

2020 ANNUAL REPORT



CECIMO – European Association of the Machine Tool Industries and related Manufacturing Technologies

www.cecimo.eu

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Introduction

The coronavirus public health crisis, which started in China in 2019, disrupted global activities across all economic sectors and industries in 2020. Production halts, movement restrictions, border closures, have caused disruption of the global supply chain as well as the slowdown of trade and business activities. The European Machine Tool sector was no exception and, the consequence is a correspondingly substantial minus for all key statistics in the European Machine Tool Industry during 2020: orders, production, consumption, trade, and investments.

While global Machine Tool production fell by over 20%, from 75.3 in 2019 to around 60.1 billion euros in 2020, CE-CIMO MT production fell by 26.3% in 2020 to 20.2 billion euros. However, CECIMO retains the leading position on the global MT market, with around 34% share at the end of 2020. Following a sharp drop in the first half of 2020, the second half reflects a partial recovery in the MT sector.

- In the first half of the year, as the initial impacts of the pandemic began to be felt, total orders for CECIMO8 declined by -29% in the first quarter of 2020, compared to the same period in 2019. Also, for the first time since 2015, the EU27 region's Industrial Production Index fell below the 100-point threshold on the quarterly value of 96,5 points. However, the second quarter of 2020 was one of the worst for the European Machine Tool Industry in recent history. CECIMO8 total orders decreased by -49%, compared to the same period in 2019. EU27 industrial production index also decreased by -19,3%, falling to 85,2 points, the lowest score recorded since Q2 2009 (financial crisis). In response to successive cutbacks in orders and industrial activity, the EU capacity utilization in Q2 2020 has the lowest rate recorded in the last 25 years (66%). Significant decline was also recorded considering gross fixed capital formation (EU27 and UK).
- The second half of the year saw a significant, but still not full recovery for the European Machine Tool Industry. In the third quarter, thanks to the easing of the lockdown and social distancing measures, the situation was comparatively better, CECIMO8 total orders marked an increase of orders compared to Q2 2020 signaling the first steps of the recovery. There was a further improvement in Machine Tool orders in the 4th quarter of 2020 with the CECIMO8 group registering growth of +36% compared to the previous quarter but this still left the level -13% lower than at the end of 2019. However, the Industrial Production Index for the European Union (27 countries) continued its recovery in the final quarter of 2020.
- ⇒ On an annual basis, the CECIMO Total Orders Index (annual average), after a decrease of 23% in 2019, also decreased by 27% in 2020. Moreover, the CECIMO domestic orders recorded a larger decline compared to foreign order, because of the larger impact of the coronavirus pandemic on the European MT consumption.

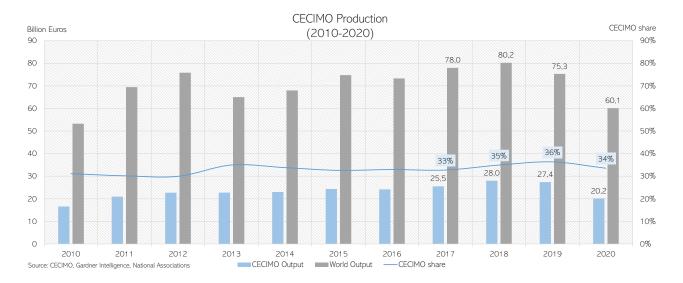
Comparing the annual figures, exports of Machine Tools from the CECIMO countries in 2020 fell by -27% compared with 2019 levels. In 2020, the United States was the largest export destination for CECIMO countries with a share of 21.8%, followed by China with a share of 21.5%. Comparing figures for 2020 as a whole, Machine Tools imports in the CECIMO countries fell -30.5% from 2019 levels. In 2020, Japan is still the main supplying market of the CECIMO countries with a share of 31.3%, followed by China with a share of 17.6%. However, the CECIMO region registered a positive trade balance for all quarters, with a positive annual result of about 7 billion euros in 2020.

CECIMO Production 2020

After a slight decline in 2019 (-2.3%), production levels of Machine Tool Builders in CECIMO countries were heavily impacted by the coronavirus in 2020. As result, CECIMO production level has fallen by -26.3% in 2020 to 20.2 billion euros. This reflects the lowest total output level since 2010, which was the low point of the financial crisis. However, it is also important to know that this represents a smaller decline than that recorded during the last financial crisis.

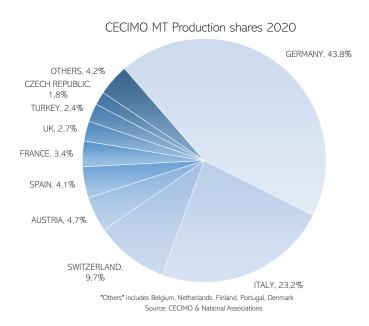
Although there were regional differences, global Machine Tool Production also experienced a significant decline of 20.2% in 2020, after a 6.1% decline in 2019 on an annual basis. This reflects also the lowest level of global output since 2010.

As result, with an output of 20.2 billion euros, CECIMO retained the leading position on the global MT market, with around 34% share at the end of 2020.



Among the CECIMO countries, output fell in almost all countries: Belgium (-33.6%), Switzerland (-31.6), France (-31.3%), Czech Republic (-30.8%), Denmark (-30.3%), Germany (-30.1%), Portugal (-30.0%), Sweden (-27.7%), Spain (-24.4%), Netherlands (-23.3%), Italy (-20.6), Turkey (-18.7%), Finland (-14.8%) and Austria (-11.5%). Only the United Kingdom registered a modest increase of 1.7%.

With a share of 43.8%, Germany remains the largest CECIMO Machine Tools producer, closely followed by Italy (23.2%) and Switzerland (9.7%). These three countries make up more than three quarters of CECIMO's production.



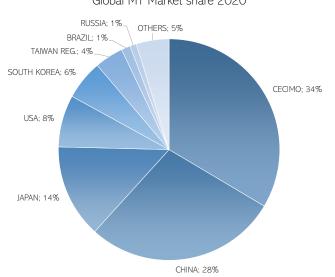
Global MT Production & Market share 2020

Concerning the MT Production growth cycles, it is important to note that almost all regions of the world experienced a downturn in production in 2019. Even the decrease in Europe and the US was not significant, China, where the coronavirus pandemic began in 2019, recorded a significant decrease of -12.7%. Given that China is one of the largest producers, this decrease was also reflected in the decrease in global MT production in 2019 (-6.1%). Between the regions, even the CECIMO countries recorded a smaller decrease in 2019 compared to the other regions, the decrease in 2020 was stronger than the global average. However, the largest decline in production was recorded in Brazil (-45.6%), Thailand (-45.1%) and India (-44.1%). Production levels in Japan, Taiwan region, Singapore and Canada also decreased strongly (20-30%). A slightly better but still negative case was also recorded in South Korea, the United States, Poland and China.

Annual MT	Production ((Million	Euros')

2018	2019	2020	2020/2019
28014,4	27365,1	20156,6	-26,3%
19864,5	17347,0	16949,7	-2,3%
12416,9	11731,0	8217,7	-29,9%
5266,7	5086,9	4565,9	-10,2%
4358,8	4123,3	3476,6	-15,7%
3984,8	3529,6	2509,1	-28,9%
1187,8	1445,5	785,8	-45,6%
1176,9	1044,9	584,4	-44,1%
549,5	599,7	475,6	-20,7%
521,6	573,5	574,3	0,1%
596,8	506,2	278,0	-45,1%
595,1	484,9	356,2	-26,5%
283,7	236,7	226,9	-4,1%
1390,9	1238,9	960,1	-22,5%
80208,3	75313,3	60117,0	-20,2%
	28014,4 19864,5 12416,9 5266,7 4358,8 3984,8 1187,8 1176,9 549,5 521,6 596,8 595,1 283,7 1390,9	28014,4 27365,1 19864,5 17347,0 12416,9 11731,0 5266,7 5086,9 4358,8 4123,3 3984,8 3529,6 1187,8 1445,5 1176,9 1044,9 549,5 599,7 521,6 573,5 596,8 506,2 595,1 484,9 283,7 236,7 1390,9 1238,9	28014,4 27365,1 20156,6 19864,5 17347,0 16949,7 12416,9 11731,0 8217,7 5266,7 5086,9 4565,9 4358,8 4123,3 3476,6 3984,8 3529,6 2509,1 1187,8 1445,5 785,8 1176,9 1044,9 584,4 549,5 599,7 475,6 521,6 573,5 574,3 596,8 506,2 278,0 595,1 484,9 356,2 283,7 236,7 226,9 1390,9 1238,9 960,1

Source: CECIMO, Gardner Intelligence Global MT Market share 2020



Even at lower levels, CECIMO countries have recorded a significant market share representing 34% of the global share. After CECIMO countries, China has the highest share (28%), closely followed by Japan (14%). The United States (8%), South Korea (6%) and Taiwan (4%) have lower but still strong market shares. Brazil and Russia registered approximately 1% of the global MT market share in 2020.

Outside the CECIMO countries, China, the United States, South Korea, Russia and Poland registered an increase in market share relative to 2019 levels.

CECIMO8 Domestic & Foreign Orders

CECIMO8 Domestic Orders

The CECIMO8 Domestic Orders Index (annual average) recorded a 35% decrease in 2020 compared to the 2019, reflecting a very sharp decline in orders in the domestic market. As a result, the 2020 CECIMO8 Domestic Orders Index decreased from 93 points in 2019 to 61 points in 2020. Also, as shown in the chart below, the CECIMO Domestic Orders index was already trending downwards from 2018 when it hit its peak. This also corresponds to lower MT production levels in 2019.

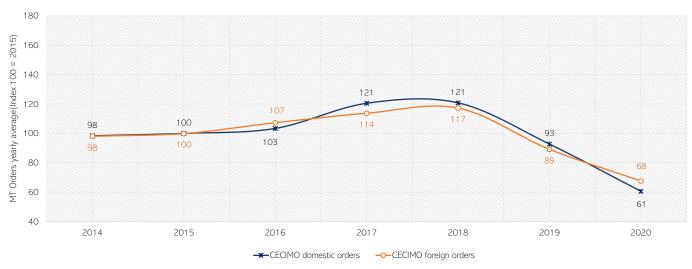
Decrease was recorded in all CECIMO countries, but with the strongest impact in France, where domestic orders recorded 80% fall compared to 2019 level. Moreover, a sharp decline was recorded in Germany (-37%), followed closely by Switzerland (-36%), Italy (-35%), the United Kingdom (-34%), Austria (-26%) and the Czech Republic (-20%). Spain recorded the lowest decrease of domestic orders (-9%) compared to 2019 levels.

CECIMO8 Foreign Orders

The CECIMO8 Foreign Orders Index (annual average) also recorded a significant decrease of 24% in 2020 compared to 2019 levels. Although this decrease is lower than the index on the domestic market, it nevertheless reflects a sharp drop in foreign orders.

Similar to the domestic orders index, this index also fell in 2019, following its peak in 2018. As shown in the chart below, the CECIMO8 Foreign Orders Index declined from 89 points in 2019 to 68 points in 2020. The strongest decline in the index was registered in France (-41%), the United Kingdom (-36%), Switzerland (-34%), the Czech Republic (-30%) and Germany (-27%). A smaller but nevertheless significant decline was also recorded in Spain (-17%), Italy (-13%) and Austria (-10%).

CECIMO8 Domestic & Foreign Orders (2015-2020)



Source: CECIMO & National Associations

CECIMO8 includes: Austria, UK, Germany, France, Italy, Czech Republic, Switzerland and Spain

CECIMO8 Total Orders

The CECIMO8 Total Orders Index (annual average), as result of decrease in CECIMO8 domestic and CECIMO8 foreign orders, recorded sharp -27% decrease in 2020.

Total Orders Index as shown in table below, after increase of 3% compared to the 2017 level, reached its peak in 2018 recording 118 points. Following a 23% decline in 2019 and a level of 90 points, it reached a very low level in 2020 due to coronavirus and other disturbances that affected global and European industries (66 points). Furthermore, if we compare this level of total orders historically, it is the lowest level of the index since the 2009 financial crisis.

As shown on the chart on right side, the strongest decrease in total orders index was recorded in France as result of strongest decrease in domestic and foreign orders index. As a result, the French total orders index was down 51% from 2019 levels.

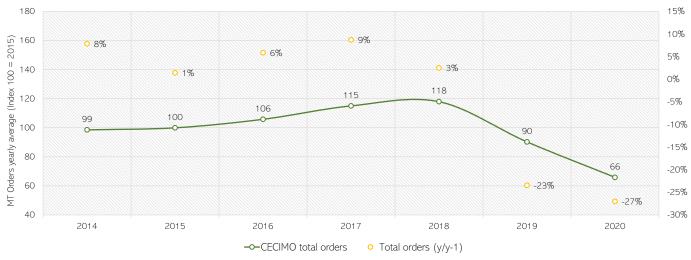
Strong decrease was also recorded in Switzerland (-35%), UK (-35%), Germany (-30%) and Czech Republic (-28%). In Italy (-18%), Spain (-16%) and Austria (-12%) there was a more modest fall in total orders.

Although not shown on the charts, the CECIMO8 Shipments Index (annual average) for 2020 reflects a similar path and the index decreased from 111 points to 79 points in 2021. This decline follows a 5% decline in 2019 and corresponds to a 29% decrease in 2020 over the 2019 level.

CECIMO8 Total Orders Index 2020/2019



CECIMO8 Total Orders (2015-2020)



Source: CECIMO & National Associations

CECIMO8 includes: Austria, UK, Germany, France, Italy, Czech Republic, Switzerland and Spain

CECIMO8 vs Competitors Total Orders

As the coronavirus epidemic caused a global crisis, the MT Total Orders Index (annual average) decreased, with a different intensity in all regions of the world.

If we compare different regions, we can see similar patterns of decline in the total order index between the CECIMO8 countries and Japan, the United States, Taiwan region, and South Korea. It is important to note that the United States curve is the average of the United States' domestic orders.

Similar to the CECIMO8 trend and peaking in 2018, all mentioned countries, as shown in the chart below, recorded a very high level of the total orders index in 2018. The decline in total orders in 2019 suggests that the slowdown phase began even before the coronavirus pandemic hit every country/region.

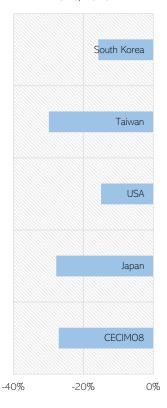
The largest decline in the total order index was in the Taiwan region, where the total order index fell by 30% to 65 points in 2020. It is important to note that the Taiwan region recorded a 16% drop in 2019 from 2018 level.

Japan's total orders index, following a peak in 2018, and a significant decline in 2019, when the total orders index fell 31% to 84 points, recorded a further decrease of total orders index by 28% in 2020.

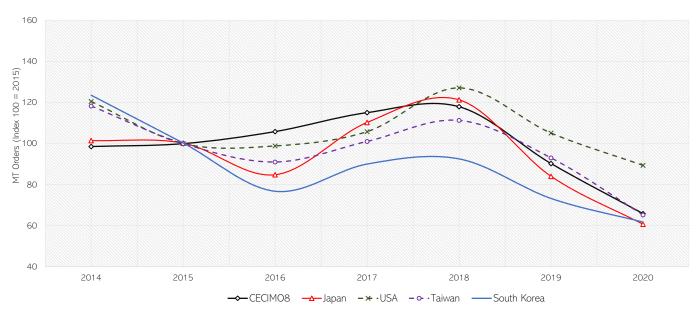
South Korea recorded a 16% decline in 2020 compared to the 2019 index level.

The US domestic order index, following 20% annual growth in 2018 and a peak, fell 17% in 2019 and 15% in 2020 when the index reached 89 points.

Total Orders Index 2020/2019



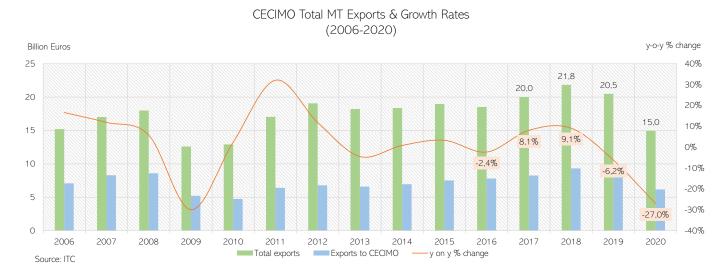
CECIMO8 vs Competitors Total Orders (2015-2020)



Source; CECIMO & National Associations

CECIMO MT Exports & Growth Rates

As a result of the slowdown in the global MT Consumption, international trade and the sharp drop in foreign orders, as mentioned in the previous chapter, CECIMO Total MT exports fell by 27% in 2020, compared to the 2019 level. CECIMO's total exports reached a record high level in 2018, reaching 21.8 billion euros, and then fell in 2019 and 2020. As a result, total exports from CECIMO countries in 2020 recorded the level of 15 billion euros, the lowest level since 2010.

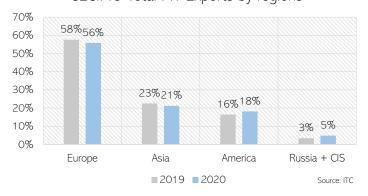


The annual figures also show that exports between CECIMO countries recorded a higher decrease (-29.2%) compared to the level of exports outside CECIMO countries (-25.3%).

Billion Euros	2015	2016	2017	2018	2019	2020
Total exports	19,0	18,5	20,0	21,8	20,5	15,0
y on y % change	3,3%	-2,4%	8,1%	9,1%	-6,2%	-27,0%
Exports to CECIMO	7,5	7,8	8,3	9,3	8,7	6,2
%change	8,2%	3,6%	5,9%	13,0%	-6,5%	-29,2%
Exports outside CECIMO	11,4	10,7	11,8	12,5	11,8	8,8
%change	0,3%	-6,2%	9,6%	6,4%	-6,0%	-25,3%

The shares of Total CECIMO's exports by region shown in the chart to the right show a significant share of total exports in Europe (56%). This reflects robust trade among CECIMO countries. The second largest export market is Asia with 21% share in 2020, closely followed by the Americas region with about 18% share in 2020. The chart to the right also shows a significant growth in the export share in Russia and the CIS (Commonwealth of Independent States).

CECIMO Total MT Exports by regions



CECIMO MT Main Export Markets 2020

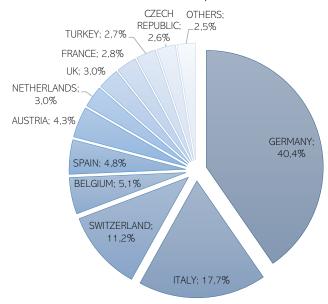
According to data from the International Trade Center (ITC), the US and China remain the two major export destinations for the CECIMO countries in 2020.

However, with a smaller decline in export flows to the US (-22.7%), compared to a decline to China (-30.4%), the US was the top export destination in 2020. According to historical data, China has always been the primary export destination of CECIMO countries.

In 2020, the largest declines in CECIMO exports (excluding CECIMO) occurred in trade with Poland (-48.1%), Mexico (-42.6%) and Japan (-42.1%). Moreover, exports towards India (-34.3%), Hungary (-34.2%) and China (-30.4%) registered a significant fall. Exports to South Korea (-23.4%), the USA (-22.7%), Russia (-16.3%) and Canada (-15.1%) decreased more modestly.

⇒ Due to lower declines, the last-mentioned countries thus recorded growth in the share of total exports of the CECIMO countries in 2020.

Main CECIMO Exporters 2020



 $Source: CECIMO, \ National \ Associations: "Others" \ include \ Sweden, \ Finland, \ Denmark, \ Portugal.$

Among the CECIMO countries in 2020, on the basis of data received from national associations, the major MT exporters in 2020 were Germany, with a share of 40.4%, followed by Italy, with a share of 17.7% and Switzerland, with a share of 11.2% (chart above).

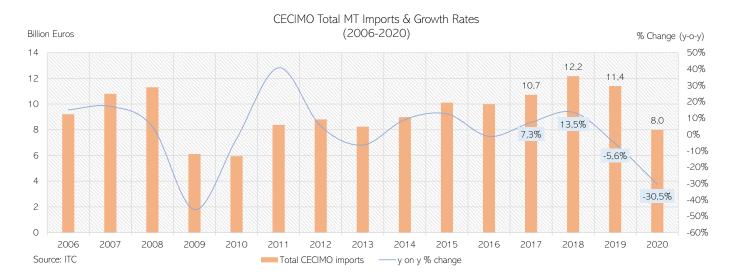
CECIMO Main MT-Purchasing Countries 2020/2019

EUR Million	2019	2019 Share	2020	2020 Share	%change
United States of America	2.480	21,1%	1.916	21,8%	-22,7%
China	2.717	23,1%	1.892	21,5%	-30,4%
Poland	1.259	10,7%	653	7,4%	-48,1%
Russia	625	5,3%	523	6,0%	-16,3%
India	463	3,9%	304	3,5%	-34,3%
Mexico	517	4,4%	297	3,4%	-42,6%
Hungary	331	2,8%	218	2,5%	-34,2%
South Korea	280	2,4%	214	2,4%	-23,4%
Japan	364	3,1%	211	2,4%	-42,1%
Canada	240	2,0%	204	2,3%	-15,1%
Total CECIMO Exports	20.483,8		14.954,0		-27,0%
Exports to CECIMO	8.722,0	42,6%	6.173,5	41,3%	-29,2%
Exports outside CECIMO	11.761,9	57,4%	8.780,5	58,7%	-25,3%

Source: ITC

CECIMO MT Imports & Growth Rates

As Machine Tools Consumption in Europe also experienced a significant slowdown in 2020, together with lower industrial production and blockages caused by the coronavirus pandemic, MT imports into CECIMO countries fell 30.5% in 2020 compared to 2019 levels. Total imports of CECIMO also peaked in 2018, reaching 12.2 billion of euros, and then dropped in 2019 and 2020. As a result, total MT imports in CECIMO countries in 2020 recorded a level of 8 billion euros, the lowest level since 2010.



As shown in the table below, the annual figures show that imports between CECIMO countries were slightly lower (-31.4%) than the level recorded of non-CECMO imports (-29.0%).

Billion Euros	2015	2016	2017	2018	2019	2020
Total CECIMO imports	10,1	10,0	10,7	12,2	11,4	8,0
y on y % change	12,5%	-1,2%	7,3%	13,5%	-5,6%	-30,5%
Intra-CECIMO imports	6,2	6,2	6,5	7,4	7,0	4,8
y on y % change	10,7%	0,2%	4,3%	13,6%	-4,9%	-31,4%
Outside CECIMO	3,9	3,8	4,2	4,8	4,4	3,2
y on y % change	15,7%	-3,4%	12,5%	13,4%	-6,7%	-29,0%



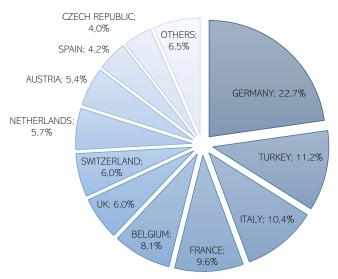
CECIMO MT Main Supplying Markets 2020

ITC data show that Japan remains CECIMO's largest supply market for Machine Tools (excluding CECIMO) with a share of 31.3% in 2020. After Japan, China (17.6%), the Taiwan region (16.6%), the US (11.2%) and South Korea (9.8%) account for the highest shares of CECIMO MT's imports.

Among countries, as shown in the table below, almost all supplier markets recorded a sharp decrease in exports to the CECIMO countries. The sharp decline in CECIMO MT imports took place in trade with Singapore (-50.5%), Thailand (-40.4%), India (-39.2%), South Korea (-37.4%), Japan (-35.2%), the Slovak Republic (-35.1%), Poland (-33.8%) and the USA (-33.2%). MT Imports from Taiwan region declined more slowly (-17.8%) and China (-13.6%).

Since Japan, the main traditional market, registered a significant drop in MT exports to CECIMO countries, its share of 34.3% compared to 2019 has decreased to 31.3% in 2020. On the other hand, due to the smaller decline, China and Taiwan region have increased their share in total CECIMO imports. China's share grew from 14.5% in 2019 to 17.6% in 2020, while the Taiwan region's share grew from 14.3% in 2019 to 16.6% in 2020.

Main CECIMO Importers 2020



Source: CECIMO, National Associations; "Others" include Sweden, Finland, Denmark, Portugal

Among CECIMO countries in 2020, according to data received from national associations, the countries with the highest share of total CECIMO MT imports in 2020 were Germany (22.7%), then Turkey (11.2%), Italy (10.4%) and France (9.6%).

CECIMO Main MT-Supplying Markets 2020/2019

CECIMO Main MI-Supplying Markets	2020/2019				
EUR Million	2019	2019 Share	2020	2020 Share	%change
Japan	1.530	34,3%	991	31,3%	-35,2%
China	646	14,5%	558	17,6%	-13,6%
Taiwan region	638	14,3%	524	16,6%	-17,8%
United States	530	11,9%	354	11,2%	-33,2%
South Korea	495	11,1%	310	9,8%	-37,4%
Poland	147	3,3%	97	3,1%	-33,8%
Thailand	104	2,3%	62	2,0%	-40,4%
Slovakia	68	1,5%	44	1,4%	-35,1%
India	30	0,7%	18	0,6%	-39,2%
Singapore	30	0,7%	15	0,5%	-50,5%
Total CECIMO Imports	11.487,0		7.988,1		-30,5%
Total from CECIMO countries	7.026,8	61,2%	4.822,2	60,4%	-31,4%
Total from non-CECIMO	4.460,3	38,8%	3.165,9	39,6%	-29,0%

Source: ITC

Highlights



About CECIMO

CECIMO is the European Association of the Machine Tool Industries and related Manufacturing Technologies. We bring together 15 national associations of machine tool builders, which represent approximately 1500 industrial enterprises in Europe (EU + UK+ EFTA + Turkey), over 80% of which are SMEs. CECIMO covers 98% of the total machine tool production in Europe and about 34% worldwide. It accounts for approximately 150,000 employees and a turnover of around 20 billion euros in 2020. More than three quarters of CECIMO production is shipped abroad, whereas half of it is exported outside Europe.

CECIMO countries

The European Association of the Machine Tool Industries and related Manufacturing Technologies brings together 15 national associations of machine tool builders from the following countries: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom.







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