by the respondents were the following:

- reaching to the external market, participating in exhibitions, marketing (4)
- public procurement,
- export facilities,
- fiscal facilities,
- salary pay, personnel policies, employee development (4).

Fig. 2.6: Types of aid needed by companies (besides grants and financial aid), N=50


Source: calculated based on survey results.
In the majority of cases, most companies would prefer to obtain assistance from an international organization rather than from the Government. However, when specifying the desired provider for the trainings, both - Government and international organizations were mentioned quite often.

Fig. 2.7: Preferred source of assistance


Source: calculated based on survey results.

### 2.4Exports

The survey reveals that $70 \%$ of the firms exported in the past three years (70\%) and 64\% exported in 2017. According to the results, $79 \%$ of machine-building firms exported in the past three years, and $63 \%$ of RPM firms exported in the same period.
Among companies that deliver their products to enterprises belonging to machine-building industry, share of those that had exports in the past three years is larger than in case of companies that do not have clients in machine-building industry ( $86 \%$ as compared to $64 \%$ ). Thus, entering the machine-building sphere forces the companies to look for partners abroad and to export, since number of potential partners in the country is extremely small.
The variables "company age" and "exports in the past 3 years" have no statistically significant relation.
Fig. 2.8: Export in 2017, N=50


Source: calculated based on survey results.
Fig. 2.9: Export in the past 3 years (2015-2017), N=50


Source: calculated based on survey results.
Fifteen of the interviewed companies export $80 \%+$ of their production, thirteen companies work predominantly on the local market ( $80 \%+$ of production is sold locally).

The firms identified the following top barriers to growth and export:

- customer identification (11 resp.);
- lack of competent human resources (6 pers.);
- customs procedures are bureaucratic (6 resp.);
- lack of investors, financial issues (6 resp.);
- problem with suppliers - expensive raw material, lack of suppliers, bad quality of material (6 resp.) + 3 respondents noted expensive energy resources, 2 - lack of modern equipment, 3 high expenditures on transportation for exports;
- certification requirements (5 resp.);
- international relations, politics (Ukrainian situation, lack of opportunity to export to Russia via Ukraine); exchange rate fluctuation, Moldovan legislation is imperfect (5 resp.);
- competition (4 resp.).

The results indicate that the main export destinations include Russia, Ukraine and Romania. Belorussia is also in the top 4. Germany, Italy and Kazakhstan were each named by 5 respondents out of 50 . Overall, the Central Asian direction is quite explored by the Moldovan exporters: Kazakhstan, Azerbaijan, Armenia, Kirgizia, Turkmenia, Uzbekistan. Still, overall, the survey reveals that European countries cumulate a larger share of Moldovan sales than other destinations.

Fig. 2.10: Export destinations, $\mathrm{N}=50$


Source: calculated based on survey results.

### 2.5 Marketing

In order to analyse to what extent companies apply marketing in their activity, a set of questions was addressed: about trade-mark, assessing client necessities, promotional methods, strategy design.

Even though a significant share of companies does have a trademark, still majority of companies do not have a trademark for their products neither on the local (64\%), nor on external market (57\%). Given the fact that the share of B2B sales in the portfolio of the interviewees prevails over B2C sales, it is an explicable finding. Quite often companies have a limited number of loyal customers and they trade their merchandise only to them, thus having no plans for extension, they consider they do not need to have a trademark or invest in marketing.

Fig. 2.11: Trademarks for products / services sold on the local market and on the external market


Source: calculated based on survey results.
Client needs assessment is another important part of company marketing activity. It is important to assess client needs regularly in order to track the trends, compare own offer to the client needs and adapt it.
Being asked about methods of clients' needs assessment, majority of the interviewees stated that they tend to assess client needs at the stage of contract negotiation (73\%) and later they also periodically ask their clients if they need something else ( $77 \%$ ). There also are $13 \%$ who consider that since their product assortment does not vary significantly, there is no need to inquire about client needs. $38 \%$ claimed that from time to time they carry out surveys to assess client needs and $23 \%$ affirm that they do it periodically.

Fig. 2.12: Methods for client-needs assessment, $\mathrm{N}=50$


Source: calculated based on survey results.

Promotion is one of the core elements of marketing mix. It is important to use promotion correctly in order to find new clients regardless of the market the company serves.

The firms were asked about promotional channels they use in order to attract new clients on the local and foreign market. B2B targeting influences the promotional channels used by companies. For the local market the following channels are mostly used by respondents: participation in exhibitions and fairs (64\%), promotion via specialized web-sites ( $64 \%$ ), and direct sales ( $62 \%$ ). $44 \%$ of the respondents also noted that clients find them on their own.

Fig. 2.13: Promotion channels for products/ services on the local market, $\mathrm{N}=50$


Source: calculated based on survey results.
Half of the exporting companies find clients via international exhibitions and fairs, $46 \%$ - do direct sales, $37 \%$ perceive local exhibitions and trade fairs as a means to find new foreign clients (most likely they hope that foreign investors and clients might visit local exhibitions in order to find potential partners). Every third company mentioned that foreign clients find them on their own.

Fig. 2.14: Promotion channels for products/ services on the foreign market, $\mathrm{N}=35$ (exporting comp.)


Source: calculated based on survey results.

Another important characteristic of successful firms is related to business planning and particularly it is important to have written plans that are approved by the key stakeholders and are therefore implemented.

It can be noted that majority of the respondents indicate that they do set objectives in written and monitor their progress against the written plans. However, there still are respondents who answered to the question on objectives saying that in Moldova it is impossible to set objectives for the future.

Export planning seems the least feasible to the respondents (one in four respondents has doubts that it is possible to plan exports). At the same time, production planning is more common among respondents. The largest share declared that they have written goals for production (66\%) and only $8 \%$ considered that in Moldova it is impossible to set objectives for the future.

In case of marketing, staffing, and sales there were respondents who do not consider it necessary to set plans for these areas.

Fig. 2.15: Setting objectives for the following 1-3 years, $\mathrm{N}=50$


Percentage of firms
Source: calculated based on survey results.

### 2.6Staffing

The average number of employees per company in the interviewed sample is 106 people. Majority of companies have up to 100 employees, however there are few very large companies that increase the mean value. One firm engaging in the machine-building industry indicated that they had 1500 people. The average number of employees for machine-building overall is larger than in case of RPM and adjacent services industries - 189 as compared to 53 and 65 correspondingly.

Fig. 2.16: Number of employees, people


Source: calculated based on survey results.

The largest number of vacancies is observed in the case of operational staff - 80 vacancies maximum and 7 vacant places on average per company. The maximum values was observed in case of RPM products company. Managers of operational processes are also searched for, but quite often these vacancies are filled in with the promoted staff from the operational processes - 1 vacancy on average per company and 13 vacancies maximum in the case of a company rendering adjacent services. Support staff vacancies average to 1.6 and maximum number of vacancies is 11 , observed in case of RPM products company and adjacent services.

Table: 2.1: Number of vacancies per employee level

|  | RPM products |  | Machine-building |  | Adjacent services |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average | Max | Average | Max | Average | Max | Average | Max |
| Staff participating in operational processes, $\mathrm{N}=45$ | 9.8 | 80 | 5.1 | 15 | 5.4 | 18 | 7.2 | 80 |
| Managers of operational processes, $\mathrm{N}=43$ | 0.6 | 4 | 0.8 | 5 | 2.8 | 13 | 1.0 | 13 |
| Support staff (accounting, marketing, HR, security), $\mathrm{N}=41$ | 1.3 | 11 | 1.6 | 10 | 2.6 | 11 | 1.6 | 11 |

Source: calculated based on survey results.
As companies state, it is most complicated for them to recruit employees for operational processes (44\% answered that it is "very complicated" and $24 \%$ - "rather complicated") compared to the rest of vacancies. One of the explanations is related to the large number of posts and, correspondingly, vacancies: the companies lack operational personnel and are ready to recruit people with no professional education and prepare them in-house. A quarter of the interviewed companies have not done recruiting for the operational process managers jobs and as for the support staff, $4 \%$ noted that it is "very easy" to recruit such specialists, while $22 \%$ declared that it is "rather easy".

Fig. 2.17: Level of difficulty employing new staff for the analysed positions, $\mathrm{N}=50$


Source: calculated based on survey results.
For the managerial positions, it is more important for the candidates/ employees to have diploma corresponding to the field of activity as compared to ordinary staff ( $71 \%$ and $35 \%$ ), while in case of nonmanagerial staff it happens more often that people with no training are employed and training is provided on the spot ( $38 \%$ of ordinary staff is employed on such terms).

Fig. 2.18: Share of operational process employees per type of educational background, $\mathrm{N}=50$


Source: calculated based on survey results.

The majority of the respondents who have staff with a diploma noted that the name of the specialization is somewhat similar to the company requirements for some of the posts. However, it is important to note that $28 \%$ of the respondents stated that in Moldova the specialists of the type needed by their enterprise are not trained.

Fig. 2.19: The extent to which the diploma of the trained staff corresponds to the specialization needed by the company, $\mathrm{N}=39$


Source: calculated based on survey results.
The companies were asked to note the educational institutions, whose graduates there are among company employees.

In the category of higher education institutions, the majority of respondents noted that among their employees there are Technical University of Moldova graduates (76\%).

Fig. 2.20: Universities, whose graduates work in the interviewed companies, $\mathrm{N}=50$


Source: calculated based on survey results.
Among colleges, the most often mentioned where technical and polytechnical colleges.
The vocational school that was mentioned most often was Vocational School number 10 from Chisinau (this school offers such specializations as welder, electrician, mechanist, lathe operator), Vocational School from Ceadir-Lunga (carpenters training, tractor drivers training, agricultural machines drivers training, locksmiths training, teaching restorers of plaster and stucco products) and Vocational School from Orhei (crane operator, excavator operator, locksmith).

### 2.7Company development

The firms were asked to indicate the top three barriers for company development. The results reveal that $50 \%$ of the firms consider that the local market is too small and for $28 \%$ of the respondents this was the number one response. Other key barriers include a lack of human and financial resources.

Fig. 2.21: Top 3 barriers for company development, $\mathrm{N}=50$


Source: calculated based on survey results.
Certificates. Access to foreign markets and development of the company overall is conditioned by the company's readiness to comply with international standards and its readiness to invest human resources, financial resources and time in obtaining international certifications that attest the high-quality standards implemented in the company. Therefore, the survey asked the companies to tell if they had any certificates and what where those.

It can be observed that the most common certificate is ISO - 22 companies (mainly ISO 9001:2015, however there also are companies that mentioned other ISO certificates - 14001, 2001, 18001). Other responses included: ATEX, GOST 3436-99, OHSAS 18001:2007, certificates of conformity, hygiene certificate, sanitary certificate.

Besides certificates that had already been obtained by the companies, the respondents were asked to note if they planned to obtain other certificates as well. The companies that had no certificates at the moment of the interview could also answer the question. Again, ISO is the top choice - 11 respondents named it (mainly 9001), few - conformity certificate, CE (Conformité Européenne) marking for exports to Europe, Achiles auditing, 5 S methodology ( 5 S Method is a standardized process that when properly implemented creates and maintains an organized, safe, clean and efficient workplace, source: https://qualityone.com/5s/), Keymark solar.

Raw materials and other supplies. Most common types of raw materials and other supplies are the following: metals and metal structures ( 58 responses), plastic and plastic elements ( 21 responses), electronic component parts (23), cables (5 responses), rubber (2 responses), tubes (3), paint (5), etc.

Majority of the supplies come from foreign suppliers. Among the top countries that provide raw materials and other supplies are the following: Russian Federation ( 36 mentions), Romania ( 25 mentions), Ukraine ( 28 mentions), Italy ( 22 mentions), Germany ( 17 mentions), China ( 12 mentions), Poland ( 9 mentions), the rest of the countries accumulated less mentions.

## CONCLUSIONS

Contemporary machine-building in Republic of Moldova is characterized by remnants of the Soviet past and growing importance of foreign-capital companies investing into cables production in Moldova for exports. The foreign direct investments into Moldovan automotive industry have driven several important results: development of free economic zones, development of dual education system, appearance of centres of excellence in areas relevant for machine-building. The number of people employed in the industry increases, in particular, so does the number of those who are engaged in manufacture of motor vehicles, trailers and semi-trailers. Production of electronic conductors, ignition spark cables has increased significantly over the past years and this drove the exports growth as well. In fact, their production from the beginning was meant for export.

The statistics figures representing industry growth are mainly representative of the achievements of the foreign-capital companies producing cables and wires, while the results of Moldovan-capital companies are less observable in the economy trends.

## Survey results

Company development is slow-paced due to lack of strategic management and lack of resources. There are few local intensely developing companies that are modern and understand the importance of both - up-to-date equipment and marketing for their exports. For instance, many local companies have outdated equipment and have no resources to invest in their renovation or into research and development. Many companies are also not looking for new opportunities and do not search for Government or international organizations' aid. Some respondents in the survey noted that they would be glad to accept any aid that would be free-of-charge - visits to foreign plants (some of the responses were based on idea "anywhere, in case it is free of charge"), visits of experts from foreign countries, financial and organizational aid for participation in international exhibitions. In case that the study will serve as a basis for taking decisions on the companies that need to receive aid, the detailed data can be offered upon request - some companies named exact plants they would like to visit abroad, mainly in Germany.

The local market is viewed as a distribution destination mainly by companies producing RPM products, while machine-building companies, serving the B2B market, need to export because otherwise they will not be able to develop. Main export opportunities at least at the starting stage are related to traditional commercial partners for Moldova - Russia, Ukraine and Romania. These are the main partners for both supplies and exports. Germany also stands out as another important partner. It can also be observed that companies tend to explore the Asian market and particularly Kazakhstan, Uzbekistan, Azerbaijan, Tajikistan. Since many among interviewed companies do not have ISO certification, targeting traditional markets is a relevant goal at least for the short and middle term export strategy.

Overall conclusions. All companies, including foreign, are dealing with decreasing labour market and lack ordinary employees for operational processes. Since the prognosis on demographical trends for Moldova is not positive (active population is migrating abroad, they take their families with them and this leads to decrease of number of citizens in the active age and consequently decrease of number of children), promoting Moldova as a country offering cheap labour for production of cables might not be an effective long-term strategy. Already many companies, both local and foreign capital firms, have to deal with lack of operational staff. The large foreign capital companies are already looking for ways to broaden their hiring opportunities by offering free of charge transportation from neighbouring localities, offering on the spot training and promoting official employment, however, they still face the challenge to fill all the vacancies.

Overall for marketing needs there should be defined a positioning statement, a guiding idea for promotion of Moldovan machine-building - whether it is "Agricultural machinery based on strong agricultural traditions", "food industry equipment from a country specialized in agriculture and food industry", "European pumps constructor with over 100 years of experience" or "an international provider of cables", it needs to
be clearly formulated and promoted among potential investors, so that it is clear what the local advantages are.

Based on secondary data and on preparational work for the survey it can be stated that companies either underestimate the value of presence on the internet or have no resources for it. Quite often information about companies on the web is scarce or is absent, even though official data might say that a particular company has over 50 employees.

Sales strategy mainly focuses on serving current customers and while seeing that local market is small, many companies still do not reach out to international distribution markets. Most likely there first needs to happen an internal change for companies to consider external markets as a strategy for development. Thus, bringing external experts, who could make the companies consider these new opportunities might be beneficial, as well as allowing companies to consider Asian export direction just as seriously as European destination - the companies might be more prepared for the Asian markets in terms of product quality and needed certifications.

## APPENDIX

Appendix 1: Number of companies for analysed NACE rev. 2 codes, depending on the number of employees

|  |  | $\begin{gathered} 1 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} 2 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 3-5 } \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 6-9 } \\ \text { empl. } \end{gathered}$ | 10-49 empl. | $\begin{aligned} & \text { 50-149 } \\ & \text { empl. } \end{aligned}$ | $\begin{aligned} & \text { 150+ } \\ & \text { empl. } \end{aligned}$ | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C2211 | Manufacture of rubber tires and tubes; retreading and rebuilding of rubber tires | 2 |  | 2 |  | 1 |  |  | 5 |
| C2219 | Manufacture of other rubber products | 2 |  | 2 | 3 |  |  |  | 7 |
| C2221 | Manufacture of plastic plates, sheets, tubes and profiles | 10 | 1 | 1 | 2 | 11 | 1 | 1 | 27 |
| C2222 | Manufacture of plastic packing goods | 11 | 2 | 4 | 6 | 6 | 3 | 3 | 35 |
| C2223 | Manufacture of builders' ware of plastic | 76 | 39 | 86 | 49 | 40 | 2 |  | 292 |
| C2229 | Manufacture of other plastic products | 17 | 3 | 3 | 6 | 7 | 2 | 1 | 39 |
| C2391 | Production of abrasive products |  |  |  |  |  |  |  | 0 |
| C2399 | Manufacture of other non-metallic mineral products n. e. c. ${ }^{7}$ | 4 | 1 | 1 | 2 |  | 1 |  | 9 |
| C2410 | Manufacture of basic iron and steel and of ferro-alloys |  |  |  |  |  |  |  | 0 |
| C2420 | Manufacture of tubes, pipes, hollow profiles and related fittings, of steel | 2 |  |  |  |  |  |  | 2 |
| C2431 | Cold drawing of bars |  |  |  |  |  |  |  | 0 |
| C2432 | Cold rolling of narrow strip |  |  |  |  |  |  |  | 0 |
| C2433 | Cold forming or folding | 5 |  |  | 1 | 2 |  |  | 8 |
| C2434 | Cold drawing of wire |  |  |  | 1 |  |  |  | 1 |
| C2451 | Casting of iron | 2 |  | 2 |  | 1 |  |  | 5 |
| C2452 | Casting of steel |  |  |  |  |  |  |  | 0 |
| C2453 | Casting of light metals |  |  |  |  |  |  |  | 0 |
| C2454 | Casting of other non-ferrous metals |  |  |  |  |  |  |  | 0 |
| C2511 | Manufacture of metal structures and parts of structures | 63 | 20 | 26 | 18 | 29 | 3 |  | 159 |
| C2512 | Manufacture of doors and windows of metal | 31 | 9 | 18 | 4 | 5 | 1 |  | 68 |
| C2521 | Manufacture of central heating radiators and boilers | 2 |  |  |  |  |  |  | 2 |
| C2529 | Manufacture of other tanks, reservoirs and containers of metal | 2 |  |  | 1 | 1 | 1 |  | 5 |
| C2530 | Manufacture of steam generators, except central heating hot water boilers |  |  |  |  |  |  |  | 0 |
| C2540 | Manufacture of weapons and ammunition | 1 | 1 |  |  |  |  |  | 2 |
| C2550 | Forging, pressing, stamping and roll-forming of metal; powder metallurgy | 12 | 2 |  | 1 | 2 | 1 |  | 18 |
| C2561 | Treatment and coating of metals | 5 | 4 | 5 | 3 | 3 |  |  | 20 |
| C2562 | Machining | 4 | 1 | 3 | 3 | 2 |  | 1 | 14 |
| C2571 | Manufacture of cutlery | 4 |  | 1 |  |  |  |  | 5 |
| C2572 | Manufacture of locks and hinges | 1 | 1 |  |  | 1 | 1 |  | 4 |
| C2573 | Manufacture of tools | 1 |  |  |  | 1 |  |  | 2 |
| C2591 | Manufacture of steel drums and similar containers |  |  |  |  |  |  |  | 0 |
| C2592 | Manufacture of light metal packaging | 1 |  |  | 2 | 2 |  |  | 5 |
| C2593 | Manufacture of wire products, chain and springs | 3 | 2 | 3 | 3 | 5 | 1 |  | 17 |
| C2594 | Manufacture of fasteners and screw machine products | 2 |  | 2 | 1 |  |  |  | 5 |
| C2599 | Manufacture of other fabricated metal products n. e. c. | 24 | 8 | 23 | 10 | 20 | 2 |  | 87 |
| C2611 | Manufacture of electronic components | 4 |  |  | 1 |  |  |  | 5 |
| C2612 | Manufacture of loaded electronic boards |  |  |  |  |  |  |  | 0 |
| C2620 | Manufacture of computers and peripheral equipment | 3 |  |  |  | 2 |  |  | 5 |
| C2630 | Manufacture of communication equipment | 2 |  |  | 1 |  |  |  | 3 |
| C2640 | Manufacture of consumer electronics | 1 |  |  | 2 | 1 |  |  | 4 |
| C2651 | Manufacture of instruments and appliances for measuring, testing and navigation | 2 | 1 | 1 |  | 4 | 4 | 2 | 14 |
| C2652 | Manufacture of watches and clocks |  |  |  |  |  |  |  | 0 |

[^6]|  |  | $\begin{gathered} 1 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} 2 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 3-5 } \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 6-9 } \\ \text { empl. } \end{gathered}$ | 10-49 empl. | $\begin{aligned} & \text { 50-149 } \\ & \text { empl. } \end{aligned}$ | $\begin{aligned} & \text { 150+ } \\ & \text { empl. } \end{aligned}$ | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C2660 | Manufacture of irradiation, electromedical and electrotherapeutic equipment |  |  |  |  |  |  |  | 0 |
| C2670 | Manufacture of optical instruments and photographic equipment |  |  |  |  | 1 |  |  | 1 |
| C2680 | Manufacture of magnetic and optical media |  |  |  |  |  |  |  | 0 |
| C2711 | Manufacture of electric motors, generators and transformers | 1 | 1 |  | 1 | 1 |  | 1 | 5 |
| C2712 | Manufacture of electricity distribution and control apparatus |  |  |  | 2 | 4 |  |  | 6 |
| C2731 | Manufacture of fibre optic cables |  |  |  |  |  |  |  | 0 |
| C2732 | Manufacture of other electronic and electric wires and cables |  |  | 1 |  | 2 | 2 | 2 | 7 |
| C2733 | Manufacture of wiring devices | 2 |  |  |  |  |  |  | 2 |
| C2740 | Manufacture of electric lighting equipment | 5 |  | 1 | 1 | 3 |  |  | 10 |
| C2751 | Manufacture of electric domestic appliances | 1 | 1 | 1 | 1 |  |  |  | 4 |
| C2752 | Manufacture of non-electric domestic appliances | 2 |  |  |  |  |  |  | 2 |
| C2790 | Manufacture of other electrical equipment |  |  |  |  |  |  |  | 0 |
| C2811 | Manufacture of engines and turbines, except aircraft, vehicle and cycle engines |  |  |  |  |  |  |  | 0 |
| C2812 | Manufacture of fluid power equipment | 2 |  | 1 |  |  | 1 |  | 4 |
| C2813 | Manufacture of other pumps and compressors | 1 |  |  |  |  | 2 | 1 | 4 |
| C2814 | Manufacture of other taps and valves |  |  |  |  |  |  |  | 0 |
| C2815 | Manufacture of bearings, gears, gearing and driving elements |  |  |  |  |  |  |  | 0 |
| C2821 | Manufacture of ovens, furnaces and furnace burners | 1 |  |  |  |  |  |  | 1 |
| C2822 | Manufacture of lifting and handling equipment | 3 |  |  |  | 2 | 1 |  | 6 |
| C2823 | Manufacture of office machinery and equipment (except computers and peripheral equipment) |  |  |  |  |  |  |  | 0 |
| C2824 | Manufacture of power-driven hand tools |  |  |  |  |  |  |  | 0 |
| C2825 | Manufacture of non-domestic cooling and ventilation equipment | 2 | 1 | 1 | 3 | 3 |  |  | 10 |
| C2829 | Manufacture of other general-purpose machinery n. e. c. | 5 | 3 | 3 |  | 3 | 2 |  | 16 |
| C2830 | Manufacture of agricultural and forestry machinery | 2 | 2 | 3 |  | 6 | 2 |  | 15 |
| C2841 | Manufacture of metal forming machinery | 1 |  |  | 1 |  |  |  | 2 |
| C2849 | Manufacture of other machine tools |  |  | 1 |  |  |  |  | 1 |
| C2891 | Manufacture of machinery for metallurgy |  |  |  |  |  |  |  | 0 |
| C2892 | Manufacture of machinery for mining, quarrying and construction | 1 |  | 1 | 1 | 1 |  |  | 4 |
| C2893 | Manufacture of machinery for food, beverage and tobacco processing |  | 1 | 1 |  | 3 | 1 |  | 6 |
| C2894 | Manufacture of machinery for textile, apparel and leather production |  |  | 1 |  |  |  |  | 1 |
| C2895 | Manufacture of machinery for paper and paperboard production |  |  |  |  |  |  |  | 0 |
| C2896 | Manufacture of plastic and rubber machinery |  |  |  | 1 |  |  |  | 1 |
| C2899 | Manufacture of other special-purpose machinery n. e.c. | 3 | 2 |  |  | 1 |  |  | 6 |
| C2910 | Manufacture of motor vehicles |  |  |  |  |  |  |  | 0 |
| C2920 | Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semitrailers |  |  |  |  | 1 |  |  | 1 |
| C2931 | Manufacture of electrical and electronic equipment for motor vehicles | 1 |  |  | 1 |  | 1 | 5 | 8 |
| C2932 | Manufacture of other parts and accessories for motor vehicles | 1 |  |  |  |  |  |  | 1 |
| C3011 | Building of ships and floating structures |  |  |  |  |  |  |  | 0 |
| C3012 | Building of pleasure and sporting boats |  |  |  |  |  |  |  | 0 |
| C3020 | Manufacture of railway locomotives and rolling stock |  | 1 |  |  |  |  |  | 1 |
| C3030 | Manufacture of air and spacecraft and related machinery |  |  |  |  |  |  |  | 0 |
| C3040 | Manufacture of military fighting vehicles |  |  |  |  |  |  |  | 0 |
| C3091 | Manufacture of motorcycles |  |  |  |  |  |  |  | 0 |
| C3092 | Manufacture of bicycles and invalid carriages |  | 1 |  |  |  |  |  | 1 |


|  |  | $\begin{gathered} 1 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} 2 \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 3-5 } \\ \text { empl. } \end{gathered}$ | $\begin{gathered} \text { 6-9 } \\ \text { empl. } \end{gathered}$ | $\begin{aligned} & \text { 10-49 } \\ & \text { empl. } \end{aligned}$ | $\begin{aligned} & \text { 50-149 } \\ & \text { empl. } \end{aligned}$ | $\begin{aligned} & \text { 150+ } \\ & \text { empl. } \end{aligned}$ | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C3099 | Manufacture of other transport equipment n.e.c. |  |  |  |  |  |  |  | 0 |
| C3250 | Manufacture of medical and dental instruments and supplies | 8 | 3 | 3 | 1 |  | 1 | 1 | 17 |
| C3311 | Repair of fabricated metal products | 3 | 2 | 3 | 2 | 6 |  |  | 16 |
| C3312 | Repair of machinery | 46 | 13 | 34 | 15 | 13 | 2 | 1 | 124 |
| C3313 | Repair of electronic and optical equipment | 9 | 6 | 8 | 2 | 2 |  |  | 27 |
| C3314 | Repair of electrical equipment | 16 | 7 | 11 | 6 | 4 | 2 |  | 46 |
| C3315 | Repair and maintenance of ships and boats | 1 |  |  |  |  |  |  | 1 |
| C3316 | Repair and maintenance of aircraft and spacecraft | 5 | 3 |  | 1 |  | 1 |  | 10 |
| C3317 | Repair and maintenance of other transport equipment |  |  |  |  |  |  |  | 0 |
| C3319 | Repair of other equipment | 4 |  |  |  |  |  |  | 4 |
| C3320 | Installation of industrial machinery and equipment | 5 | 3 | 5 | 2 | 7 |  | 1 | 23 |
| M7112 | Engineering activities and related technical consultancy | 135 | 55 | 67 | 24 | 19 | 6 |  | 306 |
| M7120 | Technical testing and analysis | 64 | 24 | 48 | 19 | 27 | 6 | 1 | 189 |
| M7211 | Research and experimental development on biotechnology | 8 |  | 2 | 1 | 2 |  | 1 | 14 |
| M7219 | Other research andexperimental <br> development on natural <br> engineering | 27 | 2 | 4 |  | 3 | 3 |  | 39 |

Appendix 2: Value of production, Republic of Moldova, thousand MDL

| Code | Name | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: |
| 22.1 | Manufacture of rubber products | 9,888 | 10,912 | 10,106 |
| 22.2 | Manufacture of plastics products | 1,619,872 | 1,752,537 | 2,091,661 |
| 23.9 | Manufacture of abrasive products and non-metallic mineral products n.e.c. | 329,157 | 196,907 | 257,471 |
| 24.1 | Manufacture of basic iron and steel and of ferro-alloys | - | - | - |
| 24.2 | Manufacture of tubes, pipes, hollow profiles and related fittings, of steel | - | - | - |
| 24.3 | Manufacture of other products of first processing of steel | 70,714 | 65,432 | 73,984 |
| 24.5 | Casting of metals | 12,981 | 11,068 | 9,313 |
| 25.1 | Manufacture of structural metal products | 473,793 | 419,957 | 478,186 |
| 25.2 | Manufacture of tanks, reservoirs and containers of metal | 101,090 | 132,443 | 101,336 |
| 25.3 | Manufacture of steam generators, except central heating hot water boilers | - | - | - |
| 25.4 | Manufacture of weapons and ammunition | C | C | C |
| 25.5 | Forging, pressing, stamping and roll-forming of metal; powder metallurgy | - | - | - |
| 25.6 | Treatment and coating of metals; machining | 74,603 | 77,716 | 85,483 |
| 25.7 | Manufacture of cutlery, tools and general hardware | 25,493 | 27,402 | 24,259 |
| 25.9 | Manufacture of other fabricated metal products | 624,564 | 674,098 | 673,368 |
| 26.1 | Manufacture of electronic components and boards | - | - | - |
| 26.2 | Manufacture of computers and peripheral equipment | 41,357 | 42,287 | 40,141 |
| 26.3 | Manufacture of communication equipment | - | C | C |
| 26.4 | Manufacture of consumer electronics | 17,913 | 8,597 | 6,745 |
| 26.5 | Manufacture of instruments and appliances for measuring, testing and navigation; watches and clocks | 492,713 | 433,901 | 385,757 |
| 26.6 | Manufacture of irradiation, electromedical and electrotherapeutic equipment | - | - | - |
| 26.7 | Manufacture of optical instruments and photographic equipment | C | C | C |
| 26.8 | Manufacture of magnetic and optical media | - | - | - |
| 27.1 | Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus | 67,309 | 68,718 | 92,684 |
| 27.2 | Manufacture of batteries and accumulators | - | - | - |
| 27.3 | Manufacture of wiring and wiring devices | 1,595,149 | 1,060,694 | 1,549,742 |
| 27.4 | Manufacture of electric lighting equipment | 11,781 | 17,687 | 34,652 |
| 27.5 | Manufacture of domestic appliances | 1,879 | 1,942 | 959 |
| 27.9 | Manufacture of other electrical equipment | C | C | C |
| 28.1 | Manufacture of general - purpose machinery | 302,764 | 263,650 | 166,141 |
| 28.2 | Manufacture of other general-purpose machinery | 138,905 | 169,089 | 249,015 |
| 28.3 | Manufacture of agricultural and forestry machinery | 87,899 | 131,369 | 167,021 |
| 28.4 | Manufacture of metal forming machinery and machine tools | 3,227 | 4,253 | 3,337 |
| 28.9 | Manufacture of other special-purpose machinery | 40,935 | 38,275 | 36,202 |
| 29.1 | Manufacture of motor vehicles | - | - | - |
| 29.2 | Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers | - | C | C |
| 29.3 | Manufacture of parts and accessories for motor vehicles | 129,994 | 739,117 | 1,314,583 |
| 30.1 | Building of ships and boats | - | - | - |
| 30.2 | Manufacture of railway locomotives and rolling stock | - | - | - |
| 30.3 | Manufacture of air and spacecraft and related machinery | - | - | - |
| 30.4 | Manufacture of military fighting vehicles | - | - | - |
| 30.9 | Manufacture of transport equipment n.e.c. | 10,669 | 13,004 | C |
| 32.5 | Manufacture of medical and dental instruments and supplies | 31,687 | 38,779 | 37,490 |
| 33.1 | Repair of fabricated metal products, machinery and equipment | 458,398 | 446,407 | 488,479 |
| 33.2 | Installation of industrial machinery and equipment | 130,719 | 88,978 | 120,117 |

Appendix 3: Export ${ }^{8}$ amount on the level of four-digit code, 2016-20179

| Year | Commodity | Commodity Code | Trade Value (\$) |
| :---: | :---: | :---: | :---: |
| 2016 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8544 | 126,389,173 |
| 2016 | Gas, liquid or electricity supply or production meters, including calibrating meters therefor | 9028 | 16,475,143 |
| 2016 | Pumps; for liquids, whether or not fitted with measuring device, liquid elevators | 8413 | 10,834,458 |
| 2016 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics | 3923 | 9,452,523 |
| 2016 | Copper; waste and scrap | 7404 | 6,237,916 |
| 2016 | Navigational instruments and appliances; direction finding compasses | 9014 | 2,893,627 |
| 2016 | Aluminium; waste and scrap | 7602 | 2,832,098 |
| 2016 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); capsules for bottles, threaded bungs, bung covers, seals and other packaging accessories, of base metal | 8309 | 2,425,714 |
| 2016 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8703 | 2,341,564 |
| 2016 | Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators; electrical parts of machinery or apparatus, n.e.c. or included elsewhere in chapter 85 | 8548 | 2,161,863 |
| 2016 | Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors | 9031 | 2,149,233 |
| 2016 | Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of $8443,8525,8527$, or 8528 | 8517 | 2,002,924 |
| 2016 | Electric transformers, static converters (e.g. rectifiers) and inductors | 8504 | 1,981,926 |
| 2016 | Machinery, plant (not domestic), or laboratory equipment; electrically heated or not, (excluding items in 85.14 ) for the treatment of materials by a process involving change of temperature; including instantaneous or non electric storage water heaters | 8419 | 1,793,381 |
| 2016 | Machine-tools; parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465 , and tool holders for any type of tool for working in the hand | 8466 | 1,667,247 |
| 2016 | Iron or non-alloy steel, angles, shapes and sections | 7216 | 1,578,560 |
| 2016 | Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers | 8432 | 1,468,487 |
| 2016 | Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines | 8424 | 1,264,650 |
| 2016 | Reservoirs, tanks, vats and similar containers; for any material (excluding compressed or liquefied gas), of iron or steel, capacity exceeding 300l, whether or not lined or heat insulated | 7309 | 1,220,104 |
| 2016 | Articles of plastics and articles of other materials of heading no. 3901 to 3914 , n.e.c. in chapter 39 | 3926 | 1,116,246 |
| 2016 | Tools, interchangeable; for hand tools, whether or not power-operated, or for machine tools (pressing, stamping, punching, drilling etc), including dies for drawing or extruding metal, and rock drilling or earth boring tools | 8207 | 1,057,994 |
| 2016 | Machines and appliances for testing the hardness, strength, compressibility, elasticity of other mechanical properties of materials (e.g. metals, wood, textiles, paper, plastics) | 9024 | 957,310 |
| 2016 | Dish washing machines; machinery for cleaning, drying, filling, closing, sealing, capsuling or labelling bottles, cans, boxes, bags, etc, machinery for aerating beverages | 8422 | 912,838 |
| 2016 | Tractors; (other than tractors of heading no 8709) | 8701 | 794,972 |
| 2016 | New pneumatic tyres, of rubber | 4011 | 705,489 |
| 2016 | Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter | 8479 | 704,414 |
| 2016 | Turbo-jets, turbo-propellers and other gas turbines | 8411 | 678,924 |
| 2016 | Structures of iron or steel and parts thereof; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures | 7308 | 674,710 |
| 2016 | Orthopaedic appliances; including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other which are worn, carried or implanted in the body to compensate for a defect or disability | 9021 | 554,182 |

[^7]| 2016 | Plastics; builders' wares n.e.c. or included | 3925 | 531,358 |
| :---: | :---: | :---: | :---: |
| 2016 | Titanium; articles thereof, including waste and scrap | 8108 | 504,701 |
| 2016 | Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines) | 8412 | 483,763 |
| 2016 | Tableware, kitchenware, other household articles and hygienic or toilet articles, of plastics | 3924 | 451,960 |
| 2016 | Machinery; for working rubber or plastics or for the manufacture of products from these materials, n.e.c. in this chapter | 8477 | 400,715 |
| 2016 | Ferrous waste and scrap; remelting scrap ingots of iron or steel | 7204 | 400,112 |
| 2016 | Machinery n.e.c. in this chapter, for the industrial preparation or manufacture of food or drink; other than machinery for extraction or preparation of animal or fixed vegetable fats or oils | 8438 | 378,938 |
| 2016 | Machinery (not of heading no. 8450) for washing, cleaning, wringing, drying, ironing, pressing, bleaching, dyeing, dressing, finishing, coating or impregnating textile yarn, fabrics or made up articles | 8451 | 370,614 |
| 2016 | Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading no 8437 | 8433 | 363,291 |
| 2016 | Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel | 7307 | 352,587 |
| 2016 | Printing machinery; used for printing by means of plates, cylinders and other printing components of heading 84.42; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof | 8443 | 341,040 |
| 2016 | Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders | 8525 | 336,985 |
| 2016 | Electrical machines and apparatus; having individual functions, not specified or included elsewhere in this chapter | 8543 | 335,393 |
| 2016 | Cloth (including endless bands), grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel | 7314 | 326,869 |
| 2016 | Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof | 8716 | 311,212 |
| 2016 | Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel | 7318 | 296,045 |
| 2016 | Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases | 8421 | 279,158 |
| 2016 | Machine-tools; n.e.c. for working metal, sintered metal carbides or cermets without removing material | 8463 | 256,298 |
| 2016 | Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426 or 8427 (e.g. lifts, escalators, conveyors, teleferics) | 8428 | 243,807 |
| 2016 | Aircraft; parts of heading no. 8801 or 8802 | 8803 | 228,128 |
| 2016 | Plastics; plates, sheets, film, foil and strip (not self-adhesive); non-cellular and not reinforced, laminated, supported or similarly combined with other materials, n.e.c. in chapter 39 | 3920 | 212,812 |
| 2016 | Moulding boxes for metal foundry, moulding patterns, moulds for metals (excluding ingot moulds), metal carbides, glass, mineral materials, rubber or plastics | 8480 | 211,494 |
| 2016 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables | 8536 | 207,714 |
| 2016 | Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415 | 8418 | 199,287 |
| 2016 | Vehicles; parts and accessories of heading no. 8711 to 8713 | 8714 | 187,560 |
| 2016 | Machinery; parts and accessories (not covers, carrying cases and the like) suitable for use solely or principally with machines of heading no. 8469 to 8472 | 8473 | 180,624 |
| 2016 | Aircraft n.e.c. in heading no. 8801 (e.g. helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles | 8802 | 175,358 |
| 2016 | Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included | 8471 | 175,144 |
| 2016 | Motor vehicles; parts and accessories, of heading no. 8701 to 8705 | 8708 | 170,646 |
| 2016 | Copper; stranded wire, cables, plaited bands and the like, not electrically insulated | 7413 | 168,165 |
| 2016 | Presses, crushers and similar machinery; used in the manufacture of wine, cider, fruit juices or similar beverages | 8435 | 167,063 |
| 2016 | Compression-ignition internal combustion piston engines (diesel or semi-diesel engines) | 8408 | 154,515 |
| 2016 | Tools; for working in the hand, pneumatic, hydraulic or with self-contained electric or nonelectric motor | 8467 | 154,090 |
| 2016 | Ball or roller bearings | 8482 | 153,148 |
| 2016 | Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves | 8481 | 147,467 |
| 2016 | Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments | 9018 | 146,751 |
| 2016 | Vehicles; for the transport of goods | 8704 | 142,520 |
| 2016 | Electrical resistors (including rheostats and potentiometers), excluding heating resistors | 8533 | 139,332 |


| 2016 | Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather, other than sewing machines | 8453 | 137,909 |
| :---: | :---: | :---: | :---: |
| 2016 | Machinery; for preparing or making up tobacco, n.e.c. in this chapter | 8478 | 135,187 |
| 2016 | Boards, panels, consoles, desks, cabinets, bases with apparatus of heading no. 8535, 8536 for electricity control and distribution, (other than switching apparatus of heading no. 8517) | 8537 | 129,282 |
| 2016 | Railway or tramway track fixtures and fittings; mechanical (including electro-mechanical) signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields; parts thereof | 8608 | 125,968 |
| 2016 | Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels | 8474 | 124,868 |
| 2016 | Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535,8536 and 8537 | 8538 | 124,787 |
| 2016 | Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters | 8414 | 124,639 |
| 2016 | Tanks, casks, drums, cans, boxes and similar containers, for any material (excluding compressed or liquefied gas), of iron or steel, capacity not exceeding 300l, whether or not lined or heat-insulated | 7310 | 121,619 |
| 2016 | Waste, parings and scrap, of plastics | 3915 | 113,549 |
| 2016 | Machines; for making up paper pulp, paper or paperboard, including cutting machines of all kinds | 8441 | 108,394 |
| 2016 | Polymers of vinyl chloride or of other halogenated olefins, in primary forms | 3904 | 107,419 |
| 2016 | Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals, or ores; pile drivers and extractors; snow ploughs and snow blowers | 8430 | 103,258 |
| 2016 | Electric water, space, soil heaters; electro-thermic hair-dressing apparatus; hand dryers, irons; electro-thermic appliances for domestic purposes; electro heating resistors, not of heading no. 8545 | 8516 | 102,408 |
| 2016 | Diodes, transistors, similar semiconductor devices; including photovoltaic cells assembled or not in modules, panels, light emitting mounted piezo-electric crystals | 8541 | 96,777 |
| 2016 | Machine-tools; for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal, sintered metal carbides or cermets by means of grinding stones, abrasives or polishing products | 8460 | 96,354 |
| 2016 | Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics | 3917 | 90,705 |
| 2016 | Sewing machines; other than book-sewing machines of heading no. 8440; furniture, bases and covers specially designed for sewing machines; sewing machine needles | 8452 | 81,794 |
| 2016 | Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls | 3919 | 79,515 |
| 2016 | Iron or steel (excluding cast iron); tubes and pipes (e.g. welded, riveted or similarly closed), having circular cross-sections, external diameter of which exceeds 406.4 mm , not seamless | 7305 | 79,253 |
| 2016 | Knives and cutting blades, for machines or for mechanical appliances | 8208 | 78,177 |
| 2016 | Polymers of ethylene, in primary forms | 3901 | 77,553 |
| 2016 | Converters, ladles, ingot moulds and casting machines; of a kind used metallurgy or in metal foundries | 8454 | 77,333 |
| 2016 | Machinery parts; used solely or principally with the machinery of heading no. 8425 to 8430 | 8431 | 75,710 |
| 2016 | Agricultural, horticultural, forestry, poultry-keeping, bee-keeping machinery; including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders | 8436 | 75,143 |
| 2016 | Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings | 8483 | 71,879 |
| 2016 | Plastic plates, sheets, film, foil and strip n.e.c. in chapter 39 | 3921 | 71,578 |
| 2016 | Instruments and apparatus; for physical or chemical analysis (e.g. polarimeters, spectrometers), for measuring or checking viscosity, porosity, etc, for measuring quantities of heat, sound or light | 9027 | 70,718 |
| 2016 | Machines for cleaning, sorting, grading seed, grain, dried leguminous vegetables; machinery used in the milling industry for the working of cereals or dried leguminous vegetables, not farm type machinery | 8437 | 68,075 |
| 2016 | Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials | 8465 | 67,187 |
| 2016 | Bulldozers, graders, levellers, scrapers, angledozers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers, self-propelled | 8429 | 57,510 |
| 2016 | Polymers of propylene or of other olefins, in primary forms | 3902 | 57,416 |
| 2016 | Fork-lift and other works trucks; fitted with lifting or handling equipment | 8427 | 55,479 |
| 2016 | X-ray, alpha, beta, gamma radiation apparatus; x-ray tubes, x-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like | 9022 | 53,183 |
| 2016 | Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40 | 4016 | 52,597 |
| 2016 | Discs, tapes, solid-state non-volatile storage devices, smart cards and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, excluding products of Chapter 37 | 8523 | 50,159 |


| 2016 | Iron or steel (excluding cast iron); tubes, pipes and hollow profiles (not seamless), n.e.c. in chapter 73 | 7306 | 47,653 |
| :---: | :---: | :---: | :---: |
| 2016 | Base metal mountings, fittings and similar articles for furniture, doors, staircases, windows, trunks, chests etc, castors with mountings of base metal, automatic door closers of base metal | 8302 | 46,734 |
| 2016 | Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges) | 4009 | 45,761 |
| 2016 | Electric (electrically heated gas) soldering, brazing, welding machines and apparatus, capable or not of cutting, electric machines and apparatus for hot spraying of metals or sintered carbides | 8515 | 43,656 |
| 2016 | Tools, hand; files, rasps, pliers (including cutting pliers), pincers, tweezers, metal cutting shears, pipe cutters, bolt croppers, perforating punches and similar | 8203 | 40,044 |
| 2016 | Derricks, cranes, including cable cranes, mobile lifting frames, straddle carriers and works trucks fitted with a crane | 8426 | 38,447 |
| 2016 | Air conditioning machines; comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated | 8415 | 38,133 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width 600 mm or more, clad, plated or coated | 7210 | 37,043 |
| 2016 | Containers for compressed or liquefied gas, of iron or steel | 7311 | 36,994 |
| 2016 | Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling | 7214 | 36,568 |
| 2016 | Electric accumulators, including separators therefor; whether or not rectangular (including square) | 8507 | 34,773 |
| 2016 | Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus | 8528 | 33,549 |
| 2016 | Revolution counter, production counters, taximeters, mileometers, pedometers and the like, speed indicators and tachometers, other than those of heading no. 9015, stroboscopes | 9029 | 32,685 |
| 2016 | Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, not laser diodes; other optical appliances and instruments n.e.c. in this chapter | 9013 | 32,545 |
| 2016 | Electric motors and generators (excluding generating sets) | 8501 | 32,046 |
| 2016 | Acrylic polymers in primary forms | 3906 | 30,856 |
| 2016 | Boilers; steam or other vapour generating (other than central heating hot water boilers, capable also of producing low pressure steam), super heated water boilers | 8402 | 28,336 |
| 2016 | Copper; articles thereof n.e.c. in chapter 74 | 7419 | 27,991 |
| 2016 | Aluminium; bars, rods and profiles | 7604 | 27,805 |
| 2016 | Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. 9014, 9015,9028 or 9032 | 9026 | 25,923 |
| 2016 | Binoculars, monoculars, other optical telescopes, mountings therefore; other astronomical instruments, mountings therefore, but not including instruments for radioastronomy | 9005 | 25,896 |
| 2016 | Central heating boilers; excluding those of heading no. 8402 | 8403 | 24,533 |
| 2016 | Bells, gongs and the like; non-electric, statuettes, other ornaments, photograph, picture, similar frames, mirrors, of base metal | 8306 | 24,327 |
| 2016 | Electronic integrated circuits | 8542 | 23,802 |
| 2016 | Bicycles and other cycles; including delivery tricycles, not motorised | 8712 | 23,776 |
| 2016 | Signalling apparatus; electric sound or visual (e.g. bells, sirens, indicator panels, burglar or fire alarms), excluding those of heading no. 8512 or 8530 | 8531 | 23,734 |
| 2016 | Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber | 4012 | 23,119 |
| 2016 | Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines | 8511 | 22,951 |
| 2016 | Machine-tools; (including presses) for working metal by forging, hammering or diestamping, for bending, folding, straightening, flattening, shearing or punching metal | 8462 | 22,476 |
| 2016 | Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting | 8447 | 20,092 |
| 2016 | Electro-magnets; permanent magnets, intended permanent magnets; electro-magnetic, permanent magnet chucks, clamps, similar; electromagnetic couplings, clutches, brakes; electro-magnetic lifting heads | 8505 | 19,743 |
| 2016 | Monofilament of which any cross-sectional dimension exceeds 1 mm , rods, sticks and profile shapes, whether or not surface-worked but not otherwise worked, of plastics | 3916 | 19,475 |
| 2016 | Zinc; waste and scrap | 7902 | 19,436 |
| 2016 | Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408 | 8409 | 19,203 |
| 2016 | Tools, hand; (including glaziers' diamonds) n.e.c.; blow lamps; vices, clamps etc, other than accessories for and parts of, machine tools; anvils; portable forges; hand or pedal operated grinding wheels with frameworks | 8205 | 19,129 |
| 2016 | Mechano-therapy, massage appliances; psychological aptitude testing apparatus; ozone, oxygen, aerosol therapy, artificial respiration or other therapeutic respiration apparatus | 9019 | 19,036 |
| 2016 | Springs and leaves for springs, of iron or steel | 7320 | 18,999 |
| 2016 | lon-exchangers; based on polymers of heading no. 3901 to 3913, in primary forms | 3914 | 18,740 |


| 2016 | Wrist-watches, pocket-watches, stop-watches and other watches, other than those of heading no. 9101 | 9102 | 18,618 |
| :---: | :---: | :---: | :---: |
| 2016 | Generators for producer or water gas with or without their purifiers acetylene gas generators and similar water process gas generators, with or without their purifiers | 8405 | 16,933 |
| 2016 | Machines; calendering or other rolling machines, for other than metal or glass and cylinders therefor | 8420 | 16,776 |
| 2016 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits; for a voltage exceeding 1000 volts | 8535 | 16,320 |
| 2016 | Stoves, ranges, grates, cookers (those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances and parts, of iron or steel | 7321 | 16,115 |
| 2016 | Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical grates, mechanical ash dischargers and similar appliances | 8416 | 15,153 |
| 2016 | Electric generating sets and rotary converters | 8502 | 14,963 |
| 2016 | Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms | 3905 | 13,987 |
| 2016 | Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated | 7312 | 13,415 |
| 2016 | Optical fibres and optical fibre bundles; optical fibre cables not of heading no. 8544; sheets, plates of polarising material; lenses, prisms, mirrors, of any material; unmounted; not non optical glass | 9001 | 13,283 |
| 2016 | Chain and parts thereof, of iron or steel | 7315 | 12,364 |
| 2016 | Book-binding machinery; including book-sewing machines | 8440 | 11,218 |
| 2016 | Radar apparatus, radio navigational aid apparatus and radio remote control apparatus | 8526 | 10,986 |
| 2016 | Wires, rods, tubes, plates, electrodes of base metal or metal carbides; of a kind used for soldering, brazing, welding; wires and rods for metal spraying | 8311 | 10,846 |
| 2016 | Regulating or controlling instruments and apparatus; automatic type | 9032 | 10,247 |
| 2016 | Microphones and their stands; loudspeakers, mounted or not in their enclosures; headphones and earphones, combined or not with a microphone, and sets of a microphone and one or more loudspeakers; audio frequency and electric sound amplifiers and sets | 8518 | 10,201 |
| 2016 | Weighing machines; excluding balances of a sensitivity of 5 cg or better, including weight operated counting or checking machines and weights of all kinds | 8423 | 9,993 |
| 2016 | Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not | 9025 | 9,749 |
| 2016 | Lighting or visual signalling equipment (excluding articles of heading no. 8539), windscreen wipers, defrosters and demisters; electrical, of a kind used for cycles or motor vehicles | 8512 | 9,395 |
| 2016 | Thermionic, cold cathode or photo-cathode valves and tubes (e.g. vacuum, vapour, gas filled valves and tubes, mercury arc rectifying valves and tubes, cathode-ray and television camera tubes) | 8540 | 9,327 |
| 2016 | Lathes for removing metal | 8458 | 8,169 |
| 2016 | Padlocks and locks (key, combination, electrically operated) of base metal; clasps and frames with clasps incorporating locks, of base metal, keys for any or the foregoing articles, of base metal | 8301 | 7,981 |
| 2016 | Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel | 7304 | 7,846 |
| 2016 | Metal-rolling mills and rolls therefor | 8455 | 7,770 |
| 2016 | Bodies; (including cabs) for the motor vehicles of heading no. 8701 to 8705 | 8707 | 7,472 |
| 2016 | Electro-mechanical domestic appliances; with self-contained electric motor, other than vacuum cleaners of heading 85.08. | 8509 | 7,442 |
| 2016 | Pulley tackle and hoists other than skip hoists; winches and capstans; jacks | 8425 | 7,340 |
| 2016 | Conveyor or transmission belts or belting, of vulcanised rubber | 4010 | 7,113 |
| 2016 | Transmission apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8525 to 8528 | 8529 | 6,892 |
| 2016 | Instruments, apparatus for measuring, checking electrical quantities not meters of heading no. 9028; instruments, apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic and other radiations | 9030 | 6,884 |
| 2016 | Anchors, grapnels and parts thereof, of iron or steel | 7316 | 6,718 |
| 2016 | Railway or tramway locomotives or rolling stock; parts thereof | 8607 | 6,632 |
| 2016 | Copper tubes and pipes | 7411 | 6,349 |
| 2016 | Balances; of a sensitivity of 5 cg or better, with or without weights | 9016 | 6,144 |
| 2016 | Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked | 9002 | 5,992 |
| 2016 | Zinc; articles n.e.c. in chapter 79 | 7907 | 5,502 |
| 2016 | Sanitary ware; baths, shower-baths, sinks, wash-basins, bidets, lavatory pans, seats and covers, flushing cisterns and sanitary ware, of plastics | 3922 | 5,436 |
| 2016 | Tools, hand; hand-operated spanners and wrenches (including torque meter wrenches but not including tap wrenches), interchangeable spanner sockets, with or without handles | 8204 | 5,268 |
| 2016 | Weaving machines (looms) | 8446 | 5,014 |


| 2016 | Special purpose motor vehicles; not those for the transport of persons or goods (e.g. breakdown lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units etc) | 8705 | 4,921 |
| :---: | :---: | :---: | :---: |
| 2016 | Copper; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7412 | 4,895 |
| 2016 | Clasps; frames with clasps, buckles, hooks, eyes, eyelets etc used for clothing, footwear, awnings, handbags, travel goods or other articles, tubular, bifurcated rivets, beads, spangles, of base metal | 8308 | 4,709 |
| 2016 | Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked | 9002 | 4,685 |
| 2016 | Cellulose and its chemical derivatives, n.e.c. or included, in primary forms | 3912 | 4,675 |
| 2016 | Lamps; electric filament or discharge lamps, including sealed beam lamp units and ultraviolet or infra-red lamps, arc-lamps | 8539 | 4,605 |
| 2016 | Electric motors and generators; parts suitable for use solely or principally with the machines of heading no. 8501 or 8502 | 8503 | 4,365 |
| 2016 | Sign plates, name plates, address plates and similar plates, numbers, letters and other symbols, of base metal, excluding those of heading no. 9405 | 8310 | 4,224 |
| 2016 | Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon; with or without metal, of a kind used for electrical purposes | 8545 | 3,939 |
| 2016 | Nails, tacks, drawing pins, corrugated nails, staples (not those of heading no. 8305) and the like, of iron or steel, with heads of other material or not, but excluding articles with heads of copper | 7317 | 3,847 |
| 2016 | Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines | 8456 | 3,608 |
| 2016 | Lamps; portable, electric, designed to function by their own source of energy (e.g. dry batteries, accumulators, magnetos), excluding lighting equipment of heading no. 8512 | 8513 | 3,433 |
| 2016 | Amino-resins, phenolic resins and polyurethanes, in primary forms | 3909 | 3,419 |
| 2016 | Textile machinery; spinning, doubling, twisting machines, textile reeling or winding machines and machines for preparing textile yarns for use on machines of heading no. 8446 and 8447 | 8445 | 2,997 |
| 2016 | Railway or tramway track constructions of iron or steel; rails, check and track rails, switch blades, crossing frogs, point rods, sleepers, fish-plates, chair wedges, sole plates, bedplates, ties and the like | 7302 | 2,985 |
| 2016 | Tubing; flexible, with or without fittings, of base metal | 8307 | 2,856 |
| 2016 | Drawing, marking-out, mathematical calculating instruments (drafting machines, protractors, drawing sets etc); instruments for measuring length (e.g. measuring rods, tapes, micrometers, callipers) n.e.c. | 9017 | 2,762 |
| 2016 | Machinery, apparatus and equipment (excluding machine-tools of heading no. 8456 to 8465) for preparing or making printing components; plates, cylinders and other printing components; lithographic stones prepared for printing purposes | 8442 | 2,687 |
| 2016 | Video recording or reproducing apparatus | 8521 | 2,528 |
| 2016 | Yachts and other vessels; for pleasure or sports, rowing boats and canoes | 8903 | 2,335 |
| 2016 | Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals | 8484 | 2,307 |
| 2016 | Aluminium; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7609 | 2,193 |
| 2016 | Sound or video recording apparatus; parts and accessories suitable for use solely or principally with the apparatus of heading 8519 or 8521 | 8522 | 2,120 |
| 2016 | Wire of iron or non-alloy steel | 7217 | 2,002 |
| 2016 | Tools; hand-operated mechanical appliances, weighing 10 kg or less, used in the preparation, conditioning or serving of food or drink | 8210 | 1,926 |
| 2016 | Stationery; fittings for loose-leaf binders or files, letter clips, letter corners, paper clips, indexing tags and the like, staples in strips (for offices, upholstery, packaging), of base metal | 8305 | 1,875 |
| 2016 | Aluminium; plates, sheets and strip, thickness exceeding 0.2 mm | 7606 | 1,649 |
| 2016 | Tools, hand; saws and blades for saws of all kinds (including slitting, slotting or toothless blades) | 8202 | 1,552 |
| 2016 | Inner tubes, of rubber | 4013 | 1,546 |
| 2016 | Machine-tools; (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes of heading no. 8458 | 8459 | 1,527 |
| 2016 | Works trucks, self-propelled, (not fitted with lifting or handling equipment), for factories, warehouses etc, for short distance transport of goods, tractors used on railway station platforms; parts thereof | 8709 | 1,484 |
| 2016 | Wire of other alloy steel | 7229 | 1,482 |
| 2016 | Cutlery; other articles, (e.g. hair clippers, butchers' or kitchen cleavers, choppers and mincing knives, paper knives), manicure or pedicure sets and instruments (including nail files) | 8214 | 1,378 |
| 2016 | Machinery; for making pulp of fibrous cellulosic material, or for making or finishing paper or paperboard | 8439 | 1,110 |
| 2016 | Tools, hand; spades, shovels, mattocks, picks, hoes, forks, rakes; axes, bill hooks etc; secateurs and pruners of any kind; scythes, sickles, hay knives, hedge shears, timber wedges and other tools used in agriculture, horticulture, forestry | 8201 | 1,098 |
| 2016 | Cells and batteries; primary | 8506 | 970 |


| 2016 | Aluminium; tubes and pipes | 7608 | 890 |
| :---: | :---: | :---: | :---: |
| 2016 | Electrical capacitors; fixed, variable or adjustable (pre-set) | 8532 | 787 |
| 2016 | Boats, floating structures, other (for e.g. rafts, tanks, coffer-dams, landing stages, buoys and beacons) | 8907 | 766 |
| 2016 | Vacuum cleaners | 8508 | 741 |
| 2016 | Unvulcanised rubber in other forms (e.g. rods, tubes and profile shapes) and articles (e.g. discs and rings) | 4006 | 727 |
| 2016 | Machinery and apparatus for soldering, brazing, welding, whether or not capable of cutting, other than those of heading no. 8515; gas-operated surface tempering machines and appliances | 8468 | 715 |
| 2016 | Safes; armoured or reinforced, strong-boxes, doors and safe deposit lockers for strongrooms, cash or deed boxes and the like, of base metal | 8303 | 702 |
| 2016 | Office machines; not elsewhere classified | 8472 | 674 |
| 2016 | Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms | 3907 | 652 |
| 2016 | Floor coverings of plastics, self-adhesive or not, in rolls or tiles; wall or ceiling coverings of plastics, in rolls of a width not less than 45 cm | 3918 | 639 |
| 2016 | Machine-tools; for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass | 8464 | 562 |
| 2016 | Instrument panel clocks and clocks of a similar type for vehicles, aircraft, spacecraft or vessels | 9104 | 536 |
| 2016 | Time switches; with clock, watch movement or synchronous motor | 9107 | 431 |
| 2016 | Milking machines and dairy machinery | 8434 | 423 |
| 2016 | Stainless steel wire | 7223 | 380 |
| 2016 | Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not and loosely twisted double wire, of a kind used for fencing, of iron or steel | 7313 | 365 |
| 2016 | Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock. | 8527 | 344 |
| 2016 | Insulating fittings; for electrical machines, appliances, equipment, excluding insulators of heading no. 8546, electrical conduit tubing and joints therefore | 8547 | 309 |
| 2016 | Instruments, apparatus and models, designed for demonstrational purposes (in education or exhibitions), unsuitable for other uses | 9023 | 290 |
| 2016 | Aluminium wire | 7605 | 263 |
| 2016 | Spectacles, goggles and the like; corrective, protective or other | 9004 | 251 |
| 2016 | Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber | 4015 | 244 |
| 2016 | Knives; with cutting blades, serrated or not (including pruning knives), other than knives of heading no. 8208, and blades therefore | 8211 | 190 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width less than 600mm, clad, plated or coated | 7212 | 184 |
| 2016 | Tools, hand; two or more of heading no. 8202 to 8205, put up in sets for retail sale | 8206 | 172 |
| 2016 | Aluminium foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.2 mm | 7607 | 140 |
| 2016 | Silicones in primary forms | 3910 | 132 |
| 2016 | Iron or non-alloy steel; bars and rods, n.e.c. in chapter 72 | 7215 | 123 |
| 2016 | Scissors; tailors' shears and similar shears, and blades therefore | 8213 | 96 |
| 2016 | Photographic (including cinematographic) laboratory apparatus and equipment, n.e.c. in chapter 90; negatoscopes; projection screens | 9010 | 56 |
| 2016 | Time of day recording apparatus and apparatus for measuring, recording or otherwise indicating intervals of time, with clock, watch movement or synchronous motor | 9106 | 54 |
| 2016 | Breathing appliances and gas masks; excluding protective masks having neither mechanical parts nor replaceable filters and excluding apparatus of item no. 9019.20 | 9020 | 53 |
| 2016 | Clocks, other, n.e.c. | 9105 | 42 |
| 2016 | Electrical insulators of any material | 8546 | 32 |
| 2016 | Plates, sheets, strip, rods and profile shapes, of vulcanised rubber other than hard rubber | 4008 | 29 |
| 2016 | Stainless steel in ingots or other primary forms; semi-finished products of stainless steel | 7218 | 27 |
| 2016 | Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers | 9008 | 22 |
| 2016 | Copper; table, kitchen or other household articles and parts thereof; pot scourers, scouring, polishing pads, gloves and the like; sanitary ware and parts thereof | 7418 | 20 |
| 2016 | Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, rangefinders | 9015 | 20 |
| 2016 | Machines and appliances, instruments or apparatus of chapter 90; parts and accessories n.e.c. in chapter 90 | 9033 | 10 |
| 2017 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8544 | 173,441,782 |
| 2017 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics | 3923 | 17,118,294 |
| 2017 | Gas, liquid or electricity supply or production meters, including calibrating meters therefor | 9028 | 14,790,174 |
| 2017 | Aircraft n.e.c. in heading no. 8801 (e.g. helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles | 8802 | 14,004,261 |


| 2017 | Pumps; for liquids, whether or not fitted with measuring device, liquid elevators | 8413 | 8,914,024 |
| :---: | :---: | :---: | :---: |
| 2017 | Copper; waste and scrap | 7404 | 8,246,780 |
| 2017 | Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators; electrical parts of machinery or apparatus, n.e.c. or included elsewhere in chapter 85 | 8548 | 3,725,190 |
| 2017 | Aluminium; waste and scrap | 7602 | 3,616,348 |
| 2017 | Electric transformers, static converters (e.g. rectifiers) and inductors | 8504 | 2,943,186 |
| 2017 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); capsules for bottles, threaded bungs, bung covers, seals and other packaging accessories, of base metal | 8309 | 2,776,673 |
| 2017 | Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors | 9031 | 2,416,751 |
| 2017 | Machine-tools; parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465, and tool holders for any type of tool for working in the hand | 8466 | 2,220,070 |
| 2017 | Machinery, plant (not domestic), or laboratory equipment; electrically heated or not, (excluding items in 85.14 ) for the treatment of materials by a process involving change of temperature; including instantaneous or non electric storage water heaters | 8419 | 2,084,026 |
| 2017 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8703 | 1,912,009 |
| 2017 | Copper; stranded wire, cables, plaited bands and the like, not electrically insulated | 7413 | 1,898,314 |
| 2017 | Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of $8443,8525,8527$, or 8528 | 8517 | 1,768,716 |
| 2017 | Reservoirs, tanks, vats and similar containers; for any material (excluding compressed or liquefied gas), of iron or steel, capacity exceeding 300l, whether or not lined or heat insulated | 7309 | 1,758,452 |
| 2017 | Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers | 8432 | 1,695,704 |
| 2017 | Machines and appliances for testing the hardness, strength, compressibility, elasticity of other mechanical properties of materials (e.g. metals, wood, textiles, paper, plastics) | 9024 | 1,369,020 |
| 2017 | Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof | 8716 | 1,238,168 |
| 2017 | Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines | 8424 | 1,236,088 |
| 2017 | Ferrous waste and scrap; remelting scrap ingots of iron or steel | 7204 | 1,091,716 |
| 2017 | Tools, interchangeable; for hand tools, whether or not power-operated, or for machine tools (pressing, stamping, punching, drilling etc), including dies for drawing or extruding metal, and rock drilling or earth boring tools | 8207 | 1,059,122 |
| 2017 | Railway or tramway goods vans and wagons; not self-propelled | 8606 | 1,047,773 |
| 2017 | Structures of iron or steel and parts thereof; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures | 7308 | 961,146 |
| 2017 | Tractors; (other than tractors of heading no 8709) | 8701 | 960,093 |
| 2017 | Regulating or controlling instruments and apparatus; automatic type | 9032 | 895,169 |
| 2017 | Articles of plastics and articles of other materials of heading no. 3901 to 3914, n.e.c. in chapter 39 | 3926 | 883,227 |
| 2017 | Iron or non-alloy steel, angles, shapes and sections | 7216 | 860,740 |
| 2017 | Dish washing machines; machinery for cleaning, drying, filling, closing, sealing, capsuling or labelling bottles, cans, boxes, bags, etc, machinery for aerating beverages | 8422 | 853,343 |
| 2017 | Navigational instruments and appliances; direction finding compasses | 9014 | 835,767 |
| 2017 | Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments | 9018 | 701,756 |
| 2017 | Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines) | 8412 | 599,558 |
| 2017 | Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms | 3907 | 594,959 |
| 2017 | Tableware, kitchenware, other household articles and hygienic or toilet articles, of plastics | 3924 | 505,095 |
| 2017 | Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals, or ores; pile drivers and extractors; snow ploughs and snow blowers | 8430 | 494,875 |
| 2017 | Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading no 8437 | 8433 | 465,216 |
| 2017 | Vehicles; for the transport of goods | 8704 | 437,834 |
| 2017 | Titanium; articles thereof, including waste and scrap | 8108 | 429,779 |
| 2017 | Orthopaedic appliances; including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other which are worn, carried or implanted in the body to compensate for a defect or disability | 9021 | 420,516 |
| 2017 | Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel | 7318 | 393,768 |
| 2017 | Cloth (including endless bands), grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel | 7314 | 390,897 |


| 2017 | Machinery n.e.c. in this chapter, for the industrial preparation or manufacture of food or drink; other than machinery for extraction or preparation of animal or fixed vegetable fats or oils | 8438 | 373,004 |
| :---: | :---: | :---: | :---: |
| 2017 | Machinery; for working rubber or plastics or for the manufacture of products from these materials, n.e.c. in this chapter | 8477 | 354,694 |
| 2017 | Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel | 7307 | 340,591 |
| 2017 | Turbo-jets, turbo-propellers and other gas turbines | 8411 | 335,434 |
| 2017 | Electrical machines and apparatus; having individual functions, not specified or included elsewhere in this chapter | 8543 | 321,911 |
| 2017 | Printing machinery; used for printing by means of plates, cylinders and other printing components of heading 84.42; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof | 8443 | 307,271 |
| 2017 | Iron or steel (excluding cast iron); tubes and pipes (e.g. welded, riveted or similarly closed), having circular cross-sections, external diameter of which exceeds 406.4 mm , not seamless | 7305 | 287,613 |
| 2017 | Agricultural, horticultural, forestry, poultry-keeping, bee-keeping machinery; including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders | 8436 | 282,552 |
| 2017 | Machinery (not of heading no. 8450) for washing, cleaning, wringing, drying, ironing, pressing, bleaching, dyeing, dressing, finishing, coating or impregnating textile yarn, fabrics or made up articles | 8451 | 270,952 |
| 2017 | Plastics; builders' wares n.e.c. or included | 3925 | 251,020 |
| 2017 | Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels | 8474 | 248,648 |
| 2017 | Boards, panels, consoles, desks, cabinets, bases with apparatus of heading no. 8535, 8536 for electricity control and distribution, (other than switching apparatus of heading no. 8517) | 8537 | 243,556 |
| 2017 | Bulldozers, graders, levellers, scrapers, angledozers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers, self-propelled | 8429 | 238,356 |
| 2017 | Plastic plates, sheets, film, foil and strip n.e.c. in chapter 39 | 3921 | 228,187 |
| 2017 | Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415 | 8418 | 225,167 |
| 2017 | Transmission apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8525 to 8528 | 8529 | 216,825 |
| 2017 | Moulding boxes for metal foundry, moulding patterns, moulds for metals (excluding ingot moulds), metal carbides, glass, mineral materials, rubber or plastics | 8480 | 216,052 |
| 2017 | Nickel; tubes, pipes and tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7507 | 212,086 |
| 2017 | Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included | 8471 | 208,452 |
| 2017 | Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders | 8525 | 206,555 |
| 2017 | Motor vehicles; parts and accessories, of heading no. 8701 to 8705 | 8708 | 203,418 |
| 2017 | Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases | 8421 | 202,945 |
| 2017 | Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535, 8536 and 8537 | 8538 | 199,796 |
| 2017 | Railway or tramway track fixtures and fittings; mechanical (including electro-mechanical) signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields; parts thereof | 8608 | 193,164 |
| 2017 | Derricks, cranes, including cable cranes, mobile lifting frames, straddle carriers and works trucks fitted with a crane | 8426 | 184,905 |
| 2017 | Machines; for making up paper pulp, paper or paperboard, including cutting machines of all kinds | 8441 | 177,037 |
| 2017 | Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426 or 8427 (e.g. lifts, escalators, conveyors, teleferics) | 8428 | 164,821 |
| 2017 | Tanks, casks, drums, cans, boxes and similar containers, for any material (excluding compressed or liquefied gas), of iron or steel, capacity not exceeding 300l, whether or not lined or heat-insulated | 7310 | 164,691 |
| 2017 | Waste, parings and scrap, of plastics | 3915 | 163,351 |
| 2017 | Machinery parts; not containing electrical connectors, insulators, coils, contacts or other electrical features, n.e.c. in this chapter | 8487 | 159,130 |
| 2017 | Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials | 8465 | 152,394 |
| 2017 | Base metal mountings, fittings and similar articles for furniture, doors, staircases, windows, trunks, chests etc, castors with mountings of base metal, automatic door closers of base metal | 8302 | 151,013 |
| 2017 | Machinery; for preparing or making up tobacco, n.e.c. in this chapter | 8478 | 143,761 |
| 2017 | Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather, other than sewing machines | 8453 | 136,604 |
| 2017 | Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter | 8479 | 128,810 |


| 2017 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables | 8536 | 128,514 |
| :---: | :---: | :---: | :---: |
| 2017 | Special purpose motor vehicles; not those for the transport of persons or goods (e.g. breakdown lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units etc) | 8705 | 125,645 |
| 2017 | Aircraft; parts of heading no. 8801 or 8802 | 8803 | 122,997 |
| 2017 | Knives and cutting blades, for machines or for mechanical appliances | 8208 | 119,870 |
| 2017 | Presses, crushers and similar machinery; used in the manufacture of wine, cider, fruit juices or similar beverages | 8435 | 116,822 |
| 2017 | Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters | 8414 | 113,079 |
| 2017 | Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves | 8481 | 113,067 |
| 2017 | Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel | 7304 | 111,155 |
| 2017 | Machinery; parts and accessories (not covers, carrying cases and the like) suitable for use solely or principally with machines of heading no. 8469 to 8472 | 8473 | 107,269 |
| 2017 | Ball or roller bearings | 8482 | 104,221 |
| 2017 | Tools, hand; (including glaziers' diamonds) n.e.c.; blow lamps; vices, clamps etc, other than accessories for and parts of, machine tools; anvils; portable forges; hand or pedal operated grinding wheels with frameworks | 8205 | 100,440 |
| 2017 | Polymers of ethylene, in primary forms | 3901 | 99,387 |
| 2017 | New pneumatic tyres, of rubber | 4011 | 98,908 |
| 2017 | Tools; for working in the hand, pneumatic, hydraulic or with self-contained electric or nonelectric motor | 8467 | 97,403 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width 600mm or more, clad, plated or coated | 7210 | 95,522 |
| 2017 | Bicycles and other cycles; including delivery tricycles, not motorised | 8712 | 95,316 |
| 2017 | Electrical resistors (including rheostats and potentiometers), excluding heating resistors | 8533 | 93,513 |
| 2017 | Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings | 8483 | 90,690 |
| 2017 | Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls | 3919 | 80,992 |
| 2017 | Nickel; articles thereof n.e.c. in chapter 75 | 7508 | 78,207 |
| 2017 | Springs and leaves for springs, of iron or steel | 7320 | 77,167 |
| 2017 | Electric accumulators, including separators therefor; whether or not rectangular (including square) | 8507 | 75,949 |
| 2017 | Revolution counter, production counters, taximeters, mileometers, pedometers and the like, speed indicators and tachometers, other than those of heading no. 9015, stroboscopes | 9029 | 72,428 |
| 2017 | X-ray, alpha, beta, gamma radiation apparatus; x-ray tubes, x-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like | 9022 | 72,298 |
| 2017 | Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus | 8528 | 65,407 |
| 2017 | Iron or steel (excluding cast iron); tubes, pipes and hollow profiles (not seamless), n.e.c. in chapter 73 | 7306 | 62,986 |
| 2017 | Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical grates, mechanical ash dischargers and similar appliances | 8416 | 61,032 |
| 2017 | Machines for cleaning, sorting, grading seed, grain, dried leguminous vegetables; machinery used in the milling industry for the working of cereals or dried leguminous vegetables, not farm type machinery | 8437 | 60,073 |
| 2017 | Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40 | 4016 | 59,680 |
| 2017 | Electric (electrically heated gas) soldering, brazing, welding machines and apparatus, capable or not of cutting, electric machines and apparatus for hot spraying of metals or sintered carbides | 8515 | 54,862 |
| 2017 | Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines | 8511 | 54,450 |
| 2017 | Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss | 8514 | 53,593 |
| 2017 | Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics | 3917 | 53,574 |
| 2017 | Monofilament of which any cross-sectional dimension exceeds 1 mm , rods, sticks and profile shapes, whether or not surface-worked but not otherwise worked, of plastics | 3916 | 52,368 |
| 2017 | Plastics; plates, sheets, film, foil and strip (not self-adhesive); non-cellular and not reinforced, laminated, supported or similarly combined with other materials, n.e.c. in chapter 39 | 3920 | 46,995 |
| 2017 | Aluminium; bars, rods and profiles | 7604 | 46,219 |
| 2017 | Discs, tapes, solid-state non-volatile storage devices, smart cards and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, excluding products of Chapter 37 | 8523 | 41,674 |


| 2017 | Machinery parts; used solely or principally with the machinery of heading no. 8425 to 8430 | 8431 | 41,145 |
| :---: | :---: | :---: | :---: |
| 2017 | Electric generating sets and rotary converters | 8502 | 37,952 |
| 2017 | Polymers of propylene or of other olefins, in primary forms | 3902 | 37,404 |
| 2017 | Clasps; frames with clasps, buckles, hooks, eyes, eyelets etc used for clothing, footwear, awnings, handbags, travel goods or other articles, tubular, bifurcated rivets, beads, spangles, of base metal | 8308 | 34,517 |
| 2017 | Wires, rods, tubes, plates, electrodes of base metal or metal carbides; of a kind used for soldering, brazing, welding; wires and rods for metal spraying | 8311 | 33,469 |
| 2017 | Instruments and apparatus; for physical or chemical analysis (e.g. polarimeters, spectrometers), for measuring or checking viscosity, porosity, etc, for measuring quantities of heat, sound or light | 9027 | 32,696 |
| 2017 | Electric water, space, soil heaters; electro-thermic hair-dressing apparatus; hand dryers, irons; electro-thermic appliances for domestic purposes; electro heating resistors, not of heading no. 8545 | 8516 | 32,274 |
| 2017 | Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408 | 8409 | 32,107 |
| 2017 | Compression-ignition internal combustion piston engines (diesel or semi-diesel engines) | 8408 | 32,027 |
| 2017 | Sewing machines; other than book-sewing machines of heading no. 8440; furniture, bases and covers specially designed for sewing machines; sewing machine needles | 8452 | 32,018 |
| 2017 | Machine-tools; (including presses) for working metal by forging, hammering or diestamping, for bending, folding, straightening, flattening, shearing or punching metal | 8462 | 31,003 |
| 2017 | Vehicles; parts and accessories of heading no. 8711 to 8713 | 8714 | 30,310 |
| 2017 | Stoves, ranges, grates, cookers (those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances and parts, of iron or steel | 7321 | 29,736 |
| 2017 | Electric motors and generators (excluding generating sets) | 8501 | 29,032 |
| 2017 | Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling | 7214 | 28,270 |
| 2017 | Instruments, apparatus for measuring, checking electrical quantities not meters of heading no. 9028; instruments, apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic and other radiations | 9030 | 27,426 |
| 2017 | Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, not laser diodes; other optical appliances and instruments n.e.c. in this chapter | 9013 | 26,789 |
| 2017 | Central heating boilers; excluding those of heading no. 8402 | 8403 | 26,763 |
| 2017 | Zinc; plates, sheets, strip and foil | 7905 | 26,710 |
| 2017 | Fork-lift and other works trucks; fitted with lifting or handling equipment | 8427 | 26,118 |
| 2017 | Weighing machines; excluding balances of a sensitivity of 5 cg or better, including weight operated counting or checking machines and weights of all kinds | 8423 | 26,011 |
| 2017 | Copper; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7412 | 24,236 |
| 2017 | Optical fibres and optical fibre bundles; optical fibre cables not of heading no. 8544; sheets, plates of polarising material; lenses, prisms, mirrors, of any material; unmounted; not non optical glass | 9001 | 23,430 |
| 2017 | Electronic integrated circuits | 8542 | 22,734 |
| 2017 | Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated | 7312 | 22,301 |
| 2017 | Railway or tramway locomotives or rolling stock; parts thereof | 8607 | 21,988 |
| 2017 | Polymers of vinyl chloride or of other halogenated olefins, in primary forms | 3904 | 19,744 |
| 2017 | Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms | 3905 | 16,316 |
| 2017 | Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. 9014, 9015, 9028 or 9032 | 9026 | 15,682 |
| 2017 | Stationery; fittings for loose-leaf binders or files, letter clips, letter corners, paper clips, indexing tags and the like, staples in strips (for offices, upholstery, packaging), of base metal | 8305 | 15,372 |
| 2017 | Sanitary ware; baths, shower-baths, sinks, wash-basins, bidets, lavatory pans, seats and covers, flushing cisterns and sanitary ware, of plastics | 3922 | 14,791 |
| 2017 | Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked | 9002 | 14,620 |
| 2017 | Radar apparatus, radio navigational aid apparatus and radio remote control apparatus | 8526 | 13,891 |
| 2017 | Padlocks and locks (key, combination, electrically operated) of base metal; clasps and frames with clasps incorporating locks, of base metal, keys for any or the foregoing articles, of base metal | 8301 | 13,600 |
| 2017 | Bells, gongs and the like; non-electric, statuettes, other ornaments, photograph, picture, similar frames, mirrors, of base metal | 8306 | 13,138 |
| 2017 | Boilers; steam or other vapour generating (other than central heating hot water boilers, capable also of producing low pressure steam), super heated water boilers | 8402 | 13,053 |
| 2017 | Tools, hand; files, rasps, pliers (including cutting pliers), pincers, tweezers, metal cutting shears, pipe cutters, bolt croppers, perforating punches and similar | 8203 | 12,440 |
| 2017 | Zinc; dust, powders and flakes | 7903 | 12,353 |


| 2017 | Electro-mechanical domestic appliances; with self-contained electric motor, other than vacuum cleaners of heading 85.08. | 8509 | 12,321 |
| :---: | :---: | :---: | :---: |
| 2017 | Microscopes, compound optical; including those for photomicrography, cinephotomicrography or microprojection | 9011 | 10,868 |
| 2017 | Instruments, apparatus and models, designed for demonstrational purposes (in education or exhibitions), unsuitable for other uses | 9023 | 10,526 |
| 2017 | Lathes for removing metal | 8458 | 10,430 |
| 2017 | Machine-tools; n.e.c. for working metal, sintered metal carbides or cermets without removing material | 8463 | 10,424 |
| 2017 | Containers for compressed or liquefied gas, of iron or steel | 7311 | 10,086 |
| 2017 | Electro-magnets; permanent magnets, intended permanent magnets; electro-magnetic, permanent magnet chucks, clamps, similar; electromagnetic couplings, clutches, brakes; electro-magnetic lifting heads | 8505 | 9,789 |
| 2017 | Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not | 9025 | 9,434 |
| 2017 | Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar, incorporating a calculating device; cash registers | 8470 | 9,097 |
| 2017 | Balances; of a sensitivity of 5 cg or better, with or without weights | 9016 | 8,528 |
| 2017 | Diodes, transistors, similar semiconductor devices; including photovoltaic cells assembled or not in modules, panels, light emitting mounted piezo-electric crystals | 8541 | 8,378 |
| 2017 | Machine-tools; for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal, sintered metal carbides or cermets by means of grinding stones, abrasives or polishing products | 8460 | 8,207 |
| 2017 | Microphones and their stands; loudspeakers, mounted or not in their enclosures; headphones and earphones, combined or not with a microphone, and sets of a microphone and one or more loudspeakers; audio frequency and electric sound amplifiers and sets | 8518 | 7,251 |
| 2017 | Pulley tackle and hoists other than skip hoists; winches and capstans; jacks | 8425 | 6,988 |
| 2017 | Copper; articles thereof n.e.c. in chapter 74 | 7419 | 6,976 |
| 2017 | Generators for producer or water gas with or without their purifiers acetylene gas generators and similar water process gas generators, with or without their purifiers | 8405 | 6,766 |
| 2017 | Conveyor or transmission belts or belting, of vulcanised rubber | 4010 | 6,567 |
| 2017 | Machine-tools; for planing, shaping, slotting, broaching, gear cutting and grinding, finishing, sawing, cutting off and other tools working by removing metal, sintered metal carbides or cermets n.e.c. | 8461 | 6,016 |
| 2017 | Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting | 8447 | 5,700 |
| 2017 | Cutlery; spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter knives, sugar tongs and similar kitchen or tableware | 8215 | 5,358 |
| 2017 | Nails, tacks, drawing pins, corrugated nails, staples (not those of heading no. 8305) and the like, of iron or steel, with heads of other material or not, but excluding articles with heads of copper | 7317 | 5,321 |
| 2017 | Converters, ladles, ingot moulds and casting machines; of a kind used metallurgy or in metal foundries | 8454 | 5,212 |
| 2017 | Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals | 8484 | 5,005 |
| 2017 | Lamps; electric filament or discharge lamps, including sealed beam lamp units and ultraviolet or infra-red lamps, arc-lamps | 8539 | 4,494 |
| 2017 | Machinery, apparatus and equipment (excluding machine-tools of heading no. 8456 to 8465) for preparing or making printing components; plates, cylinders and other printing components; lithographic stones prepared for printing purposes | 8442 | 4,477 |
| 2017 | Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges) | 4009 | 4,397 |
| 2017 | Cutlery; other articles, (e.g. hair clippers, butchers' or kitchen cleavers, choppers and mincing knives, paper knives), manicure or pedicure sets and instruments (including nail files) | 8214 | 4,346 |
| 2017 | Machines and appliances, instruments or apparatus of chapter 90; parts and accessories n.e.c. in chapter 90 | 9033 | 4,251 |
| 2017 | Video recording or reproducing apparatus | 8521 | 4,075 |
| 2017 | Stainless steel; flat-rolled products of width of 600 mm or more | 7219 | 4,045 |
| 2017 | Machine-tools; for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass | 8464 | 4,030 |
| 2017 | Tin; bars, rods, profiles and wire | 8003 | 3,822 |
| 2017 | Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, rangefinders | 9015 | 3,753 |
| 2017 | Signalling apparatus; electric sound or visual (e.g. bells, sirens, indicator panels, burglar or fire alarms), excluding those of heading no. 8512 or 8530 | 8531 | 3,706 |
| 2017 | Knives; with cutting blades, serrated or not (including pruning knives), other than knives of heading no. 8208, and blades therefore | 8211 | 3,602 |
| 2017 | Zinc; articles n.e.c. in chapter 79 | 7907 | 3,419 |


| 2017 | Sound or video recording apparatus; parts and accessories suitable for use solely or principally with the apparatus of heading 8519 or 8521 | 8522 | 3,273 |
| :---: | :---: | :---: | :---: |
| 2017 | Circuits; printed | 8534 | 3,162 |
| 2017 | Electric motors and generators; parts suitable for use solely or principally with the machines of heading no. 8501 or 8502 | 8503 | 2,914 |
| 2017 | Bodies; (including cabs) for the motor vehicles of heading no. 8701 to 8705 | 8707 | 2,778 |
| 2017 | Copper wire | 7408 | 2,715 |
| 2017 | Iron or steel sheet piling, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel | 7301 | 2,480 |
| 2017 | Breathing appliances and gas masks; excluding protective masks having neither mechanical parts nor replaceable filters and excluding apparatus of item no. 9019.20 | 9020 | 2,443 |
| 2017 | Reciprocating or rotary internal combustion piston engines | 8407 | 2,310 |
| 2017 | Chain and parts thereof, of iron or steel | 7315 | 2,160 |
| 2017 | Lighting or visual signalling equipment (excluding articles of heading no. 8539), windscreen wipers, defrosters and demisters; electrical, of a kind used for cycles or motor vehicles | 8512 | 2,155 |
| 2017 | Lamps; portable, electric, designed to function by their own source of energy (e.g. dry batteries, accumulators, magnetos), excluding lighting equipment of heading no. 8512 | 8513 | 2,106 |
| 2017 | Signalling, safety or traffic control equipment; for railways, tramways, roads, inland waterways, parking facilities, port installations, airfields, excluding those of heading no. 8608 | 8530 | 2,080 |
| 2017 | Air conditioning machines; comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated | 8415 | 1,842 |
| 2017 | Iron or non-alloy steel; flat-rolled products of a width of 600 mm or more, hot-rolled, not clad, plated or coated | 7208 | 1,793 |
| 2017 | Drawing, marking-out, mathematical calculating instruments (drafting machines, protractors, drawing sets etc); instruments for measuring length (e.g. measuring rods, tapes, micrometers, callipers) n.e.c. | 9017 | 1,719 |
| 2017 | Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock. | 8527 | 1,669 |
| 2017 | Sign plates, name plates, address plates and similar plates, numbers, letters and other symbols, of base metal, excluding those of heading no. 9405 | 8310 | 1,568 |
| 2017 | Plates, sheets, strip, rods and profile shapes, of vulcanised rubber other than hard rubber | 4008 | 1,527 |
| 2017 | Mechano-therapy, massage appliances; psychological aptitude testing apparatus; ozone, oxygen, aerosol therapy, artificial respiration or other therapeutic respiration apparatus | 9019 | 1,501 |
| 2017 | Tools, hand; saws and blades for saws of all kinds (including slitting, slotting or toothless blades) | 8202 | 1,494 |
| 2017 | Aluminium foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.2 mm | 7607 | 1,480 |
| 2017 | Wrist-watches, pocket-watches, stop-watches and other watches, other than those of heading no. 9101 | 9102 | 1,475 |
| 2017 | Copper, nails, tacks, drawing pins, staples (not those of heading no. 8305) and the like, of copper or iron or steel with heads of copper; screws bolts, nuts, screws hooks, rivets, cotters, washers | 7415 | 1,456 |
| 2017 | Safes; armoured or reinforced, strong-boxes, doors and safe deposit lockers for strongrooms, cash or deed boxes and the like, of base metal | 8303 | 1,449 |
| 2017 | Tubing; flexible, with or without fittings, of base metal | 8307 | 1,405 |
| 2017 | Inner tubes, of rubber | 4013 | 1,403 |
| 2017 | Copper tubes and pipes | 7411 | 1,184 |
| 2017 | Tools, hand; hand-operated spanners and wrenches (including torque meter wrenches but not including tap wrenches), interchangeable spanner sockets, with or without handles | 8204 | 992 |
| 2017 | Household or laundry-type washing machines; including machines which both wash and dry | 8450 | 877 |
| 2017 | Tools, hand; two or more of heading no. 8202 to 8205, put up in sets for retail sale | 8206 | 875 |
| 2017 | Office machines; not elsewhere classified | 8472 | 862 |
| 2017 | Spectacles, goggles and the like; corrective, protective or other | 9004 | 741 |
| 2017 | Machines; calendering or other rolling machines, for other than metal or glass and cylinders therefor | 8420 | 700 |
| 2017 | Tools, hand; spades, shovels, mattocks, picks, hoes, forks, rakes; axes, bill hooks etc; secateurs and pruners of any kind; scythes, sickles, hay knives, hedge shears, timber wedges and other tools used in agriculture, horticulture, forestry | 8201 | 687 |
| 2017 | Copper; table, kitchen or other household articles and parts thereof; pot scourers, scouring, polishing pads, gloves and the like; sanitary ware and parts thereof | 7418 | 675 |
| 2017 | Automatic goods-vending machines (e.g. postage stamp, cigarette, food or beverage machines), including money-changing machines | 8476 | 672 |
| 2017 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits; for a voltage exceeding 1000 volts | 8535 | 669 |
| 2017 | Stainless steel wire | 7223 | 579 |
| 2017 | Polymers of styrene, in primary forms | 3903 | 564 |
| 2017 | Ferro-alloys | 7202 | 561 |


| 2017 | Insulating fittings; for electrical machines, appliances, equipment, excluding insulators of heading no. 8546, electrical conduit tubing and joints therefore | 8547 | 552 |
| :---: | :---: | :---: | :---: |
| 2017 | Time switches; with clock, watch movement or synchronous motor | 9107 | 501 |
| 2017 | Electrical capacitors; fixed, variable or adjustable (pre-set) | 8532 | 472 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width 600 mm or more, cold-rolled (coldreduced), not clad, plated or coated | 7209 | 465 |
| 2017 | Furnaces and ovens; industrial or laboratory, including incinerators, non-electric | 8417 | 447 |
| 2017 | Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon; with or without metal, of a kind used for electrical purposes | 8545 | 445 |
| 2017 | Machinery, auxiliary; for use with machines of heading no. 8444 to 8447 (e.g. dobbies, jacquards, automatic stop motions, shuttle changing mechanisms) parts, accessories for machines of heading no. 8444, 8447 | 8448 | 335 |
| 2017 | Wire of other alloy steel | 7229 | 269 |
| 2017 | Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber | 4012 | 264 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width less than 600 mm , clad, plated or coated | 7212 | 237 |
| 2017 | Aluminium; plates, sheets and strip, thickness exceeding 0.2 mm | 7606 | 193 |
| 2017 | Vacuum cleaners | 8508 | 193 |
| 2017 | Nickel; bars, rods, profiles and wire | 7505 | 172 |
| 2017 | Aluminium; tubes and pipes | 7608 | 164 |
| 2017 | Hard rubber (e.g. ebonite) in all forms, including waste and scrap; articles of hard rubber | 4017 | 94 |
| 2017 | Silicones in primary forms | 3910 | 76 |
| 2017 | Scissors; tailors' shears and similar shears, and blades therefore | 8213 | 75 |
| 2017 | Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber | 4015 | 58 |
| 2017 | Stainless steel; flat-rolled products of width less than 600mm | 7220 | 40 |
| 2017 | Amino-resins, phenolic resins and polyurethanes, in primary forms | 3909 | 32 |
| 2017 | Aluminium; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7609 | 31 |
| 2017 | Tools; hand-operated mechanical appliances, weighing 10 kg or less, used in the preparation, conditioning or serving of food or drink | 8210 | 28 |
| 2017 | Sound recording or reproducing apparatus | 8519 | 25 |
| 2017 | Cameras, photographic (excluding cinematographic); photographic flashlight apparatus and flashbulbs other than discharge lamps of heading no. 8539 | 9006 | 24 |
| 2017 | Cells and batteries; primary | 8506 | 23 |
| 2017 | Wire of iron or non-alloy steel | 7217 | 8 |
| 2017 | Clocks, other, n.e.c. | 9105 | 4 |

Appendix 4: Import of foreign commodities, trade value, 2016-2017

| Year | Commodity | Commodity Code | Trade Value (\$) |
| :---: | :---: | :---: | :---: |
| 2016 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8703 | 107,287,801 |
| 2016 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8544 | 76,674,072 |
| 2016 | Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of $8443,8525,8527$, or 8528 | 8517 | 60,423,258 |
| 2016 | Tractors; (other than tractors of heading no 8709) | 8701 | 40,637,309 |
| 2016 | Copper wire | 7408 | 38,667,640 |
| 2016 | New pneumatic tyres, of rubber | 4011 | 36,600,395 |
| 2016 | Motor vehicles; parts and accessories, of heading no. 8701 to 8705 | 8708 | 36,386,712 |
| 2016 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables | 8536 | 33,919,140 |
| 2016 | Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included | 8471 | 25,854,468 |
| 2016 | Insulating fittings; for electrical machines, appliances, equipment, excluding insulators of heading no. 8546, electrical conduit tubing and joints therefore | 8547 | 25,486,327 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width 600 mm or more, clad, plated or coated | 7210 | 23,712,952 |
| 2016 | Plastics; plates, sheets, film, foil and strip (not self-adhesive); non-cellular and not reinforced, laminated, supported or similarly combined with other materials, n.e.c. in chapter 39 | 3920 | 23,003,560 |
| 2016 | Articles of plastics and articles of other materials of heading no. 3901 to 3914 , n.e.c. in chapter 39 | 3926 | 21,833,130 |
| 2016 | Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415 | 8418 | 21,830,061 |
| 2016 | Structures of iron or steel and parts thereof; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures | 7308 | 21,718,849 |
| 2016 | Monofilament of which any cross-sectional dimension exceeds 1 mm , rods, sticks and profile shapes, whether or not surface-worked but not otherwise worked, of plastics | 3916 | 21,609,739 |
| 2016 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics | 3923 | 21,472,971 |
| 2016 | Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus | 8528 | 20,153,630 |
| 2016 | Base metal mountings, fittings and similar articles for furniture, doors, staircases, windows, trunks, chests etc, castors with mountings of base metal, automatic door closers of base metal | 8302 | 20,037,219 |
| 2016 | Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers | 8432 | 19,912,048 |
| 2016 | Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics | 3917 | 18,799,108 |
| 2016 | Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling | 7214 | 18,641,372 |
| 2016 | Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading no 8437 | 8433 | 18,033,232 |
| 2016 | Plastic plates, sheets, film, foil and strip n.e.c. in chapter 39 | 3921 | 17,433,454 |
| 2016 | Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535, 8536 and 8537 | 8538 | 16,465,171 |
| 2016 | Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40 | 4016 | 14,779,339 |
| 2016 | Electric water, space, soil heaters; electro-thermic hair-dressing apparatus; hand dryers, irons; electro-thermic appliances for domestic purposes; electro heating resistors, not of heading no. 8545 | 8516 | 14,773,921 |
| 2016 | Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases | 8421 | 14,470,087 |
| 2016 | Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter | 8479 | 13,555,876 |
| 2016 | Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves | 8481 | 13,401,936 |
| 2016 | Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments | 9018 | 12,444,046 |
| 2016 | Vehicles; for the transport of goods | 8704 | 12,177,148 |
| 2016 | Iron or steel (excluding cast iron); tubes, pipes and hollow profiles (not seamless), n.e.c. in chapter 73 | 7306 | 11,782,116 |
| 2016 | Machinery, plant (not domestic), or laboratory equipment; electrically heated or not, (excluding items in 85.14 ) for the treatment of materials by a process involving change of temperature; including instantaneous or non electric storage water heaters | 8419 | 10,959,904 |
| 2016 | Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof | 8716 | 10,895,050 |


| 2016 | Pumps; for liquids, whether or not fitted with measuring device, liquid elevators | 8413 | 10,613,994 |
| :---: | :---: | :---: | :---: |
| 2016 | Electric transformers, static converters (e.g. rectifiers) and inductors | 8504 | 10,532,501 |
| 2016 | Central heating boilers; excluding those of heading no. 8402 | 8403 | 10,400,858 |
| 2016 | Polymers of ethylene, in primary forms | 3901 | 10,369,432 |
| 2016 | Special purpose motor vehicles; not those for the transport of persons or goods (e.g. breakdown lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units etc) | 8705 | 10,335,156 |
| 2016 | Air conditioning machines; comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated | 8415 | 9,994,609 |
| 2016 | Household or laundry-type washing machines; including machines which both wash and dry | 8450 | 9,572,034 |
| 2016 | Iron or steel; articles, n.e.c. in chapter 73 | 7326 | 8,838,066 |
| 2016 | Electric accumulators, including separators therefor; whether or not rectangular (including square) | 8507 | 8,505,295 |
| 2016 | Vehicles; public transport passenger type | 8702 | 8,354,858 |
| 2016 | Orthopaedic appliances; including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other which are worn, carried or implanted in the body to compensate for a defect or disability | 9021 | 8,337,736 |
| 2016 | Plastics; builders' wares n.e.c. or included | 3925 | 8,322,680 |
| 2016 | Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters | 8414 | 8,073,233 |
| 2016 | Tableware, kitchenware, other household articles and hygienic or toilet articles, of plastics | 3924 | 7,667,573 |
| 2016 | Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms | 3907 | 7,069,797 |
| 2016 | Printing machinery; used for printing by means of plates, cylinders and other printing components of heading 84.42; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof | 8443 | 7,040,364 |
| 2016 | Boards, panels, consoles, desks, cabinets, bases with apparatus of heading no. 8535, 8536 for electricity control and distribution, (other than switching apparatus of heading no. 8517) | 8537 | 6,973,590 |
| 2016 | Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines | 8424 | 6,906,983 |
| 2016 | Aluminium; bars, rods and profiles | 7604 | 6,741,199 |
| 2016 | Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426 or 8427 (e.g. lifts, escalators, conveyors, teleferics) | 8428 | 6,647,394 |
| 2016 | Iron or non-alloy steel, angles, shapes and sections | 7216 | 6,573,146 |
| 2016 | Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel | 7318 | 6,564,318 |
| 2016 | Bulldozers, graders, levellers, scrapers, angledozers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers, self-propelled | 8429 | 6,172,977 |
| 2016 | Polymers of vinyl chloride or of other halogenated olefins, in primary forms | 3904 | 6,106,681 |
| 2016 | Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors | 9031 | 6,022,960 |
| 2016 | Electronic integrated circuits | 8542 | 5,945,681 |
| 2016 | Radiators for central heating, not electrically heated and parts thereof, of iron or steel; air heaters, hot air distributors not electrically heated, with motor fan or blower | 7322 | 5,809,065 |
| 2016 | Wire of iron or non-alloy steel | 7217 | 5,675,681 |
| 2016 | Machinery n.e.c. in this chapter, for the industrial preparation or manufacture of food or drink; other than machinery for extraction or preparation of animal or fixed vegetable fats or oils | 8438 | 5,535,914 |
| 2016 | Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings | 8483 | 5,382,963 |
| 2016 | Polymers of styrene, in primary forms | 3903 | 5,321,567 |
| 2016 | Tools; for working in the hand, pneumatic, hydraulic or with self-contained electric or nonelectric motor | 8467 | 5,004,075 |
| 2016 | Polymers of propylene or of other olefins, in primary forms | 3902 | 4,959,309 |
| 2016 | Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders | 8525 | 4,777,627 |
| 2016 | Dish washing machines; machinery for cleaning, drying, filling, closing, sealing, capsuling or labelling bottles, cans, boxes, bags, etc, machinery for aerating beverages | 8422 | 4,762,849 |
| 2016 | Table, kitchen, other household articles and parts, of iron or steel; iron or steel wool; pot scourers and scouring or polishing pads, gloves and the like, of iron or steel | 7323 | 4,758,463 |
| 2016 | Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls | 3919 | 4,724,753 |
| 2016 | Electrical machines and apparatus; having individual functions, not specified or included elsewhere in this chapter | 8543 | 4,698,918 |
| 2016 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); capsules for bottles, threaded bungs, bung covers, seals and other packaging accessories, of base metal | 8309 | 4,469,614 |


| 2016 | Agricultural, horticultural, forestry, poultry-keeping, bee-keeping machinery; including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders | 8436 | 4,257,424 |
| :---: | :---: | :---: | :---: |
| 2016 | Stainless steel; flat-rolled products of width of 600 mm or more | 7219 | 4,176,363 |
| 2016 | Iron or non-alloy steel; flat-rolled products of a width of 600 mm or more, hot-rolled, not clad, plated or coated | 7208 | 4,085,429 |
| 2016 | Stoves, ranges, grates, cookers (those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances and parts, of iron or steel | 7321 | 4,023,095 |
| 2016 | Instruments, apparatus for measuring, checking electrical quantities not meters of heading no. 9028; instruments, apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic and other radiations | 9030 | 3,964,394 |
| 2016 | Discs, tapes, solid-state non-volatile storage devices, smart cards and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, excluding products of Chapter 37 | 8523 | 3,930,038 |
| 2016 | Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials | 8465 | 3,909,090 |
| 2016 | Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408 | 8409 | 3,905,124 |
| 2016 | Clasps; frames with clasps, buckles, hooks, eyes, eyelets etc used for clothing, footwear, awnings, handbags, travel goods or other articles, tubular, bifurcated rivets, beads, spangles, of base metal | 8308 | 3,831,614 |
| 2016 | Acrylic polymers in primary forms | 3906 | 3,819,125 |
| 2016 | Sanitary ware; baths, shower-baths, sinks, wash-basins, bidets, lavatory pans, seats and covers, flushing cisterns and sanitary ware, of plastics | 3922 | 3,721,711 |
| 2016 | Machinery; parts and accessories (not covers, carrying cases and the like) suitable for use solely or principally with machines of heading no. 8469 to 8472 | 8473 | 3,652,050 |
| 2016 | Sewing machines; other than book-sewing machines of heading no. 8440; furniture, bases and covers specially designed for sewing machines; sewing machine needles | 8452 | 3,647,105 |
| 2016 | Instruments and apparatus; for physical or chemical analysis (e.g. polarimeters, spectrometers), for measuring or checking viscosity, porosity, etc, for measuring quantities of heat, sound or light | 9027 | 3,588,048 |
| 2016 | Aluminium; structures (excluding prefabricated buildings of heading no. 9406) and parts (e.g. bridges and sections, towers, lattice masts, etc) plates, rods, profiles and tubes for structures | 7610 | 3,582,223 |
| 2016 | Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels | 8474 | 3,567,302 |
| 2016 | Ball or roller bearings | 8482 | 3,507,636 |
| 2016 | Tanks, casks, drums, cans, boxes and similar containers, for any material (excluding compressed or liquefied gas), of iron or steel, capacity not exceeding 300l, whether or not lined or heat-insulated | 7310 | 3,439,391 |
| 2016 | Gas, liquid or electricity supply or production meters, including calibrating meters therefor | 9028 | 3,289,295 |
| 2016 | Cellulose and its chemical derivatives, n.e.c. or included, in primary forms | 3912 | 3,220,472 |
| 2016 | Machinery; for working rubber or plastics or for the manufacture of products from these materials, n.e.c. in this chapter | 8477 | 3,092,182 |
| 2016 | Vacuum cleaners | 8508 | 3,017,510 |
| 2016 | Springs and leaves for springs, of iron or steel | 7320 | 3,004,429 |
| 2016 | Electric motors and generators (excluding generating sets) | 8501 | 2,968,155 |
| 2016 | Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel | 7307 | 2,887,422 |
| 2016 | Electro-mechanical domestic appliances; with self-contained electric motor, other than vacuum cleaners of heading 85.08. | 8509 | 2,870,767 |
| 2016 | Electric generating sets and rotary converters | 8502 | 2,867,849 |
| 2016 | Iron or steel (excluding cast iron); tubes and pipes (e.g. welded, riveted or similarly closed), having circular cross-sections, external diameter of which exceeds 406.4 mm , not seamless | 7305 | 2,824,137 |
| 2016 | Fork-lift and other works trucks; fitted with lifting or handling equipment | 8427 | 2,810,867 |
| 2016 | Sign plates, name plates, address plates and similar plates, numbers, letters and other symbols, of base metal, excluding those of heading no. 9405 | 8310 | 2,791,064 |
| 2016 | X-ray, alpha, beta, gamma radiation apparatus; x-ray tubes, x-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like | 9022 | 2,728,959 |
| 2016 | Razors and razor blades; (including razor blade blanks in strips) | 8212 | 2,668,027 |
| 2016 | Tools, interchangeable; for hand tools, whether or not power-operated, or for machine tools (pressing, stamping, punching, drilling etc), including dies for drawing or extruding metal, and rock drilling or earth boring tools | 8207 | 2,636,387 |
| 2016 | Diodes, transistors, similar semiconductor devices; including photovoltaic cells assembled or not in modules, panels, light emitting mounted piezo-electric crystals | 8541 | 2,549,024 |
| 2016 | Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines | 8511 | 2,514,786 |
| 2016 | Electric (electrically heated gas) soldering, brazing, welding machines and apparatus, capable or not of cutting, electric machines and apparatus for hot spraying of metals or sintered carbides | 8515 | 2,480,779 |


| 2016 | Wires, rods, tubes, plates, electrodes of base metal or metal carbides; of a kind used for soldering, brazing, welding; wires and rods for metal spraying | 8311 | 2,463,927 |
| :---: | :---: | :---: | :---: |
| 2016 | Lamps; electric filament or discharge lamps, including sealed beam lamp units and ultraviolet or infra-red lamps, arc-lamps | 8539 | 2,451,273 |
| 2016 | Machines for cleaning, sorting, grading seed, grain, dried leguminous vegetables; machinery used in the milling industry for the working of cereals or dried leguminous vegetables, not farm type machinery | 8437 | 2,412,402 |
| 2016 | Aluminium; articles n.e.c. in chapter 76 | 7616 | 2,379,908 |
| 2016 | Padlocks and locks (key, combination, electrically operated) of base metal; clasps and frames with clasps incorporating locks, of base metal, keys for any or the foregoing articles, of base metal | 8301 | 2,373,478 |
| 2016 | Microphones and their stands; loudspeakers, mounted or not in their enclosures; headphones and earphones, combined or not with a microphone, and sets of a microphone and one or more loudspeakers; audio frequency and electric sound amplifiers and sets | 8518 | 2,366,530 |
| 2016 | Aluminium; plates, sheets and strip, thickness exceeding 0.2 mm | 7606 | 2,331,570 |
| 2016 | Aluminium; table, kitchen or other household articles and parts thereof, pot scourers and scouring or polishing pads, gloves and the like, sanitary ware and parts thereof | 7615 | 2,274,037 |
| 2016 | Wrist-watches, pocket-watches, stop-watches and other watches, other than those of heading no. 9101 | 9102 | 2,253,314 |
| 2016 | Office machines; not elsewhere classified | 8472 | 2,247,044 |
| 2016 | Floor coverings of plastics, self-adhesive or not, in rolls or tiles; wall or ceiling coverings of plastics, in rolls of a width not less than 45 cm | 3918 | 2,190,283 |
| 2016 | Signalling apparatus; electric sound or visual (e.g. bells, sirens, indicator panels, burglar or fire alarms), excluding those of heading no. 8512 or 8530 | 8531 | 2,185,079 |
| 2016 | Conveyor or transmission belts or belting, of vulcanised rubber | 4010 | 2,144,002 |
| 2016 | Iron or non-alloy steel; bars and rods, hot-rolled, in irregularly wound coils | 7213 | 2,028,464 |
| 2016 | Tools, hand; (including glaziers' diamonds) n.e.c.; blow lamps; vices, clamps etc, other than accessories for and parts of, machine tools; anvils; portable forges; hand or pedal operated grinding wheels with frameworks | 8205 | 2,003,881 |
| 2016 | Reservoirs, tanks, vats and similar containers; for any material (excluding compressed or liquefied gas), of iron or steel, capacity exceeding 3001, whether or not lined or heat insulated | 7309 | 1,973,257 |
| 2016 | Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. 9014, 9015,9028 or 9032 | 9026 | 1,972,920 |
| 2016 | Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms | 3905 | 1,924,094 |
| 2016 | Circuits; printed | 8534 | 1,913,646 |
| 2016 | Amino-resins, phenolic resins and polyurethanes, in primary forms | 3909 | 1,906,259 |
| 2016 | Machine-tools; (including presses) for working metal by forging, hammering or diestamping, for bending, folding, straightening, flattening, shearing or punching metal | 8462 | 1,885,695 |
| 2016 | Machinery parts; used solely or principally with the machinery of heading no. 8425 to 8430 | 8431 | 1,841,593 |
| 2016 | Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges) | 4009 | 1,812,356 |
| 2016 | Sanitary ware and parts thereof, of iron or steel | 7324 | 1,762,099 |
| 2016 | Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss | 8514 | 1,744,168 |
| 2016 | Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals | 8484 | 1,691,709 |
| 2016 | Moulding boxes for metal foundry, moulding patterns, moulds for metals (excluding ingot moulds), metal carbides, glass, mineral materials, rubber or plastics | 8480 | 1,687,660 |
| 2016 | Aluminium foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.2 mm | 7607 | 1,646,565 |
| 2016 | Copper; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7412 | 1,642,171 |
| 2016 | Copper tubes and pipes | 7411 | 1,618,034 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width 600mm or more, cold-rolled (coldreduced), not clad, plated or coated | 7209 | 1,600,771 |
| 2016 | Machines; for making up paper pulp, paper or paperboard, including cutting machines of all kinds | 8441 | 1,584,016 |
| 2016 | Regulating or controlling instruments and apparatus; automatic type | 9032 | 1,582,615 |
| 2016 | Spectacles, goggles and the like; corrective, protective or other | 9004 | 1,539,624 |
| 2016 | Presses, crushers and similar machinery; used in the manufacture of wine, cider, fruit juices or similar beverages | 8435 | 1,519,840 |
| 2016 | Vehicles; parts and accessories of heading no. 8711 to 8713 | 8714 | 1,511,377 |
| 2016 | Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel | 7304 | 1,479,292 |
| 2016 | Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar, incorporating a calculating device; cash registers | 8470 | 1,449,333 |
| 2016 | Mechano-therapy, massage appliances; psychological aptitude testing apparatus; ozone, oxygen, aerosol therapy, artificial respiration or other therapeutic respiration apparatus | 9019 | 1,420,179 |


| 2016 | Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber | 4015 | 1,398,375 |
| :---: | :---: | :---: | :---: |
| 2016 | Bicycles and other cycles; including delivery tricycles, not motorised | 8712 | 1,380,360 |
| 2016 | Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, not laser diodes; other optical appliances and instruments n.e.c. in this chapter | 9013 | 1,366,286 |
| 2016 | Electrical capacitors; fixed, variable or adjustable (pre-set) | 8532 | 1,339,472 |
| 2016 | Plates, sheets, strip, rods and profile shapes, of vulcanised rubber other than hard rubber | 4008 | 1,301,741 |
| 2016 | Lighting or visual signalling equipment (excluding articles of heading no. 8539), windscreen wipers, defrosters and demisters; electrical, of a kind used for cycles or motor vehicles | 8512 | 1,271,079 |
| 2016 | Cells and batteries; primary | 8506 | 1,229,435 |
| 2016 | Nails, tacks, drawing pins, corrugated nails, staples (not those of heading no. 8305) and the like, of iron or steel, with heads of other material or not, but excluding articles with heads of copper | 7317 | 1,228,864 |
| 2016 | Machinery; for making pulp of fibrous cellulosic material, or for making or finishing paper or paperboard | 8439 | 1,199,902 |
| 2016 | Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather, other than sewing machines | 8453 | 1,179,056 |
| 2016 | Knives and cutting blades, for machines or for mechanical appliances | 8208 | 1,156,396 |
| 2016 | Machinery (not of heading no. 8450) for washing, cleaning, wringing, drying, ironing, pressing, bleaching, dyeing, dressing, finishing, coating or impregnating textile yarn, fabrics or made up articles | 8451 | 1,125,153 |
| 2016 | Hygienic or pharmaceutical articles (including teats), of vulcanised rubber other than hard rubber, with or without fittings of hard rubber | 4014 | 1,107,218 |
| 2016 | Cloth (including endless bands), grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel | 7314 | 1,078,554 |
| 2016 | Aluminium casks, drums, cans, boxes etc (including rigid, collapsible tubular containers), for materials other than compressed, liquefied gas, 300 capacity or less, lined, heatinsulated or not | 7612 | 1,065,657 |
| 2016 | Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals, or ores; pile drivers and extractors; snow ploughs and snow blowers | 8430 | 1,064,038 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width less than 600 mm , not clad, plated or coated | 7211 | 1,038,657 |
| 2016 | Machine-tools; parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465 , and tool holders for any type of tool for working in the hand | 8466 | 1,032,246 |
| 2016 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits; for a voltage exceeding 1000 volts | 8535 | 1,005,222 |
| 2016 | Transmission apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8525 to 8528 | 8529 | 996,310 |
| 2016 | Tools, hand; saws and blades for saws of all kinds (including slitting, slotting or toothless blades) | 8202 | 992,039 |
| 2016 | Weighing machines; excluding balances of a sensitivity of 5 cg or better, including weight operated counting or checking machines and weights of all kinds | 8423 | 990,398 |
| 2016 | Iron or steel; cast articles | 7325 | 948,319 |
| 2016 | Signalling, safety or traffic control equipment; for railways, tramways, roads, inland waterways, parking facilities, port installations, airfields, excluding those of heading no. 8608 | 8530 | 946,989 |
| 2016 | Compounded rubber, unvulcanised, in primary forms or in plates, sheets or strip | 4005 | 942,771 |
| 2016 | Electrical resistors (including rheostats and potentiometers), excluding heating resistors | 8533 | 940,094 |
| 2016 | Alloy steel bars, rods, shapes and sections; hollow drill bars and rods, of alloy or non-alloy steel | 7228 | 938,803 |
| 2016 | Pulley tackle and hoists other than skip hoists; winches and capstans; jacks | 8425 | 938,610 |
| 2016 | Radar apparatus, radio navigational aid apparatus and radio remote control apparatus | 8526 | 925,489 |
| 2016 | Iron or non-alloy steel; bars and rods, n.e.c. in chapter 72 | 7215 | 877,026 |
| 2016 | Baby carriages and parts thereof | 8715 | 820,117 |
| 2016 | Shavers, hair clippers and hair removing appliances, with self-contained electric motor | 8510 | 819,974 |
| 2016 | Electrical insulators of any material | 8546 | 787,847 |
| 2016 | Cutlery; spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter knives, sugar tongs and similar kitchen or tableware | 8215 | 787,210 |
| 2016 | Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not | 9025 | 764,567 |
| 2016 | Iron or non-alloy steel; flat-rolled products, width less than 600mm, clad, plated or coated | 7212 | 764,500 |
| 2016 | Chain and parts thereof, of iron or steel | 7315 | 741,048 |
| 2016 | Video recording or reproducing apparatus | 8521 | 740,394 |
| 2016 | Milking machines and dairy machinery | 8434 | 731,793 |
| 2016 | Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of heading no. 4001 and 4002, in primary forms or in plates, sheets or strip | 4002 | 696,601 |


| 2016 | Optical fibres and optical fibre bundles; optical fibre cables not of heading no. 8544; sheets, plates of polarising material; lenses, prisms, mirrors, of any material; unmounted; not non optical glass | 9001 | 663,474 |
| :---: | :---: | :---: | :---: |
| 2016 | Tubing; flexible, with or without fittings, of base metal | 8307 | 654,723 |
| 2016 | Frames and mountings; for spectacles, goggles or the like, and parts | 9003 | 644,685 |
| 2016 | Aircraft; parts of heading no. 8801 or 8802 | 8803 | 630,426 |
| 2016 | Furnaces and ovens; industrial or laboratory, including incinerators, non-electric | 8417 | 609,278 |
| 2016 | Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines) | 8412 | 601,329 |
| 2016 | Tools, hand; spades, shovels, mattocks, picks, hoes, forks, rakes; axes, bill hooks etc; secateurs and pruners of any kind; scythes, sickles, hay knives, hedge shears, timber wedges and other tools used in agriculture, horticulture, forestry | 8201 | 601,193 |
| 2016 | Electric motors and generators; parts suitable for use solely or principally with the machines of heading no. 8501 or 8502 | 8503 | 584,617 |
| 2016 | Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting | 8447 | 572,452 |
| 2016 | Knives; with cutting blades, serrated or not (including pruning knives), other than knives of heading no. 8208, and blades therefore | 8211 | 564,024 |
| 2016 | Tools, hand; hand-operated spanners and wrenches (including torque meter wrenches but not including tap wrenches), interchangeable spanner sockets, with or without handles | 8204 | 530,126 |
| 2016 | Stationery; fittings for loose-leaf binders or files, letter clips, letter corners, paper clips, indexing tags and the like, staples in strips (for offices, upholstery, packaging), of base metal | 8305 | 524,486 |
| 2016 | Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated | 7312 | 523,035 |
| 2016 | Microscopes, compound optical; including those for photomicrography, cinephotomicrography or microprojection | 9011 | 506,363 |
| 2016 | Machine-tools; for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass | 8464 | 493,463 |
| 2016 | Machine-tools; (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes of heading no. 8458 | 8459 | 492,084 |
| 2016 | Tools, hand; files, rasps, pliers (including cutting pliers), pincers, tweezers, metal cutting shears, pipe cutters, bolt croppers, perforating punches and similar | 8203 | 483,981 |
| 2016 | Drawing, marking-out, mathematical calculating instruments (drafting machines, protractors, drawing sets etc); instruments for measuring length (e.g. measuring rods, tapes, micrometers, callipers) n.e.c. | 9017 | 482,597 |
| 2016 | Motorcycles (including mopeds) and cycles; fitted with an auxiliary motor, with or without side-cars; side-cars | 8711 | 468,535 |
| 2016 | Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber | 4012 | 468,088 |
| 2016 | Machines and appliances for testing the hardness, strength, compressibility, elasticity of other mechanical properties of materials (e.g. metals, wood, textiles, paper, plastics) | 9024 | 466,208 |
| 2016 | Tools, hand; two or more of heading no. 8202 to 8205, put up in sets for retail sale | 8206 | 464,143 |
| 2016 | Stainless steel bars and rods, angles, shapes and sections | 7222 | 449,384 |
| 2016 | Derricks, cranes, including cable cranes, mobile lifting frames, straddle carriers and works trucks fitted with a crane | 8426 | 440,565 |
| 2016 | Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock. | 8527 | 436,315 |
| 2016 | Aluminium; stranded wire, cables, plaited bands and the like, (not electrically insulated) | 7614 | 407,378 |
| 2016 | Bodies; (including cabs) for the motor vehicles of heading no. 8701 to 8705 | 8707 | 406,808 |
| 2016 | Generators for producer or water gas with or without their purifiers acetylene gas generators and similar water process gas generators, with or without their purifiers | 8405 | 380,941 |
| 2016 | Containers for compressed or liquefied gas, of iron or steel | 7311 | 379,098 |
| 2016 | Machinery; for preparing or making up tobacco, n.e.c. in this chapter | 8478 | 374,703 |
| 2016 | Machine-tools; for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal, sintered metal carbides or cermets by means of grinding stones, abrasives or polishing products | 8460 | 371,297 |
| 2016 | Compression-ignition internal combustion piston engines (diesel or semi-diesel engines) | 8408 | 357,481 |
| 2016 | Inner tubes, of rubber | 4013 | 350,488 |
| 2016 | Automatic goods-vending machines (e.g. postage stamp, cigarette, food or beverage machines), including money-changing machines | 8476 | 334,552 |
| 2016 | Titanium; articles thereof, including waste and scrap | 8108 | 328,553 |
| 2016 | Lamps; portable, electric, designed to function by their own source of energy (e.g. dry batteries, accumulators, magnetos), excluding lighting equipment of heading no. 8512 | 8513 | 320,421 |
| 2016 | Auxiliary plant for use with boilers of heading no. 8402 or 8403 ; e.g. economisers, superheaters, soot removers, gas recoverers), condensers for steam or other vapour power units | 8404 | 312,654 |
| 2016 | Zinc; articles n.e.c. in chapter 79 | 7907 | 299,294 |
| 2016 | Boilers; steam or other vapour generating (other than central heating hot water boilers, capable also of producing low pressure steam), super heated water boilers | 8402 | 292,386 |
| 2016 | Lathes for removing metal | 8458 | 288,013 |


| 2016 | Machinery, apparatus and equipment (excluding machine-tools of heading no. 8456 to 8465) for preparing or making printing components; plates, cylinders and other printing components; lithographic stones prepared for printing purposes | 8442 | 271,325 |
| :---: | :---: | :---: | :---: |
| 2016 | Bells, gongs and the like; non-electric, statuettes, other ornaments, photograph, picture, similar frames, mirrors, of base metal | 8306 | 265,102 |
| 2016 | Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines | 8456 | 263,332 |
| 2016 | Carriages for disabled persons; whether or not motorised or otherwise mechanically propelled | 8713 | 262,011 |
| 2016 | Sound recording or reproducing apparatus | 8519 | 248,853 |
| 2016 | Clocks, other, n.e.c. | 9105 | 246,433 |
| 2016 | Safes; armoured or reinforced, strong-boxes, doors and safe deposit lockers for strongrooms, cash or deed boxes and the like, of base metal | 8303 | 244,310 |
| 2016 | Machining centres, unit construction machines (single station) and multi-station transfer machines for working metal | 8457 | 243,366 |
| 2016 | Revolution counter, production counters, taximeters, mileometers, pedometers and the like, speed indicators and tachometers, other than those of heading no. 9015, stroboscopes | 9029 | 239,483 |
| 2016 | Cutlery; other articles, (e.g. hair clippers, butchers' or kitchen cleavers, choppers and mincing knives, paper knives), manicure or pedicure sets and instruments (including nail files) | 8214 | 237,412 |
| 2016 | Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked | 9002 | 236,123 |
| 2016 | Tubes, pipes and hollow profiles, of cast iron | 7303 | 233,042 |
| 2016 | Electro-magnets; permanent magnets, intended permanent magnets; electro-magnetic, permanent magnet chucks, clamps, similar; electromagnetic couplings, clutches, brakes; electro-magnetic lifting heads | 8505 | 227,916 |
| 2016 | Aluminium; unwrought | 7601 | 226,481 |
| 2016 | Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, rangefinders | 9015 | 224,442 |
| 2016 | Copper plates, sheets and strip; of a thickness exceeding 0.15 mm | 7409 | 223,777 |
| 2016 | Railway or tramway locomotives or rolling stock; parts thereof | 8607 | 221,118 |
| 2016 | Tin; bars, rods, profiles and wire | 8003 | 216,875 |
| 2016 | Machinery, auxiliary; for use with machines of heading no. 8444 to 8447 (e.g. dobbies, jacquards, automatic stop motions, shuttle changing mechanisms) parts, accessories for machines of heading no. 8444, 8447 | 8448 | 216,410 |
| 2016 | Wire of other alloy steel | 7229 | 207,889 |
| 2016 | Navigational instruments and appliances; direction finding compasses | 9014 | 194,529 |
| 2016 | Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon; with or without metal, of a kind used for electrical purposes | 8545 | 187,627 |
| 2016 | Machines; for assembling electric or electronic lamps, tubes, valves, flashbulbs, in glass envelopes, machines for manufacturing or hot working glass or glassware | 8475 | 181,076 |
| 2016 | Railway or tramway track constructions of iron or steel; rails, check and track rails, switch blades, crossing frogs, point rods, sleepers, fish-plates, chair wedges, sole plates, bedplates, ties and the like | 7302 | 178,536 |
| 2016 | Machine-tools; n.e.c. for working metal, sintered metal carbides or cermets without removing material | 8463 | 174,565 |
| 2016 | Machine-tools; for planing, shaping, slotting, broaching, gear cutting and grinding, finishing, sawing, cutting off and other tools working by removing metal, sintered metal carbides or cermets n.e.c. | 8461 | 167,740 |
| 2016 | Scissors; tailors' shears and similar shears, and blades therefore | 8213 | 165,090 |
| 2016 | Tools; hand-operated mechanical appliances, weighing 10kg or less, used in the preparation, conditioning or serving of food or drink | 8210 | 163,586 |
| 2016 | Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical grates, mechanical ash dischargers and similar appliances | 8416 | 161,884 |
| 2016 | Weaving machines (looms) | 8446 | 154,339 |
| 2016 | Anchors, grapnels and parts thereof, of iron or steel | 7316 | 151,896 |
| 2016 | Reciprocating or rotary internal combustion piston engines | 8407 | 147,408 |
| 2016 | Alloy steel flat-rolled products, of a width 600 mm or more | 7225 | 140,091 |
| 2016 | Alloy steel flat-rolled products, of a width of less than 600 mm | 7226 | 139,237 |
| 2016 | Cameras, photographic (excluding cinematographic); photographic flashlight apparatus and flashbulbs other than discharge lamps of heading no. 8539 | 9006 | 138,312 |
| 2016 | Pig iron and spiegeleisen in pigs, blocks or other primary forms | 7201 | 135,234 |
| 2016 | Silicones in primary forms | 3910 | 133,815 |
| 2016 | Petroleum resins, coumarone-indene resins, polyterpenes, polysulphides, polysulphones and similar products of chemical synthesis n.e.c. in chapter 39, in primary forms | 3911 | 132,603 |
| 2016 | Machines and appliances, instruments or apparatus of chapter 90; parts and accessories n.e.c. in chapter 90 | 9033 | 130,290 |


| 2016 | Machines; calendering or other rolling machines, for other than metal or glass and cylinders therefor | 8420 | 129,939 |
| :---: | :---: | :---: | :---: |
| 2016 | Stainless steel; flat-rolled products of width less than 600mm | 7220 | 125,753 |
| 2016 | Tools; plates, sticks, tips and the like for tools, unmounted, of sintered metal carbides or cermets | 8209 | 121,924 |
| 2016 | Iron or steel sheet piling, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel | 7301 | 114,616 |
| 2016 | Turbo-jets, turbo-propellers and other gas turbines | 8411 | 114,350 |
| 2016 | Copper; bars, rods and profiles | 7407 | 110,153 |
| 2016 | lon-exchangers; based on polymers of heading no. 3901 to 3913, in primary forms | 3914 | 109,518 |
| 2016 | Stainless steel wire | 7223 | 99,133 |
| 2016 | Binoculars, monoculars, other optical telescopes, mountings therefore; other astronomical instruments, mountings therefore, but not including instruments for radio-astronomy | 9005 | 96,726 |
| 2016 | Works trucks, self-propelled, (not fitted with lifting or handling equipment), for factories, warehouses etc, for short distance transport of goods, tractors used on railway station platforms; parts thereof | 8709 | 94,081 |
| 2016 | Aluminium wire | 7605 | 88,933 |
| 2016 | Aluminium; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7609 | 86,576 |
| 2016 | Polyamides in primary forms | 3908 | 85,268 |
| 2016 | Aluminium; tubes and pipes | 7608 | 84,389 |
| 2016 | Zinc; bars, rods, profiles and wire | 7904 | 81,827 |
| 2016 | Breathing appliances and gas masks; excluding protective masks having neither mechanical parts nor replaceable filters and excluding apparatus of item no. 9019.20 | 9020 | 81,453 |
| 2016 | Balances; of a sensitivity of 5 cg or better, with or without weights | 9016 | 76,576 |
| 2016 | Nickel; unwrought | 7502 | 74,590 |
| 2016 | Instruments, apparatus and models, designed for demonstrational purposes (in education or exhibitions), unsuitable for other uses | 9023 | 71,759 |
| 2016 | Book-binding machinery; including book-sewing machines | 8440 | 70,272 |
| 2016 | Yachts and other vessels; for pleasure or sports, rowing boats and canoes | 8903 | 66,526 |
| 2016 | Aircraft n.e.c. in heading no. 8801 (e.g. helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles | 8802 | 63,937 |
| 2016 | Copper, nails, tacks, drawing pins, staples (not those of heading no. 8305) and the like, of copper or iron or steel with heads of copper; screws bolts, nuts, screws hooks, rivets, cotters, washers | 7415 | 60,171 |
| 2016 | Wrist-watches, pocket-watches, stop-watches and other watches; with case of precious metal or of metal clad with precious metal | 9101 | 59,647 |
| 2016 | Machinery and apparatus for soldering, brazing, welding, whether or not capable of cutting, other than those of heading no. 8515; gas-operated surface tempering machines and appliances | 8468 | 58,808 |
| 2016 | Ferro-alloys | 7202 | 57,324 |
| 2016 | Office equipment; filing cabinets, card-index cabinets, paper trays and rests, pen trays, office-stamp stands and the like, of base metal, other than office furniture of heading no. 9403 | 8304 | 54,712 |
| 2016 | Time of day recording apparatus and apparatus for measuring, recording or otherwise indicating intervals of time, with clock, watch movement or synchronous motor | 9106 | 54,679 |
| 2016 | Railway or tramway track fixtures and fittings; mechanical (including electro-mechanical) signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields; parts thereof | 8608 | 54,605 |
| 2016 | Stainless steel in ingots or other primary forms; semi-finished products of stainless steel | 7218 | 53,687 |
| 2016 | Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods | 8901 | 53,110 |
| 2016 | Copper; table, kitchen or other household articles and parts thereof; pot scourers, scouring, polishing pads, gloves and the like; sanitary ware and parts thereof | 7418 | 52,028 |
| 2016 | Copper; articles thereof n.e.c. in chapter 74 | 7419 | 51,025 |
| 2016 | Photographic (including cinematographic) laboratory apparatus and equipment, n.e.c. in chapter 90; negatoscopes; projection screens | 9010 | 47,974 |
| 2016 | Machinery parts; not containing electrical connectors, insulators, coils, contacts or other electrical features, n.e.c. in this chapter | 8487 | 46,576 |
| 2016 | Natural polymers (e.g. alginic acid) and modified natural polymers (e.g. hardened proteins, chemical derivatives of natural rubber), n.e.c. or included, in primary forms | 3913 | 42,492 |
| 2016 | Watch straps, watch bands, watch bracelets and parts thereof | 9113 | 41,481 |
| 2016 | Time switches; with clock, watch movement or synchronous motor | 9107 | 37,620 |
| 2016 | Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not and loosely twisted double wire, of a kind used for fencing, of iron or steel | 7313 | 37,618 |
| 2016 | Containers; (including containers for transport of fluids) specially designed and equipped for carriage by one or more modes of transport | 8609 | 33,148 |
| 2016 | Cobalt; mattes and other intermediate products of cobalt metallurgy, cobalt and articles thereof, including waste and scrap | 8105 | 32,850 |
| 2016 | Sewing and knitting needles, bodkins, crochet hooks, embroidery stilettos and similar articles, for use in the hand, of iron or steel; safety pins and other pins of iron or steel, not elsewhere specified or included | 7319 | 30,515 |


| 2016 | Granules and powders, of pig iron, spiegeleisen, iron or steel | 7205 | 29,096 |
| :---: | :---: | :---: | :---: |
| 2016 | Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers | 9008 | 28,461 |
| 2016 | Zinc; plates, sheets, strip and foil | 7905 | 27,738 |
| 2016 | Unvulcanised rubber in other forms (e.g. rods, tubes and profile shapes) and articles (e.g. discs and rings) | 4006 | 26,700 |
| 2016 | Textile machinery; spinning, doubling, twisting machines, textile reeling or winding machines and machines for preparing textile yarns for use on machines of heading no. 8446 and 8447 | 8445 | 24,824 |
| 2016 | Nickel; powders and flakes | 7504 | 22,157 |
| 2016 | Copper; stranded wire, cables, plaited bands and the like, not electrically insulated | 7413 | 20,762 |
| 2016 | Parachutes (including dirigible parachutes and paragliders) and rotochutes; parts thereof and accessories thereto | 8804 | 20,500 |
| 2016 | Magnesium; articles thereof, including waste and scrap | 8104 | 19,474 |
| 2016 | Microscopes (excluding optical microscopes); diffraction apparatus | 9012 | 18,092 |
| 2016 | Nickel; bars, rods, profiles and wire | 7505 | 16,966 |
| 2016 | Watch or clock movements, complete, unassembled or partly assembled (movement sets); incomplete watch or clock movements, assembled; rough watch or clock movements | 9110 | 15,360 |
| 2016 | Cinematographic cameras and projectors, whether or not incorporating sound recording or reproducing apparatus | 9007 | 15,189 |
| 2016 | Alloy steel in ingots or other primary forms, semi-finished products of other alloy steel | 7224 | 14,459 |
| 2016 | Reclaimed rubber in primary forms or in plates, sheets or strip | 4003 | 12,825 |
| 2016 | Thermionic, cold cathode or photo-cathode valves and tubes (e.g. vacuum, vapour, gas filled valves and tubes, mercury arc rectifying valves and tubes, cathode-ray and television camera tubes) | 8540 | 11,962 |
| 2016 | Instrument panel clocks and clocks of a similar type for vehicles, aircraft, spacecraft or vessels | 9104 | 10,924 |
| 2016 | Steel, alloy; bars and rods, hot-rolled, in irregularly wound coils | 7227 | 9,588 |
| 2016 | Hard rubber (e.g. ebonite) in all forms, including waste and scrap; articles of hard rubber | 4017 | 9,003 |
| 2016 | Sound or video recording apparatus; parts and accessories suitable for use solely or principally with the apparatus of heading 8519 or 8521 | 8522 | 8,011 |
| 2016 | Stainless steel bars and rods, hot-rolled, in irregularly wound coils | 7221 | 7,179 |
| 2016 | Textile machinery; for extruding, drawing, texturing or cutting man-made textile materials | 8444 | 6,642 |
| 2016 | Copper foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.15 mm | 7410 | 6,422 |
| 2016 | Metal-rolling mills and rolls therefor | 8455 | 6,330 |
| 2016 | Aluminium; reservoirs, tanks, vats and the like for material (not compressed or liquefied gas) of capacity over 300l, whether or not lined, heat-insulated, not fitted with mechanical, thermal equipment | 7611 | 5,907 |
| 2016 | Tungsten (wolfram); articles thereof, including waste and scrap | 8101 | 5,422 |
| 2016 | Aluminium; powders and flakes | 7603 | 5,252 |
| 2016 | Lead; articles n.e.c. in chapter 78 | 7806 | 4,700 |
| 2016 | Turbines; steam and other vapour turbines | 8406 | 4,668 |
| 2016 | Copper; powders and flakes | 7406 | 4,392 |
| 2016 | Aircraft launching gear, deck-arrestor or similar gear, ground flying trainers; parts of the foregoing articles | 8805 | 4,344 |
| 2016 | Vulcanised rubber thread and cord | 4007 | 4,326 |
| 2016 | Clock movements; complete and assembled | 9109 | 3,568 |
| 2016 | Lead; plates, sheets, strip and foil, lead powders and flakes | 7804 | 3,525 |
| 2016 | Natural rubber, balata, gutta-percha, guayule, chicle and similar gums; in primary forms or in plates, sheets or strip | 4001 | 3,170 |
| 2016 | Bismuth; articles thereof, including waste and scrap | 8106 | 3,085 |
| 2016 | Converters, ladles, ingot moulds and casting machines; of a kind used metallurgy or in metal foundries | 8454 | 2,996 |
| 2016 | Nickel; articles thereof n.e.c. in chapter 75 | 7508 | 2,615 |
| 2016 | Aluminium; containers for compressed or liquefied gas | 7613 | 2,413 |
| 2016 | Boats, floating structures, other (for e.g. rafts, tanks, coffer-dams, landing stages, buoys and beacons) | 8907 | 2,175 |
| 2016 | Typewriters (other than printers of heading no. 8443) and word-processing machines | 8469 | 2,019 |
| 2016 | Iron and non-alloy steel in ingots or other primary forms (excluding iron of heading no. 7203) | 7206 | 1,653 |
| 2016 | Iron or non-alloy steel; semi-finished products thereof | 7207 | 1,605 |
| 2016 | Cermets; articles thereof, including waste and scrap | 8113 | 1,183 |
| 2016 | Lead; unwrought | 7801 | 991 |
| 2016 | Watch movements; complete and assembled | 9108 | 915 |
| 2016 | Clocks; with watch movements, excluding clocks of heading no. 9104 | 9103 | 719 |
| 2016 | Clock or watch parts; n.e.c. in chapter 91 | 9114 | 578 |


| 2016 | Tin; articles n.e.c. in chapter 80 | 8007 | 484 |
| :---: | :---: | :---: | :---: |
| 2016 | Clock cases and cases of a similar type for other goods of this chapter and parts thereof | 9112 | 450 |
| 2016 | Zinc; unwrought | 7901 | 421 |
| 2016 | Turbines; hydraulic water wheels and regulators therefor | 8410 | 265 |
| 2016 | Zinc; dust, powders and flakes | 7903 | 255 |
| 2016 | Watch cases and parts thereof | 9111 | 237 |
| 2016 | Tin; unwrought | 8001 | 203 |
| 2016 | Cadmium; articles thereof, including waste and scrap | 8107 | 140 |
| 2016 | Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators; electrical parts of machinery or apparatus, n.e.c. or included elsewhere in chapter 85 | 8548 | 134 |
| 2016 | Antimony; articles thereof, including waste and scrap | 8110 | 128 |
| 2016 | Copper; refined and copper alloys, unwrought | 7403 | 79 |
| 2016 | Waste, parings and scrap, of plastics | 3915 | 21 |
| 2016 | Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in note 9-C to this Chapter | 8486 | 19 |
| 2017 | Motor cars and other motor vehicles; principally designed for the transport of persons (other than those of heading no. 8702), including station wagons and racing cars | 8703 | 145,722,070 |
| 2017 | Insulated wire, cable and other electric conductors, connector fitted or not; optical fibre cables of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors | 8544 | 101,990,214 |
| 2017 | Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data (including wired/wireless networks), excluding items of $8443,8525,8527$, or 8528 | 8517 | 81,672,623 |
| 2017 | Copper wire | 7408 | 66,771,388 |
| 2017 | Tractors; (other than tractors of heading no 8709) | 8701 | 52,983,158 |
| 2017 | Motor vehicles; parts and accessories, of heading no. 8701 to 8705 | 8708 | 42,137,233 |
| 2017 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits, for a voltage not exceeding 1000 volts; connectors for optical fibres, optical fibre bundles or cables | 8536 | 41,973,072 |
| 2017 | New pneumatic tyres, of rubber | 4011 | 36,081,832 |
| 2017 | Automatic data processing machines and units thereof, magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included | 8471 | 32,835,665 |
| 2017 | Refrigerators, freezers and other refrigerating or freezing equipment, electric or other; heat pumps other than air conditioning machines of heading no. 8415 | 8418 | 31,117,534 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width 600 mm or more, clad, plated or coated | 7210 | 29,923,345 |
| 2017 | Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus | 8528 | 29,657,735 |
| 2017 | Articles of plastics and articles of other materials of heading no. 3901 to 3914 , n.e.c. in chapter 39 | 3926 | 28,576,566 |
| 2017 | Agricultural, horticultural or forestry machinery for soil preparation or cultivation; lawn or sports-ground rollers | 8432 | 27,930,838 |
| 2017 | Insulating fittings; for electrical machines, appliances, equipment, excluding insulators of heading no. 8546, electrical conduit tubing and joints therefore | 8547 | 27,205,125 |
| 2017 | Harvesting and threshing machinery, straw and fodder balers, grass or hay mowers; machines for cleaning, sorting or grading eggs, fruit or other agricultural produce, other than machinery of heading no 8437 | 8433 | 26,900,064 |
| 2017 | Plastic articles for the conveyance or packing of goods; stoppers, lids, caps and other closures of plastics | 3923 | 26,317,112 |
| 2017 | Plastics; plates, sheets, film, foil and strip (not self-adhesive); non-cellular and not reinforced, laminated, supported or similarly combined with other materials, n.e.c. in chapter 39 | 3920 | 26,149,383 |
| 2017 | Structures of iron or steel and parts thereof; plates, rods, angles, shapes, sections, tubes and the like, prepared for use in structures | 7308 | 25,806,513 |
| 2017 | Tubes, pipes and hoses and fittings thereof (for example, joints, elbows, flanges), of plastics | 3917 | 24,899,169 |
| 2017 | Monofilament of which any cross-sectional dimension exceeds 1 mm , rods, sticks and profile shapes, whether or not surface-worked but not otherwise worked, of plastics | 3916 | 23,040,740 |
| 2017 | Electric water, space, soil heaters; electro-thermic hair-dressing apparatus; hand dryers, irons; electro-thermic appliances for domestic purposes; electro heating resistors, not of heading no. 8545 | 8516 | 18,823,719 |
| 2017 | Iron or non-alloy steel; bars and rods, not further worked than forged, hot-rolled, hot drawn or hot-extruded, but including those twisted after rolling | 7214 | 18,618,941 |
| 2017 | Base metal mountings, fittings and similar articles for furniture, doors, staircases, windows, trunks, chests etc, castors with mountings of base metal, automatic door closers of base metal | 8302 | 18,586,145 |
| 2017 | Plastic plates, sheets, film, foil and strip n.e.c. in chapter 39 | 3921 | 18,480,553 |
| 2017 | Iron or steel (excluding cast iron); tubes, pipes and hollow profiles (not seamless), n.e.c. in chapter 73 | 7306 | 17,712,419 |


| 2017 | Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight testing instruments | 9018 | 17,693,217 |
| :---: | :---: | :---: | :---: |
| 2017 | Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus for liquids or gases | 8421 | 17,352,290 |
| 2017 | Taps, cocks, valves and similar appliances for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves | 8481 | 16,469,930 |
| 2017 | Electrical apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8535,8536 and 8537 | 8538 | 15,891,245 |
| 2017 | Vehicles; for the transport of goods | 8704 | 15,124,823 |
| 2017 | Trailers and semi-trailers; other vehicles, not mechanically propelled; parts thereof | 8716 | 14,869,737 |
| 2017 | Articles of vulcanised rubber other than hard rubber, n.e.c. in chapter 40 | 4016 | 13,531,437 |
| 2017 | Electric transformers, static converters (e.g. rectifiers) and inductors | 8504 | 13,357,508 |
| 2017 | Central heating boilers; excluding those of heading no. 8402 | 8403 | 13,029,316 |
| 2017 | Iron or steel; articles, n.e.c. in chapter 73 | 7326 | 12,147,670 |
| 2017 | Polymers of ethylene, in primary forms | 3901 | 11,989,056 |
| 2017 | Machinery, plant (not domestic), or laboratory equipment; electrically heated or not, (excluding items in 85.14 ) for the treatment of materials by a process involving change of temperature; including instantaneous or non electric storage water heaters | 8419 | 11,939,380 |
| 2017 | Household or laundry-type washing machines; including machines which both wash and dry | 8450 | 11,834,472 |
| 2017 | Measuring or checking instruments, appliances and machines, n.e.c. or included in this chapter; profile projectors | 9031 | 11,713,729 |
| 2017 | Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan whether or not fitted with filters | 8414 | 11,633,866 |
| 2017 | Pumps; for liquids, whether or not fitted with measuring device, liquid elevators | 8413 | 11,481,152 |
| 2017 | Orthopaedic appliances; including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other which are worn, carried or implanted in the body to compensate for a defect or disability | 9021 | 11,270,294 |
| 2017 | Machinery and mechanical appliances; having individual functions, n.e.c. in this chapter | 8479 | 10,914,099 |
| 2017 | Electric accumulators, including separators therefor; whether or not rectangular (including square) | 8507 | 10,625,484 |
| 2017 | Screws, bolts, nuts, coach screws, screw hooks, rivets, cotters, cotter-pins, washers (including spring washers) and similar articles, of iron or steel | 7318 | 9,463,142 |
| 2017 | Tableware, kitchenware, other household articles and hygienic or toilet articles, of plastics | 3924 | 9,248,417 |
| 2017 | Air conditioning machines; comprising a motor driven fan and elements for changing the temperature and humidity, including those machines in which the humidity cannot be separately regulated | 8415 | 9,222,581 |
| 2017 | Vehicles; public transport passenger type | 8702 | 8,989,026 |
| 2017 | Iron or non-alloy steel, angles, shapes and sections | 7216 | 8,750,654 |
| 2017 | Plastics; builders' wares n.e.c. or included | 3925 | 8,674,349 |
| 2017 | Polymers of vinyl chloride or of other halogenated olefins, in primary forms | 3904 | 8,648,503 |
| 2017 | Printing machinery; used for printing by means of plates, cylinders and other printing components of heading 84.42; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof | 8443 | 8,300,258 |
| 2017 | Aluminium; bars, rods and profiles | 7604 | 7,998,492 |
| 2017 | Polyacetals, other polyethers and epoxide resins, in primary forms; polycarbonates, alkyd resins, polyallyl esters and other polyesters, in primary forms | 3907 | 7,828,299 |
| 2017 | Mechanical appliances for projecting, dispersing or spraying liquids or powders; fire extinguishers, spray guns, steam, sand blasting machines | 8424 | 7,605,841 |
| 2017 | Tools; for working in the hand, pneumatic, hydraulic or with self-contained electric or nonelectric motor | 8467 | 7,555,149 |
| 2017 | Bulldozers, graders, levellers, scrapers, angledozers, mechanical shovels, excavators, shovel loaders, tamping machines and road rollers, self-propelled | 8429 | 7,395,989 |
| 2017 | Dish washing machines; machinery for cleaning, drying, filling, closing, sealing, capsuling or labelling bottles, cans, boxes, bags, etc, machinery for aerating beverages | 8422 | 6,908,115 |
| 2017 | Machinery n.e.c. in this chapter, for the industrial preparation or manufacture of food or drink; other than machinery for extraction or preparation of animal or fixed vegetable fats or oils | 8438 | 6,903,523 |
| 2017 | Radiators for central heating, not electrically heated and parts thereof, of iron or steel; air heaters, hot air distributors not electrically heated, with motor fan or blower | 7322 | 6,396,245 |
| 2017 | Lifting, handling, loading or unloading machinery; n.e.c. in heading no. 8425, 8426 or 8427 (e.g. lifts, escalators, conveyors, teleferics) | 8428 | 6,375,299 |
| 2017 | Polymers of styrene, in primary forms | 3903 | 6,328,847 |
| 2017 | Wire of iron or non-alloy steel | 7217 | 6,279,722 |
| 2017 | Boards, panels, consoles, desks, cabinets, bases with apparatus of heading no. 8535, 8536 for electricity control and distribution, (other than switching apparatus of heading no. 8517) | 8537 | 6,236,652 |
| 2017 | Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls | 3919 | 6,064,359 |


| 2017 | Transmission shafts (including cam and crank) and cranks; bearing housings and plain shaft bearings; gears and gearing; ball or roller screws; gear boxes and other speed changers; flywheels and pulleys; clutches and shaft couplings | 8483 | 6,060,259 |
| :---: | :---: | :---: | :---: |
| 2017 | Agricultural, horticultural, forestry, poultry-keeping, bee-keeping machinery; including germination plant fitted with mechanical or thermal equipment; poultry incubators and brooders | 8436 | 5,974,670 |
| 2017 | Electrical machines and apparatus; having individual functions, not specified or included elsewhere in this chapter | 8543 | 5,954,063 |
| 2017 | Electronic integrated circuits | 8542 | 5,941,216 |
| 2017 | Polymers of propylene or of other olefins, in primary forms | 3902 | 5,618,821 |
| 2017 | Table, kitchen, other household articles and parts, of iron or steel; iron or steel wool; pot scourers and scouring or polishing pads, gloves and the like, of iron or steel | 7323 | 5,562,375 |
| 2017 | Parts suitable for use solely or principally with the engines of heading no. 8407 or 8408 | 8409 | 5,334,933 |
| 2017 | Machinery; parts and accessories (not covers, carrying cases and the like) suitable for use solely or principally with machines of heading no. 8469 to 8472 | 8473 | 5,267,793 |
| 2017 | Electric generating sets and rotary converters | 8502 | 5,267,623 |
| 2017 | Discs, tapes, solid-state non-volatile storage devices, smart cards and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, excluding products of Chapter 37 | 8523 | 5,233,132 |
| 2017 | Sewing machines; other than book-sewing machines of heading no. 8440; furniture, bases and covers specially designed for sewing machines; sewing machine needles | 8452 | 5,221,740 |
| 2017 | Stainless steel; flat-rolled products of width of 600 mm or more | 7219 | 5,200,574 |
| 2017 | Iron or non-alloy steel; flat-rolled products of a width of 600 mm or more, hot-rolled, not clad, plated or coated | 7208 | 5,135,976 |
| 2017 | Sanitary ware; baths, shower-baths, sinks, wash-basins, bidets, lavatory pans, seats and covers, flushing cisterns and sanitary ware, of plastics | 3922 | 4,810,835 |
| 2017 | Stoppers, caps, lids (including crown corks, screw caps, pouring stoppers); capsules for bottles, threaded bungs, bung covers, seals and other packaging accessories, of base metal | 8309 | 4,708,559 |
| 2017 | Ball or roller bearings | 8482 | 4,496,688 |
| 2017 | Stoves, ranges, grates, cookers (those with subsidiary boilers for central heating), barbecues, braziers, gas-rings, plate warmers and similar non-electric domestic appliances and parts, of iron or steel | 7321 | 4,428,620 |
| 2017 | Tanks, casks, drums, cans, boxes and similar containers, for any material (excluding compressed or liquefied gas), of iron or steel, capacity not exceeding 3001, whether or not lined or heat-insulated | 7310 | 4,322,908 |
| 2017 | Fork-lift and other works trucks; fitted with lifting or handling equipment | 8427 | 4,146,490 |
| 2017 | Aluminium; articles n.e.c. in chapter 76 | 7616 | 4,128,999 |
| 2017 | Vacuum cleaners | 8508 | 4,065,030 |
| 2017 | Clasps; frames with clasps, buckles, hooks, eyes, eyelets etc used for clothing, footwear, awnings, handbags, travel goods or other articles, tubular, bifurcated rivets, beads, spangles, of base metal | 8308 | 4,060,491 |
| 2017 | Electrical apparatus for switching, protecting electrical circuits, for making connections to or in electrical circuits; for a voltage exceeding 1000 volts | 8535 | 4,054,440 |
| 2017 | Machinery for sorting, screening, separating, washing, crushing, grinding, mixing or kneading earth, stone, ores in solid form, shaping, moulding machinery for solid mineral fuels | 8474 | 4,047,999 |
| 2017 | Special purpose motor vehicles; not those for the transport of persons or goods (e.g. breakdown lorries, road sweeper lorries, spraying lorries, mobile workshops, mobile radiological units etc) | 8705 | 4,034,224 |
| 2017 | Instruments and apparatus; for physical or chemical analysis (e.g. polarimeters, spectrometers), for measuring or checking viscosity, porosity, etc, for measuring quantities of heat, sound or light | 9027 | 3,990,837 |
| 2017 | Electric (electrically heated gas) soldering, brazing, welding machines and apparatus, capable or not of cutting, electric machines and apparatus for hot spraying of metals or sintered carbides | 8515 | 3,947,506 |
| 2017 | Gas, liquid or electricity supply or production meters, including calibrating meters therefor | 9028 | 3,808,636 |
| 2017 | Circuits; printed | 8534 | 3,778,545 |
| 2017 | Transmission apparatus for radio-broadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras, digital cameras and video camera recorders | 8525 | 3,768,384 |
| 2017 | Aluminium; structures (excluding prefabricated buildings of heading no. 9406) and parts (e.g. bridges and sections, towers, lattice masts, etc) plates, rods, profiles and tubes for structures | 7610 | 3,734,144 |
| 2017 | Acrylic polymers in primary forms | 3906 | 3,635,591 |
| 2017 | Microphones and their stands; loudspeakers, mounted or not in their enclosures; headphones and earphones, combined or not with a microphone, and sets of a microphone and one or more loudspeakers; audio frequency and electric sound amplifiers and sets | 8518 | 3,617,093 |
| 2017 | Electro-mechanical domestic appliances; with self-contained electric motor, other than vacuum cleaners of heading 85.08. | 8509 | 3,612,126 |
| 2017 | Electric motors and generators (excluding generating sets) | 8501 | 3,608,107 |
| 2017 | Tube or pipe fittings (e.g. couplings, elbows, sleeves), of iron or steel | 7307 | 3,313,125 |


| 2017 | Diodes, transistors, similar semiconductor devices; including photovoltaic cells assembled or not in modules, panels, light emitting mounted piezo-electric crystals | 8541 | 3,304,269 |
| :---: | :---: | :---: | :---: |
| 2017 | Lamps; electric filament or discharge lamps, including sealed beam lamp units and ultraviolet or infra-red lamps, arc-lamps | 8539 | 3,287,959 |
| 2017 | Springs and leaves for springs, of iron or steel | 7320 | 3,253,443 |
| 2017 | Ignition or starting equipment; used for spark-ignition or compression-ignition internal combustion engines; generators and cut outs used in conjunction with such engines | 8511 | 3,222,235 |
| 2017 | Padlocks and locks (key, combination, electrically operated) of base metal; clasps and frames with clasps incorporating locks, of base metal, keys for any or the foregoing articles, of base metal | 8301 | 3,217,279 |
| 2017 | Wrist-watches, pocket-watches, stop-watches and other watches, other than those of heading no. 9101 | 9102 | 3,176,742 |
| 2017 | Machine-tools; (including machines for nailing, stapling, glueing or otherwise assembling) for working wood, cork, bone, hard plastics or rubber or similar hard materials | 8465 | 3,131,575 |
| 2017 | Aluminium; table, kitchen or other household articles and parts thereof, pot scourers and scouring or polishing pads, gloves and the like, sanitary ware and parts thereof | 7615 | 3,088,753 |
| 2017 | Machinery parts; used solely or principally with the machinery of heading no. 8425 to 8430 | 8431 | 3,067,597 |
| 2017 | Tools, interchangeable; for hand tools, whether or not power-operated, or for machine tools (pressing, stamping, punching, drilling etc), including dies for drawing or extruding metal, and rock drilling or earth boring tools | 8207 | 3,003,396 |
| 2017 | Iron or steel (excluding cast iron); tubes and pipes (e.g. welded, riveted or similarly closed), having circular cross-sections, external diameter of which exceeds 406.4 mm , not seamless | 7305 | 2,924,112 |
| 2017 | Wires, rods, tubes, plates, electrodes of base metal or metal carbides; of a kind used for soldering, brazing, welding; wires and rods for metal spraying | 8311 | 2,917,361 |
| 2017 | Conveyor or transmission belts or belting, of vulcanised rubber | 4010 | 2,844,026 |
| 2017 | X-ray, alpha, beta, gamma radiation apparatus; x-ray tubes, x-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like | 9022 | 2,782,735 |
| 2017 | Machine-tools; (including presses) for working metal by forging, hammering or diestamping, for bending, folding, straightening, flattening, shearing or punching metal | 8462 | 2,666,523 |
| 2017 | Floor coverings of plastics, self-adhesive or not, in rolls or tiles; wall or ceiling coverings of plastics, in rolls of a width not less than 45 cm | 3918 | 2,650,261 |
| 2017 | Razors and razor blades; (including razor blade blanks in strips) | 8212 | 2,627,798 |
| 2017 | Instruments, apparatus for measuring or checking the flow, level, pressure of liquids, gases (e.g. flow meters, heat meters etc), not instruments and apparatus of heading no. $9014,9015,9028$ or 9032 | 9026 | 2,617,535 |
| 2017 | Cellulose and its chemical derivatives, n.e.c. or included, in primary forms | 3912 | 2,570,922 |
| 2017 | Copper tubes and pipes | 7411 | 2,561,372 |
| 2017 | Signalling apparatus; electric sound or visual (e.g. bells, sirens, indicator panels, burglar or fire alarms), excluding those of heading no. 8512 or 8530 | 8531 | 2,534,387 |
| 2017 | Tools, hand; (including glaziers' diamonds) n.e.c.; blow lamps; vices, clamps etc, other than accessories for and parts of, machine tools; anvils; portable forges; hand or pedal operated grinding wheels with frameworks | 8205 | 2,505,612 |
| 2017 | Aluminium; plates, sheets and strip, thickness exceeding 0.2 mm | 7606 | 2,458,242 |
| 2017 | Machines for cleaning, sorting, grading seed, grain, dried leguminous vegetables; machinery used in the milling industry for the working of cereals or dried leguminous vegetables, not farm type machinery | 8437 | 2,436,025 |
| 2017 | Machinery; for working rubber or plastics or for the manufacture of products from these materials, n.e.c. in this chapter | 8477 | 2,348,343 |
| 2017 | Amino-resins, phenolic resins and polyurethanes, in primary forms | 3909 | 2,331,718 |
| 2017 | Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss | 8514 | 2,309,117 |
| 2017 | Aluminium foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.2 mm | 7607 | 2,262,933 |
| 2017 | Spectacles, goggles and the like; corrective, protective or other | 9004 | 2,203,855 |
| 2017 | Tubes, pipes and hoses, of vulcanised rubber (other than hard rubber), with or without their fittings (e.g. joints, elbows, flanges) | 4009 | 2,162,323 |
| 2017 | Instruments, apparatus for measuring, checking electrical quantities not meters of heading no. 9028 ; instruments, apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic and other radiations | 9030 | 2,113,373 |
| 2017 | Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings; mechanical seals | 8484 | 2,043,797 |
| 2017 | Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber | 4015 | 2,018,926 |
| 2017 | Polymers of vinyl acetate or of other vinyl esters, in primary forms; other vinyl polymers in primary forms | 3905 | 1,999,641 |
| 2017 | Transmission apparatus; parts suitable for use solely or principally with the apparatus of heading no. 8525 to 8528 | 8529 | 1,968,217 |
| 2017 | Regulating or controlling instruments and apparatus; automatic type | 9032 | 1,915,184 |
| 2017 | Presses, crushers and similar machinery; used in the manufacture of wine, cider, fruit juices or similar beverages | 8435 | 1,900,379 |


| 2017 | Iron or non-alloy steel; flat-rolled products, width 600 mm or more, cold-rolled (coldreduced), not clad, plated or coated | 7209 | 1,884,103 |
| :---: | :---: | :---: | :---: |
| 2017 | Machinery (not of heading no. 8450) for washing, cleaning, wringing, drying, ironing, pressing, bleaching, dyeing, dressing, finishing, coating or impregnating textile yarn, fabrics or made up articles | 8451 | 1,884,029 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width less than 600 mm , not clad, plated or coated | 7211 | 1,845,437 |
| 2017 | Lighting or visual signalling equipment (excluding articles of heading no. 8539), windscreen wipers, defrosters and demisters; electrical, of a kind used for cycles or motor vehicles | 8512 | 1,827,512 |
| 2017 | Sanitary ware and parts thereof, of iron or steel | 7324 | 1,815,877 |
| 2017 | Reservoirs, tanks, vats and similar containers; for any material (excluding compressed or liquefied gas), of iron or steel, capacity exceeding 300l, whether or not lined or heat insulated | 7309 | 1,774,532 |
| 2017 | Moulding boxes for metal foundry, moulding patterns, moulds for metals (excluding ingot moulds), metal carbides, glass, mineral materials, rubber or plastics | 8480 | 1,740,076 |
| 2017 | Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, not laser diodes; other optical appliances and instruments n.e.c. in this chapter | 9013 | 1,726,621 |
| 2017 | Alloy steel bars, rods, shapes and sections; hollow drill bars and rods, of alloy or non-alloy steel | 7228 | 1,687,984 |
| 2017 | Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar, incorporating a calculating device; cash registers | 8470 | 1,646,718 |
| 2017 | Aircraft; parts of heading no. 8801 or 8802 | 8803 | 1,623,061 |
| 2017 | Iron or non-alloy steel; bars and rods, hot-rolled, in irregularly wound coils | 7213 | 1,597,379 |
| 2017 | Nails, tacks, drawing pins, corrugated nails, staples (not those of heading no. 8305) and the like, of iron or steel, with heads of other material or not, but excluding articles with heads of copper | 7317 | 1,595,509 |
| 2017 | Machines; for making up paper pulp, paper or paperboard, including cutting machines of all kinds | 8441 | 1,588,112 |
| 2017 | Bicycles and other cycles; including delivery tricycles, not motorised | 8712 | 1,561,996 |
| 2017 | Office machines; not elsewhere classified | 8472 | 1,544,846 |
| 2017 | Copper; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7412 | 1,528,576 |
| 2017 | Mechano-therapy, massage appliances; psychological aptitude testing apparatus; ozone, oxygen, aerosol therapy, artificial respiration or other therapeutic respiration apparatus | 9019 | 1,516,952 |
| 2017 | Electrical capacitors; fixed, variable or adjustable (pre-set) | 8532 | 1,508,127 |
| 2017 | Iron or non-alloy steel; flat-rolled products, width less than 600mm, clad, plated or coated | 7212 | 1,486,263 |
| 2017 | Sign plates, name plates, address plates and similar plates, numbers, letters and other symbols, of base metal, excluding those of heading no. 9405 | 8310 | 1,486,225 |
| 2017 | Plates, sheets, strip, rods and profile shapes, of vulcanised rubber other than hard rubber | 4008 | 1,479,642 |
| 2017 | Knives and cutting blades, for machines or for mechanical appliances | 8208 | 1,440,611 |
| 2017 | Hygienic or pharmaceutical articles (including teats), of vulcanised rubber other than hard rubber, with or without fittings of hard rubber | 4014 | 1,401,614 |
| 2017 | Tools, hand; spades, shovels, mattocks, picks, hoes, forks, rakes; axes, bill hooks etc; secateurs and pruners of any kind; scythes, sickles, hay knives, hedge shears, timber wedges and other tools used in agriculture, horticulture, forestry | 8201 | 1,399,203 |
| 2017 | Vehicles; parts and accessories of heading no. 8711 to 8713 | 8714 | 1,344,147 |
| 2017 | Tubes, pipes and hollow profiles, seamless, of iron (other than cast iron) or steel | 7304 | 1,334,249 |
| 2017 | Aluminium; stranded wire, cables, plaited bands and the like, (not electrically insulated) | 7614 | 1,308,700 |
| 2017 | Machine-tools; for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass | 8464 | 1,293,875 |
| 2017 | Cells and batteries; primary | 8506 | 1,284,804 |
| 2017 | Weighing machines; excluding balances of a sensitivity of 5 cg or better, including weight operated counting or checking machines and weights of all kinds | 8423 | 1,280,095 |
| 2017 | Textile machinery; for extruding, drawing, texturing or cutting man-made textile materials | 8444 | 1,252,044 |
| 2017 | Baby carriages and parts thereof | 8715 | 1,197,494 |
| 2017 | Pulley tackle and hoists other than skip hoists; winches and capstans; jacks | 8425 | 1,195,962 |
| 2017 | Tools, hand; saws and blades for saws of all kinds (including slitting, slotting or toothless blades) | 8202 | 1,174,405 |
| 2017 | Chain and parts thereof, of iron or steel | 7315 | 1,115,067 |
| 2017 | Cloth (including endless bands), grill, netting and fencing, of iron or steel wire; expanded metal of iron or steel | 7314 | 1,108,356 |
| 2017 | Electrical insulators of any material | 8546 | 1,098,803 |
| 2017 | Electrical resistors (including rheostats and potentiometers), excluding heating resistors | 8533 | 1,097,420 |
| 2017 | Milking machines and dairy machinery | 8434 | 1,076,764 |
| 2017 | Motorcycles (including mopeds) and cycles; fitted with an auxiliary motor, with or without side-cars; side-cars | 8711 | 1,018,576 |
| 2017 | Machine-tools; parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465 , and tool holders for any type of tool for working in the hand | 8466 | 1,006,658 |


| 2017 | Frames and mountings; for spectacles, goggles or the like, and parts | 9003 | 950,415 |
| :---: | :---: | :---: | :---: |
| 2017 | Iron or steel; cast articles | 7325 | 949,244 |
| 2017 | Machinery; for manufacture or finishing felt or non-wovens in the piece or in shapes, including machinery for making felt hats, blocks for making hats | 8449 | 943,000 |
| 2017 | Optical fibres and optical fibre bundles; optical fibre cables not of heading no. 8544; sheets, plates of polarising material; lenses, prisms, mirrors, of any material; unmounted; not non optical glass | 9001 | 935,050 |
| 2017 | Binoculars, monoculars, other optical telescopes, mountings therefore; other astronomical instruments, mountings therefore, but not including instruments for radio-astronomy | 9005 | 905,063 |
| 2017 | Aluminium casks, drums, cans, boxes etc (including rigid, collapsible tubular containers), for materials other than compressed, liquefied gas, 300 l capacity or less, lined, heatinsulated or not | 7612 | 902,257 |
| 2017 | Radar apparatus, radio navigational aid apparatus and radio remote control apparatus | 8526 | 895,671 |
| 2017 | Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock. | 8527 | 894,611 |
| 2017 | Knives; with cutting blades, serrated or not (including pruning knives), other than knives of heading no. 8208, and blades therefore | 8211 | 892,495 |
| 2017 | Microscopes, compound optical; including those for photomicrography, cinephotomicrography or microprojection | 9011 | 866,469 |
| 2017 | Moving, grading, levelling, scraping, excavating, tamping, compacting, extracting or boring machinery, for earth, minerals, or ores; pile drivers and extractors; snow ploughs and snow blowers | 8430 | 860,496 |
| 2017 | Cutlery; spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter knives, sugar tongs and similar kitchen or tableware | 8215 | 858,178 |
| 2017 | Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated | 7312 | 855,136 |
| 2017 | Shavers, hair clippers and hair removing appliances, with self-contained electric motor | 8510 | 824,720 |
| 2017 | Electric motors and generators; parts suitable for use solely or principally with the machines of heading no. 8501 or 8502 | 8503 | 807,784 |
| 2017 | Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not | 9025 | 792,386 |
| 2017 | Tubing; flexible, with or without fittings, of base metal | 8307 | 783,046 |
| 2017 | Machinery for preparing, tanning or working hides, skins or leather or for making or repairing footwear or other articles of hides, skins or leather, other than sewing machines | 8453 | 781,052 |
| 2017 | Machine-tools; n.e.c. for working metal, sintered metal carbides or cermets without removing material | 8463 | 768,999 |
| 2017 | Video recording or reproducing apparatus | 8521 | 746,661 |
| 2017 | Iron or non-alloy steel; bars and rods, n.e.c. in chapter 72 | 7215 | 746,203 |
| 2017 | Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip; mixtures of heading no. 4001 and 4002, in primary forms or in plates, sheets or strip | 4002 | 734,845 |
| 2017 | Tools, hand; hand-operated spanners and wrenches (including torque meter wrenches but not including tap wrenches), interchangeable spanner sockets, with or without handles | 8204 | 717,906 |
| 2017 | Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses, rangefinders | 9015 | 679,756 |
| 2017 | Machines and appliances for testing the hardness, strength, compressibility, elasticity of other mechanical properties of materials (e.g. metals, wood, textiles, paper, plastics) | 9024 | 676,029 |
| 2017 | Tools, hand; files, rasps, pliers (including cutting pliers), pincers, tweezers, metal cutting shears, pipe cutters, bolt croppers, perforating punches and similar | 8203 | 666,468 |
| 2017 | Engines and motors; n.e.c. (e.g. reaction engines, hydraulic power engines, pneumatic power engines) | 8412 | 655,129 |
| 2017 | Drawing, marking-out, mathematical calculating instruments (drafting machines, protractors, drawing sets etc); instruments for measuring length (e.g. measuring rods, tapes, micrometers, callipers) n.e.c. | 9017 | 640,545 |
| 2017 | Stationery; fittings for loose-leaf binders or files, letter clips, letter corners, paper clips, indexing tags and the like, staples in strips (for offices, upholstery, packaging), of base metal | 8305 | 635,563 |
| 2017 | Retreaded or used pneumatic tyres of rubber; solid or cushion tyres, tyre treads and tyre flaps, of rubber | 4012 | 594,531 |
| 2017 | Furnaces and ovens; industrial or laboratory, including incinerators, non-electric | 8417 | 560,009 |
| 2017 | Generators for producer or water gas with or without their purifiers acetylene gas generators and similar water process gas generators, with or without their purifiers | 8405 | 531,237 |
| 2017 | Furnace burners for liquid fuel, for pulverised solid fuel or for gas; mechanical grates, mechanical ash dischargers and similar appliances | 8416 | 520,574 |
| 2017 | Knitting machines, stitch-bonding machines and machines for making gimped yarn, tulle, lace, embroidery, trimmings, braid or net and machines for tufting | 8447 | 504,220 |
| 2017 | Auxiliary plant for use with boilers of heading no. 8402 or 8403 ; e.g. economisers, superheaters, soot removers, gas recoverers), condensers for steam or other vapour power units | 8404 | 499,474 |
| 2017 | Railway or tramway locomotives or rolling stock; parts thereof | 8607 | 489,638 |
| 2017 | Inner tubes, of rubber | 4013 | 452,872 |
| 2017 | Lamps; portable, electric, designed to function by their own source of energy (e.g. dry batteries, accumulators, magnetos), excluding lighting equipment of heading no. 8512 | 8513 | 444,169 |


| 2017 | Boilers; steam or other vapour generating (other than central heating hot water boilers, capable also of producing low pressure steam), super heated water boilers | 8402 | 440,251 |
| :---: | :---: | :---: | :---: |
| 2017 | Turbo-jets, turbo-propellers and other gas turbines | 8411 | 438,351 |
| 2017 | Automatic goods-vending machines (e.g. postage stamp, cigarette, food or beverage machines), including money-changing machines | 8476 | 427,920 |
| 2017 | Cutlery; other articles, (e.g. hair clippers, butchers' or kitchen cleavers, choppers and mincing knives, paper knives), manicure or pedicure sets and instruments (including nail files) | 8214 | 421,162 |
| 2017 | Machinery; for making pulp of fibrous cellulosic material, or for making or finishing paper or paperboard | 8439 | 420,463 |
| 2017 | Derricks, cranes, including cable cranes, mobile lifting frames, straddle carriers and works trucks fitted with a crane | 8426 | 420,088 |
| 2017 | Textile machinery; spinning, doubling, twisting machines, textile reeling or winding machines and machines for preparing textile yarns for use on machines of heading no. 8446 and 8447 | 8445 | 401,854 |
| 2017 | Tubes, pipes and hollow profiles, of cast iron | 7303 | 400,785 |
| 2017 | Instruments, apparatus and models, designed for demonstrational purposes (in education or exhibitions), unsuitable for other uses | 9023 | 400,466 |
| 2017 | Machinery and apparatus for soldering, brazing, welding, whether or not capable of cutting, other than those of heading no. 8515; gas-operated surface tempering machines and appliances | 8468 | 393,921 |
| 2017 | Lathes for removing metal | 8458 | 382,849 |
| 2017 | Machines; calendering or other rolling machines, for other than metal or glass and cylinders therefor | 8420 | 378,082 |
| 2017 | Machinery, auxiliary; for use with machines of heading no. 8444 to 8447 (e.g. dobbies, jacquards, automatic stop motions, shuttle changing mechanisms) parts, accessories for machines of heading no. 8444,8447 | 8448 | 360,591 |
| 2017 | Compression-ignition internal combustion piston engines (diesel or semi-diesel engines) | 8408 | 359,495 |
| 2017 | Machining centres, unit construction machines (single station) and multi-station transfer machines for working metal | 8457 | 352,356 |
| 2017 | Electro-magnets; permanent magnets, intended permanent magnets; electro-magnetic, permanent magnet chucks, clamps, similar; electromagnetic couplings, clutches, brakes; electro-magnetic lifting heads | 8505 | 348,222 |
| 2017 | Revolution counter, production counters, taximeters, mileometers, pedometers and the like, speed indicators and tachometers, other than those of heading no. 9015, stroboscopes | 9029 | 347,756 |
| 2017 | Tin; bars, rods, profiles and wire | 8003 | 345,645 |
| 2017 | Machinery, apparatus and equipment (excluding machine-tools of heading no. 8456 to 8465) for preparing or making printing components; plates, cylinders and other printing components; lithographic stones prepared for printing purposes | 8442 | 339,912 |
| 2017 | Clocks, other, n.e.c. | 9105 | 329,767 |
| 2017 | Machine-tools; (including way-type unit head machines) for drilling, boring, milling, threading or tapping by removing metal, other than lathes of heading no. 8458 | 8459 | 326,285 |
| 2017 | Turbines; hydraulic water wheels and regulators therefor | 8410 | 316,436 |
| 2017 | Stainless steel bars and rods, angles, shapes and sections | 7222 | 312,370 |
| 2017 | Machines and appliances, instruments or apparatus of chapter 90; parts and accessories n.e.c. in chapter 90 | 9033 | 310,690 |
| 2017 | Copper plates, sheets and strip; of a thickness exceeding 0.15 mm | 7409 | 309,436 |
| 2017 | Wire of other alloy steel | 7229 | 308,491 |
| 2017 | Containers for compressed or liquefied gas, of iron or steel | 7311 | 280,994 |
| 2017 | Compounded rubber, unvulcanised, in primary forms or in plates, sheets or strip | 4005 | 280,636 |
| 2017 | Bells, gongs and the like; non-electric, statuettes, other ornaments, photograph, picture, similar frames, mirrors, of base metal | 8306 | 277,405 |
| 2017 | Sound recording or reproducing apparatus | 8519 | 272,747 |
| 2017 | Tools, hand; two or more of heading no. 8202 to 8205, put up in sets for retail sale | 8206 | 266,845 |
| 2017 | Machinery; for preparing or making up tobacco, n.e.c. in this chapter | 8478 | 264,716 |
| 2017 | Machine-tools; for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron beam, ionic-beam, or plasma arc processes; water-jet cutting machines | 8456 | 251,221 |
| 2017 | Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts or fittings for instruments or apparatus, other than such elements of glass not optically worked | 9002 | 237,090 |
| 2017 | Scissors; tailors' shears and similar shears, and blades therefore | 8213 | 235,334 |
| 2017 | Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon; with or without metal, of a kind used for electrical purposes | 8545 | 228,785 |
| 2017 | Alloy steel flat-rolled products, of a width 600 mm or more | 7225 | 225,179 |
| 2017 | Zinc; articles n.e.c. in chapter 79 | 7907 | 214,994 |
| 2017 | Machines; for assembling electric or electronic lamps, tubes, valves, flashbulbs, in glass envelopes, machines for manufacturing or hot working glass or glassware | 8475 | 214,879 |
| 2017 | Lead; articles n.e.c. in chapter 78 | 7806 | 207,939 |
| 2017 | Iron or steel sheet piling, whether or not drilled, punched or made from assembled elements; welded angles, shapes and sections, of iron or steel | 7301 | 201,182 |


| 2017 | Tools; hand-operated mechanical appliances, weighing 10kg or less, used in the preparation, conditioning or serving of food or drink | 8210 | 197,626 |
| :---: | :---: | :---: | :---: |
| 2017 | Breathing appliances and gas masks; excluding protective masks having neither mechanical parts nor replaceable filters and excluding apparatus of item no. 9019.20 | 9020 | 193,131 |
| 2017 | Machine-tools; for planing, shaping, slotting, broaching, gear cutting and grinding, finishing, sawing, cutting off and other tools working by removing metal, sintered metal carbides or cermets n.e.c. | 8461 | 177,870 |
| 2017 | Navigational instruments and appliances; direction finding compasses | 9014 | 174,553 |
| 2017 | Bodies; (including cabs) for the motor vehicles of heading no. 8701 to 8705 | 8707 | 170,642 |
| 2017 | Aluminium; tubes and pipes | 7608 | 166,206 |
| 2017 | Nickel; unwrought | 7502 | 159,517 |
| 2017 | Reciprocating or rotary internal combustion piston engines | 8407 | 158,757 |
| 2017 | Safes; armoured or reinforced, strong-boxes, doors and safe deposit lockers for strongrooms, cash or deed boxes and the like, of base metal | 8303 | 154,463 |
| 2017 | Carriages for disabled persons; whether or not motorised or otherwise mechanically propelled | 8713 | 140,490 |
| 2017 | Weaving machines (looms) | 8446 | 132,242 |
| 2017 | Metal-rolling mills and rolls therefor | 8455 | 132,036 |
| 2017 | Machine-tools; for deburring, sharpening, grinding, honing, lapping, polishing or otherwise finishing metal, sintered metal carbides or cermets by means of grinding stones, abrasives or polishing products | 8460 | 130,631 |
| 2017 | Photographic (including cinematographic) laboratory apparatus and equipment, n.e.c. in chapter 90; negatoscopes; projection screens | 9010 | 129,150 |
| 2017 | lon-exchangers; based on polymers of heading no. 3901 to 3913, in primary forms | 3914 | 125,835 |
| 2017 | Wrist-watches, pocket-watches, stop-watches and other watches; with case of precious metal or of metal clad with precious metal | 9101 | 124,600 |
| 2017 | Silicones in primary forms | 3910 | 124,447 |
| 2017 | Signalling, safety or traffic control equipment; for railways, tramways, roads, inland waterways, parking facilities, port installations, airfields, excluding those of heading no. 8608 | 8530 | 120,954 |
| 2017 | Zinc; bars, rods, profiles and wire | 7904 | 110,499 |
| 2017 | Yachts and other vessels; for pleasure or sports, rowing boats and canoes | 8903 | 108,290 |
| 2017 | Aluminium wire | 7605 | 106,696 |
| 2017 | Titanium; articles thereof, including waste and scrap | 8108 | 99,961 |
| 2017 | Aluminium; tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7609 | 99,073 |
| 2017 | Natural polymers (e.g. alginic acid) and modified natural polymers (e.g. hardened proteins, chemical derivatives of natural rubber), n.e.c. or included, in primary forms | 3913 | 94,673 |
| 2017 | Copper, nails, tacks, drawing pins, staples (not those of heading no. 8305) and the like, of copper or iron or steel with heads of copper; screws bolts, nuts, screws hooks, rivets, cotters, washers | 7415 | 92,178 |
| 2017 | Tools; plates, sticks, tips and the like for tools, unmounted, of sintered metal carbides or cermets | 8209 | 89,155 |
| 2017 | Aircraft n.e.c. in heading no. 8801 (e.g. helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles | 8802 | 88,934 |
| 2017 | Containers; (including containers for transport of fluids) specially designed and equipped for carriage by one or more modes of transport | 8609 | 84,297 |
| 2017 | Copper; articles thereof n.e.c. in chapter 74 | 7419 | 83,748 |
| 2017 | Watch straps, watch bands, watch bracelets and parts thereof | 9113 | 83,144 |
| 2017 | Copper; table, kitchen or other household articles and parts thereof; pot scourers, scouring, polishing pads, gloves and the like; sanitary ware and parts thereof | 7418 | 82,492 |
| 2017 | Cameras, photographic (excluding cinematographic); photographic flashlight apparatus and flashbulbs other than discharge lamps of heading no. 8539 | 9006 | 82,241 |
| 2017 | Aluminium; unwrought | 7601 | 82,093 |
| 2017 | Polyamides in primary forms | 3908 | 81,954 |
| 2017 | Book-binding machinery; including book-sewing machines | 8440 | 80,031 |
| 2017 | Stainless steel; flat-rolled products of width less than 600 mm | 7220 | 79,041 |
| 2017 | Ferro-alloys | 7202 | 77,650 |
| 2017 | Petroleum resins, coumarone-indene resins, polyterpenes, polysulphides, polysulphones and similar products of chemical synthesis n.e.c. in chapter 39, in primary forms | 3911 | 74,986 |
| 2017 | Balances; of a sensitivity of 5 cg or better, with or without weights | 9016 | 71,548 |
| 2017 | Office equipment; filing cabinets, card-index cabinets, paper trays and rests, pen trays, office-stamp stands and the like, of base metal, other than office furniture of heading no. 9403 | 8304 | 68,007 |
| 2017 | Copper; bars, rods and profiles | 7407 | 66,735 |
| 2017 | Machinery parts; not containing electrical connectors, insulators, coils, contacts or other electrical features, n.e.c. in this chapter | 8487 | 51,845 |
| 2017 | Sewing and knitting needles, bodkins, crochet hooks, embroidery stilettos and similar articles, for use in the hand, of iron or steel; safety pins and other pins of iron or steel, not elsewhere specified or included | 7319 | 51,180 |
| 2017 | Nickel; articles thereof n.e.c. in chapter 75 | 7508 | 50,956 |


| 2017 | Railway or tramway track constructions of iron or steel; rails, check and track rails, switch blades, crossing frogs, point rods, sleepers, fish-plates, chair wedges, sole plates, bedplates, ties and the like | 7302 | 50,501 |
| :---: | :---: | :---: | :---: |
| 2017 | Nickel; bars, rods, profiles and wire | 7505 | 45,954 |
| 2017 | Time of day recording apparatus and apparatus for measuring, recording or otherwise indicating intervals of time, with clock, watch movement or synchronous motor | 9106 | 45,721 |
| 2017 | Zinc; plates, sheets, strip and foil | 7905 | 45,614 |
| 2017 | Barbed wire of iron or steel; twisted hoop or single flat wire, barbed or not and loosely twisted double wire, of a kind used for fencing, of iron or steel | 7313 | 43,645 |
| 2017 | Railway or tramway track fixtures and fittings; mechanical (including electro-mechanical) signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields; parts thereof | 8608 | 36,473 |
| 2017 | Works trucks, self-propelled, (not fitted with lifting or handling equipment), for factories, warehouses etc, for short distance transport of goods, tractors used on railway station platforms; parts thereof | 8709 | 34,143 |
| 2017 | Copper; stranded wire, cables, plaited bands and the like, not electrically insulated | 7413 | 33,874 |
| 2017 | Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods | 8901 | 29,376 |
| 2017 | Time switches; with clock, watch movement or synchronous motor | 9107 | 28,472 |
| 2017 | Stainless steel wire | 7223 | 27,824 |
| 2017 | Granules and powders, of pig iron, spiegeleisen, iron or steel | 7205 | 27,380 |
| 2017 | Nickel; powders and flakes | 7504 | 27,180 |
| 2017 | Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers | 9008 | 25,424 |
| 2017 | Anchors, grapnels and parts thereof, of iron or steel | 7316 | 25,214 |
| 2017 | Magnesium; articles thereof, including waste and scrap | 8104 | 24,978 |
| 2017 | Hard rubber (e.g. ebonite) in all forms, including waste and scrap; articles of hard rubber | 4017 | 24,277 |
| 2017 | Sound or video recording apparatus; parts and accessories suitable for use solely or principally with the apparatus of heading 8519 or 8521 | 8522 | 23,878 |
| 2017 | Turbines; steam and other vapour turbines | 8406 | 22,062 |
| 2017 | Watch or clock movements, complete, unassembled or partly assembled (movement sets); incomplete watch or clock movements, assembled; rough watch or clock movements | 9110 | 21,778 |
| 2017 | Alloy steel in ingots or other primary forms, semi-finished products of other alloy steel | 7224 | 19,714 |
| 2017 | Thermionic, cold cathode or photo-cathode valves and tubes (e.g. vacuum, vapour, gas filled valves and tubes, mercury arc rectifying valves and tubes, cathode-ray and television camera tubes) | 8540 | 16,861 |
| 2017 | Cobalt; mattes and other intermediate products of cobalt metallurgy, cobalt and articles thereof, including waste and scrap | 8105 | 15,172 |
| 2017 | Aluminium; containers for compressed or liquefied gas | 7613 | 13,954 |
| 2017 | Pig iron and spiegeleisen in pigs, blocks or other primary forms | 7201 | 13,716 |
| 2017 | Boats, floating structures, other (for e.g. rafts, tanks, coffer-dams, landing stages, buoys and beacons) | 8907 | 13,097 |
| 2017 | Cinematographic cameras and projectors, whether or not incorporating sound recording or reproducing apparatus | 9007 | 12,232 |
| 2017 | Unvulcanised rubber in other forms (e.g. rods, tubes and profile shapes) and articles (e.g. discs and rings) | 4006 | 11,124 |
| 2017 | Cermets; articles thereof, including waste and scrap | 8113 | 10,536 |
| 2017 | Iron or non-alloy steel; semi-finished products thereof | 7207 | 9,832 |
| 2017 | Ferrous products obtained by direct reduction of iron ore and other spongy ferrous products, in lumps, pellets or the like; iron having a minimum purity of $99.94 \%$, in lumps, pellets or similar forms | 7203 | 9,106 |
| 2017 | Vulcanised rubber thread and cord | 4007 | 8,458 |
| 2017 | Copper; powders and flakes | 7406 | 7,488 |
| 2017 | Reclaimed rubber in primary forms or in plates, sheets or strip | 4003 | 5,949 |
| 2017 | Alloy steel flat-rolled products, of a width of less than 600 mm | 7226 | 5,599 |
| 2017 | Natural rubber, balata, gutta-percha, guayule, chicle and similar gums; in primary forms or in plates, sheets or strip | 4001 | 5,201 |
| 2017 | Lead; plates, sheets, strip and foil, lead powders and flakes | 7804 | 5,018 |
| 2017 | Nickel; tubes, pipes and tube or pipe fittings (e.g. couplings, elbows, sleeves) | 7507 | 4,841 |
| 2017 | Converters, ladles, ingot moulds and casting machines; of a kind used metallurgy or in metal foundries | 8454 | 4,313 |
| 2017 | Instrument panel clocks and clocks of a similar type for vehicles, aircraft, spacecraft or vessels | 9104 | 3,732 |
| 2017 | Tungsten (wolfram); articles thereof, including waste and scrap | 8101 | 3,011 |
| 2017 | Copper foil (whether or not printed or backed with paper, paperboard, plastics or similar backing materials) of a thickness (excluding any backing) not exceeding 0.15 mm | 7410 | 2,154 |
| 2017 | Copper; refined and copper alloys, unwrought | 7403 | 2,147 |
| 2017 | Clocks; with watch movements, excluding clocks of heading no. 9104 | 9103 | 2,146 |


| 2017 | Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in note $9-C$ to this Chapter | 8486 | 1,640 |
| :---: | :---: | :---: | :---: |
| 2017 | Waste, parings and scrap, of plastics | 3915 | 1,406 |
| 2017 | Clock movements; complete and assembled | 9109 | 1,395 |
| 2017 | Iron and non-alloy steel in ingots or other primary forms (excluding iron of heading no. 7203) | 7206 | 1,352 |
| 2017 | Parachutes (including dirigible parachutes and paragliders) and rotochutes; parts thereof and accessories thereto | 8804 | 1,150 |
| 2017 | Bismuth; articles thereof, including waste and scrap | 8106 | 970 |
| 2017 | Beryllium, chromium, germanium, vanadium, gallium, hafnium, indium, niobium (columbium), rhenium and thallium; and articles of these metals, including waste and scrap | 8112 | 909 |
| 2017 | Clock or watch parts; n.e.c. in chapter 91 | 9114 | 794 |
| 2017 | Waste and scrap of primary cells, primary batteries and electric accumulators; spent primary cells, spent primary batteries and spent electric accumulators; electrical parts of machinery or apparatus, n.e.c. or included elsewhere in chapter 85 | 8548 | 668 |
| 2017 | Zinc; dust, powders and flakes | 7903 | 652 |
| 2017 | Watch movements; complete and assembled | 9108 | 398 |
| 2017 | Tin; articles n.e.c. in chapter 80 | 8007 | 253 |
| 2017 | Aluminium; powders and flakes | 7603 | 235 |
| 2017 | Molybdenum; articles thereof, including waste and scrap | 8102 | 204 |
| 2017 | Tin; unwrought | 8001 | 172 |
| 2017 | Watch cases and parts thereof | 9111 | 42 |
| 2017 | Nickel; plates, sheets, strip and foil | 7506 | 12 |


[^0]:    ${ }^{1}$ A) Machine Industry Report, March 2016, Visegrad Fund, by Sierz Naurodski, Vladimir Benc, Martin Lacny, Iryna Lafiuk, Uladzimir Valetka, B) Machine Industry Transformation in Belarus, Ukraine, and Moldova Eastern Partnership Civil Society Forum, Minsk 2016, by Sierz Naurodski, Dzmitry Babicki.
    ${ }^{2}$ Full list of 4-digit codes: C2210, C2220, C2390, C2410, C2420, C2430, C2450, C2550, C2560, C2570, C2590, C2610, C2680, C2710, C2720, C2730, C2740, C2790, C2510, C2520, C2530, C2540, C2620, C2630, C2650, C2660, C2810, C2820, C2830, C2840, C2890, C2910, C2920, C2930, C3010, C3020, C3030, C3040, C3250, C3310, C3320, C2640, C2670, C2750, C3090, M7112, M7120, M7211, M7219.

[^1]:    ${ }^{3}$ This chapter presents information on tangible assets: real estate, capitalized property, plant and equipment.

[^2]:    Source: chart designed by authors based on data from National Bureau of Statistics, offered upon data request.

[^3]:    ${ }^{4}$ The median is the value separating the higher half from the lower half of a data sample (a population or a probability distribution). For a data set, it may be thought of as the "middle" value. For example, in the data set $\{1,3,3,6,7,8,9\}$, the median is 6 , the fourth largest, and also the fourth smallest, number in the sample.

[^4]:    ${ }^{5}$ https://www.ipt.md/ro/invatamint-dual.

[^5]:    6 " $N$ " in this chart and the charts and tables below represents the number of respondents who answered the particular question. $N$ might vary due to filtering questions that preceded some questions and therefore the number of respondents for those questions was smaller than the number of respondents in the survey overall.

[^6]:    ${ }^{7}$ N.e.c. $=$ Not elsewhere classified

[^7]:    ${ }^{8}$ Domestic export is calculated as a difference between the amount of goods exported (per commodity code) and the amount of goods re-exported per the same commodity code.
    Note: The goods for which the re-export was equal to export were not included in the table. There were goods for which the difference result was negative (at the quantity level). This fact might be explained by the re-export of the previous year stocks. The same explanation can be used for interpreting some export results that seem unexpected - the good export might in fact represent re-export of past year stocks and not necessarily mean that the particular commodity was produced in Moldova.

    The largest value of re-export can be noticed in case of Romania (a sum of 136,9 million USD for 2017), Russian Federation (a sum of 27,6 million USD), Germany ( 17,8 million USD), Bulgaria ( 16,2 million USD), Switzerland ( 8,7 million USD), Italy ( 7,9 million USD), Ukraine ( 7,7 million USD).
    ${ }^{9}$ Dark grey area represents top 10 positions, light grey represents top 20 positions per each year.

