



Role of third-country subsidiaries of European manufacturers in the supply of CNC machinery to the Russian Federation

December 2024

Key points

- I. CNC machines and components produced by European brands and their third country subsidiaries are still finding their way to Russia, and account for 11% of all Russian CNC imports.
- II. Between 2023 and July 2024, Russia, primarily through intermediaries, received at least 57 machines worth more than USD 26.5 million, as well as more than USD 9.5 million worth of components and consumables manufactured by third-country subsidiaries of well-known European brands.
- III. This has been made possible, in part, due to insufficient compliance both by parent companies within the EU and by their subsidiaries in third countries.

Summary

Foreign CNC machines and their components are important for Russian military industry and the expansion of its production capacity. Russia's dependence on imports of CNC machines remains at 70-90%. For the related original components this number is even higher – 80-95%.

Russia is trying to adjust to the tightening of sanctions and export restrictions imposed by the 12th and 14th EU sanctions packages by developing new ways to maintain CNC machines import. Between January 2023 and July 2024, more than 22 thousand CNC machines worth more than USD 4.16 billion were delivered to Russia¹. Even though, the PRC is now the biggest supplier of industrial equipment to Russia, the share of European manufacturers and their third-country subsidiaries in Russian imports of CNC machines and related components remains significant.

During 2023 and the first 7 months of 2024, Russia received more than 10 thousand CNC machines with a total value of more than USD 405 million, as well as more than USD 1.1 billion worth of related components and consumables produced by EU member states (with the majority split between Italy and Germany).

In addition, at least 57 machine tools worth more than USD 26.5 million and USD 9.5 million worth of components and consumables imported by Russia (mainly through intermediaries) during the

¹ More than half of the total Russian imports was produced in the PRC.



same period of time were manufactured by third-country subsidiaries of well-known European brands, including Emag, Huron Graffenstaden, Trumpf, DMG Mori, Chiron, Grob, Siemens, Schneider Electric, Heidenhain, Sandvik Coromant, etc.

Russia's continued access to European CNC products was facilitated, among other factors, by insufficient compliance with sanctions and export restrictions by both the parent companies in the EU and their subsidiaries in third countries.

We call for the following actions to stop the export to the Russian Federation of CNC machines and related components produced by third-country subsidiaries of European manufacturers:

- A. Extend the relevant export/reexport bans for the EU operators to the activities of their subsidiaries in third countries.
- B. Investigate all cases of products manufactured by third-country subsidiaries of European operators being delivered to Russia, as mentioned in this document and its annexes.
- C. Provide European manufacturers of CNC products with detailed and strict instructions to investigate, stop, and prevent supplies of their products and technologies to Russia.
- D. Enhance oversight by European manufacturers over the activities of their third-country subsidiaries, especially those in the PRC, as well as end users and end-use due diligence practices to be performed by the parent company and its subsidiaries.
- E. Impose comprehensive liability on parent companies for the activities and violations of sanctions and export restrictions conducted by their subsidiaries in third countries.



Issue overview

High-precision, highly efficient, and fully automated CNC machines and their components remain crucial for Russia. Without them, the production of modern weaponry, including missiles, ammunition, small arms, armored vehicles, electronic and navigation equipment, submarines, nuclear weapons would be impossible. Prior to the full-scale invasion of Ukraine, Russia's dependence on imports of CNC machines was 70-90%². For the related original components this number is even higher – 80-95%. New CNC machines are essential for expanding Russia's military production facilities, while imports of components and consumables are critical for maintaining current equipment at Russian military plants.³

Since the end of 2023, members of the sanctions coalition have tightened sanctions and export restrictions to block Russia's access to CNC equipment. In the 12th sanctions package, the EU imposed significant restrictions on the export/re-export of CNC machines and related components to Russia. The EU's 14th sanctions package envisages tighter control of parent companies, including CNC producers, over their third-country subsidiaries.⁴

At the same time, the analysis of Russian imports for 2023 and the first 7 months of 2024 shows that Russia's access to foreign CNC machines, their components and consumables was maintained. The main problem is that the Russian Federation is building new chains to circumvent the existing restrictions by refocusing on supplies from the PRC. Nevertheless, **the continued supply of European-made CNC machines and components to the Russian Federation** remains a no less important issue, facilitated by the insufficient compliance with sanctions and export restrictions by both the parent companies in the EU and their subsidiaries in third countries.⁵ The analysis presented in this memo focuses specifically on the second problem as the one requiring direct EU involvement.

1. Russian import of CNC machines

In total, over 22 thousand CNC machines worth more than USD 4.16 billion were supplied to the Russian Federation between January 2023 and July 2024. Most of them were manufactured in the PRC (62.8% or more than USD 2.6 billion).⁶ At the same time, the contribution of European manufacturers to Russian machine tool imports remains significant. More than 10 thousand CNC

² <https://jamestown.org/program/chinese-machine-tools-serve-as-russias-safety-net/>

³ These include a) components (machine controls, servo motors, spindles, bearings, guides, tool holders, machine stands, etc.); b) consumables (drills, cutting inserts, nozzles, milling cutters, blades, etc.).

⁴ The 12th and 14th EU sanctions packages banned the sale of almost all CNC machines, critical components and related software to the Russian Federation. Strict transit and re-export restrictions were imposed, including a ban on the general transit of CNC goods through Russia and the mandatory inclusion of a "No Russia" clause in sales contracts related to the export of CNC machines. Improved system of requirements for compliance with sanctions and due diligence of European companies; <https://eur-lex.europa.eu/eli/reg/2023/2878>; https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401745; The US Executive Order 14114 prohibited foreign financial institutions from servicing any significant transactions related to the support of the Russian military-industrial complex, including the supply of CNC machines; <https://ofac.treasury.gov/media/932441/download?inline>

⁵ Out of 185 identified European manufacturers of CNC machines, their components and consumables, almost half (at least 96 companies) have subsidiaries in third countries (in particular, in the PRC, India, Turkey, Taiwan, Thailand, Malaysia, etc.). Products of 78 subsidiaries of European brands are still being supplied to the Russian Federation. About 95% of such supplies are made through intermediaries.

⁶ Trade data seen by ESCU.



machines delivered to Russia with a total value of more than USD 405 million were manufactured by European companies.⁷

57 CNC machines delivered to Russia with a total value of more than USD 26.5 million were **manufactured by subsidiaries** of European brands **in third countries**, mostly by subsidiaries of **German** and **French** machine tool manufacturers.⁸ The average cost of a delivered machine produced by European brand subsidiaries is approximately USD 474-491 thousand.

For example, 17 CNC machines supplied to Russia with a total value of more than USD 14.7 million were manufactured by the Turkish branch of the German manufacturer **Emag** Salach GmbH.⁹ Emag machines are used at Russian military plants. For example, Research and Production Centre Titan-Barricades JSC uses the Emag equipment to produce launchers for ballistic missiles, components of artillery systems.¹⁰ The German manufacturer also has a subsidiary in Russia, Emag LLC, which is engaged in the wholesale trade of machine tools and has supplied this equipment to companies involved in the Russian military-industrial complex, such as Scientific and Production Association Elektromashina JSC, the manufacturer of electrical equipment for military.¹¹

Another 24 machines worth more than USD 1 million, which were delivered to Russia during the reporting period, were manufactured by the Chinese subsidiaries of the German manufacturer **Trumpf** – Trumpf China Co., Ltd (2 machines) and Jiangsu Jinfangyuan CNC Machine Co. Ltd (22 machines).¹² In addition, machines of this German brand are widely used at Russian military plants, with Trumpf itself having subsidiaries in Russia that have been involved in supplies for the Russian military-industrial complex.¹³ In particular, Vavilova 67 LLC (directly owned by Trumpf) supplied machine tools and components to the developer of high-precision guided weapons for the ground forces Shipunov Instrumentation Design Bureau JSC,

⁷ For more details on the supply of CNC machines to Russia, including those manufactured in European countries, see Annex 1. Supplies of machine tools under HS codes 8456 - 8465 and 8485 were analyzed.

⁸ For more details on the supply of CNC machines to Russia manufactured by subsidiaries of European brands in third countries, see Annex 2.

⁹ Emag (German Commercial Registration No. B8537_HRB720643, headquarters: Austrasse 24, 73084 Salach Germany) is a manufacturer of a range of high-precision CNC machines, including lathes, grinders, machining centers, laser welding and cleaning machines.

¹⁰ Titan-Barricades Federal Research and Production Center JSC (TIN: 3442110950, is sanctioned by the US, EU, UK, Canada, Switzerland, Japan, New Zealand, Australia and Ukraine); <https://war-sanctions.gur.gov.ua/en/tools/401>

¹¹ Emag LLC (TIN: 7728030613); <https://checko.ru/company/ehmag-1037739252880>;

Research And Production Association Elektromashina JSC (TIN: 7449044990, under sanctions of the US, EU, Switzerland, New Zealand and Ukraine), is part of the Uralvagonzavod concern. It is involved in the development and production of various electrical equipment for military equipment (in particular, weapons control systems; electronic tracking systems; weapons drives for guided missiles used in warships of the Russian Navy, etc.;

<https://companionium.ru/id/1037739252880/purchases>; <https://bit.ly/3Z1bk9j>

¹² Trumpf SE + Co. KG (Germany Commercial Registration № B8534_HRA201460, address: Johann-Maus-Str. 2, 71254 Ditzingen, Germany) – is a German private company that manufactures a range of high-precision CNC machines, including CNC laser machines, CNC punch presses, CNC press brakes, and CNC marking lasers. Subsidiaries of the manufacturer whose products were supplied to the Russian Federation: Trumpf China Co., Ltd (China Company Registration No. 320585400012098); Jiangsu Jinfangyuan CNC Machine Co. Ltd (address: Hanjiang Industrial Park, Yangzhou City, China);

https://www.trumpf.com/en_US/company/profile/company-profile/

¹³ <https://bit.ly/3BaVpXs>



a manufacturer of components for 3M-14 Kalibr missiles FSUE Oktyabr Production Association, and FSUE Military Unit 35533.¹⁴

Four machines with a total value of more than USD 1 million delivered to Russia, were manufactured by the Chinese subsidiaries of another German manufacturer **DMG Mori** - DMG Mori Tianjin and DMG Mori Manufacturing Solutions.¹⁵ Previously, DMG Mori machines have been repeatedly recorded in use by Russian military plants.¹⁶

2. Russian import of components and consumables for CNC machines

In the reporting period, **components for CNC machines** worth more than USD 12.8 billion (almost 50% of those were produced in the PRC) were supplied to the Russian Federation. The share of European manufacturers in Russia's component imports remains significant, with the total value of European components supplied to Russia exceeding USD 1 billion.¹⁷ At the same time, components manufactured by subsidiaries of European brands in third countries were supplied to Russia for more than USD 6.9 million.¹⁸

Most of the **components** were supplied by subsidiaries of such **German** brands as STC-Steyr Wälzlager Deutschland GmbH, Schaeffler Group, SEW Eurodrive, Festo SE & Co. KG, Siemens, as well as the aforementioned Emag and Trumpf.¹⁹

The Turkish company **STC Steyr** Rulman Ve Danismanlik Tic Ltd **directly supplied** components manufactured by the German parent company STC-Steyr Walzlager Deutschland GmbH, as well as other manufacturers (Schaeffler AG, BDI Germany GmbH) **to Russia** for more than USD 2 million.²⁰

The Chinese, Turkish and Indian subsidiaries of the German manufacturer **SEW Eurodrive** together produced components worth about USD 1 million that were supplied to Russia.²¹

¹⁴ Until April 2024, Vavilova 67 LLC was called Trumpf LLC, TIN: 7722560773, under US sanctions;

<https://checko.ru/company/vavilova-67-1057748942448>;

<https://companium.ru/id/1057748942448/purchases?role=supplier&law=94&year=&inn=>; A.G. Shipunov Instrumentation Design Bureau JSC (TIN: 7105514574) is under sanctions imposed by the US, EU, Canada, Switzerland and Ukraine.

Developer of Kornet anti-tank missile systems, Pantsir-S1 anti-aircraft missile systems, and Krasnopol-M corrected ammunition); FSUE "Production Association Oktyabr (TIN: 6612001971, under US sanctions, manufacturer of components for 3M-14 Kalibr missiles); FSGA Military Unit 35533 (TIN: 5012009279).

¹⁵ DMG Mori Aktiengesellschaft - a manufacturer of a range of high-precision CNC machines. Subsidiaries of the manufacturer whose products were supplied to the Russian Federation: DMG Mori Tianjin (address: Room 3208, Global Land Plaza, No. 309 Nanjing Road, Nankai District, Tianjin, 300073); DMG Mori Manufacturing Solutions (address: No.6 Desen Road, Zhongdai Street, Pinghu City, Jiaxing City, Zhejiang Province, China, Pinghu 314200).

¹⁶ <https://bit.ly/4fS4Eeg>

¹⁷ For more details on the supply of components for CNC machines to Russia, including those manufactured in European countries, see Annex 3.

¹⁸ Trade data seen by ESCU.

¹⁹ For more details on the supply of components for CNC machines manufactured by subsidiaries of European brands in third countries to Russia, see Annex 4.

²⁰ STC-Steyr Wälzlager Deutschland GmbH manufactures a wide variety of ball bearings, roller bearings and special-purpose bearings. These include spherical and needle roller bearings, angular contact ball bearings and split bearings for conveyor systems; <https://stc-steyr.com/contact/locations-specialist-contact-person/>

²¹ SEW Eurodrive manufactures gearboxes, motors, electric motors and servo motors. Subsidiaries: in China - SEW-Eurodrive (Suzhou); SEW-Eurodrive (Guangzhou); SEW-Eurodrive (Shenyang); SEW-Eurodrive (Wuhan); SEW-Eurodrive



The **Schaeffler Group's** subsidiaries (five in the PRC, one in India and one in Taiwan) together produced components worth more than USD 809 thousand, which were supplied to Russia.²²

In another case, components worth more than USD 762 thousand supplied to Russia came from subsidiaries of the **Swedish** manufacturer **SKF**.²³

Total Russian imports of **consumables for CNC machines** in the period under review amounted to almost USD 1.2 billion, of which about 16% (or more than USD 192 million) were products of manufacturers from European countries.²⁴ In addition, over USD 2.6 million worth of consumables supplied to Russia were produced by subsidiaries of European brands in third countries.²⁵

The largest number of consumables for CNC machines was supplied by subsidiaries of the **Luxembourg-based Ceratizit S.A.**²⁶ In particular, the subsidiaries of this manufacturer (CB-Ceratizit (Xiamen), CB-Ceratizit Cutting Tools (Suzhou) in the PRC, and Ceratizit India Pvt. Ltd in India) together became the source of consumables supplied to Russia for a total amount of approximately USD 1.7 million.²⁷

In addition, the subsidiaries of **German Gühring KG**, **Swedish Seco Tools AB** and **Sandvik Coromant** together produced goods worth more than USD 964 thousand, which were supplied to Russia.²⁸

Conclusions

(Tianjin); in India - SEW-Eurodrive India Pvt.Ltd.; in Turkey - Sew Eurodrive Hareket Sistemleri San. Tic. Ltd. Şti.; https://www.seweurodrive.com/meta-pages/contacts_worldwide.html

²² Schaeffler Group is a manufacturer of bearings for automated equipment. Subsidiaries: in China - Schaeffler Holding (China) Co., Ltd; Schaeffler Hong Kong Co., Ltd; Schaeffler Trading (Shanghai) Co., Ltd; Schaeffler (Nanjing) Co., Ltd; Schaeffler (Ningxia) Co., Ltd; in India - Schaeffler India Limited; in Taiwan - Schaeffler Taiwan Co., Ltd; <https://www.schaeffler.com/en/meta/worldwide/locations-worldwide/>

²³ SKF manufactures and supplies bearings, seals, lubricants and lubrication systems, maintenance products, mechatronics products, power transmission products, condition monitoring systems and related services worldwide. Subsidiaries: in China - SKF (China) Sales Co Ltd; in Turkey - SKF Turk San. Ve Tic. Ltd. Sti; in India - SKF India Limited; in Malaysia - SKF Malaysia Sdn. Bhd, SKF Bearing Ind. (Malaysia) Sdn. Bhd; in Thailand - SKF (Thailand) Ltd.; <https://www.skf.com/group/support/skf-locations>

²⁴ More details on supplies to the Russian Federation of consumables for CNC machines, including those produced in European countries, are provided in Annex 5. We analyzed supplies of consumables for CNC machines under HS codes 8207 and 8209; 56% of consumables for CNC machines supplied to Russia were produced in the PRC.

²⁵ For more details on the supply of consumables to Russia for CNC machines manufactured by subsidiaries of European brands in third countries, see Annex 6.

²⁶ Ceratizit S.A. - manufacturer of cutting tools and related clamps; <https://www.ceratizit.com/int/en/company/ceratizit-group/locations.html>

²⁷ Trade data seen by ESCU.

²⁸ Gühring KG - is a manufacturer of axial cutting tools, in particular for CNC machines. Subsidiaries in China - Guhring (Changzhou) Cutting Tools Co., Ltd. and in India - Guhring (Changzhou) Cutting Tools Co., Ltd; <https://guehring.com/en/about-us/company/contact-worldwide/>; Seco Tools AB - manufacturer of drills, mills and clamps for use in CNC machines. Subsidiaries in China - Seco Tools (Shanghai) Co., Ltd. and India - Seco Tools India (P) Ltd; <https://www.secotools.com/article/10610?contactuspage=office>; Sandvik Coromant - manufacturer of various cutting equipment for metal processing that can be used in CNC machines and holders for them. Subsidiaries in China - Sandvik Coromant Cutting Tools (Shanghai) Co. Ltd, Sandvik Tooling Production (Langfang) Co. Ltd; <https://www.home.sandvik/en/about-this-site/data-privacy/legal-entities/>



The analysis confirms that despite the tightening of sanctions and export restrictions, imports of critical CNC equipment and components to Russia continue. Russian-Chinese trade cooperation is getting stronger and the PRC's role as an export/re-export hub for these goods is growing. Most of the CNC machines and their components that Russia received in 2023 and during the first 7 months of 2024 originated (manufactured and/or supplied) from the PRC.

However, the share of European countries in Russia's imports remains significant. Russia's imports of critical CNC equipment and related components produced by European brands and their third-country subsidiaries continues, primarily through intermediaries. This challenge is facilitated, among other factors, by insufficient sanctions due diligence and compliance by European producers and their subsidiaries in third countries. In order for the practice of adhering to restrictions to become standard in the CNC industry, EU supranational bodies and the governments of member states must provide manufacturers with detailed and strict guidelines.

Recommendations

In order to prevent Russia's access to CNC machines, as well as related components and consumables manufactured by European brands and their subsidiaries, the EU supranational bodies and the governments of individual member states should enhance oversight over compliance and due diligence practices employed by the operators associated with the EU, including the following steps:

- A. Extend all export/re-export bans and restrictions on CNC machines and related components that apply to EU parent companies (including the "No Russia" clause) to the activities of European manufacturers' subsidiaries in third countries.
- B. Investigate all cases of products manufactured by third-country subsidiaries of European operators being delivered to Russia, as mentioned in this document and its annexes.
- C. Provide European manufacturers of CNC products with detailed and strict instructions to investigate, stop, and prevent supplies of their products and technologies to Russia.
- D. Align the obligations for sanctions compliance and due diligence between parent and subsidiary companies. In particular, require both parent and subsidiary companies to implement the same comprehensive measures to prevent, terminate, and investigate instances of their products being supplied to Russia. Furthermore, the parent company should be held accountable for the compliance or non-compliance of its subsidiaries with these obligations.
- E. Enhance oversight by European manufacturers over the activities of their third-country subsidiaries, especially those in the PRC. Oblige both parent companies and related subsidiaries to conduct regular physical (on-site), photo and video inspections of the end user and end-use of products manufactured in third countries.
- F. Introduce clear types and scope of liability for parent companies regarding the activities, negligence, or violations of sanctions and export restrictions by their subsidiaries. In particular, in cases where the parent company knew or should have known about the violations or negligence of its subsidiaries and failed to take appropriate measures to prevent them.

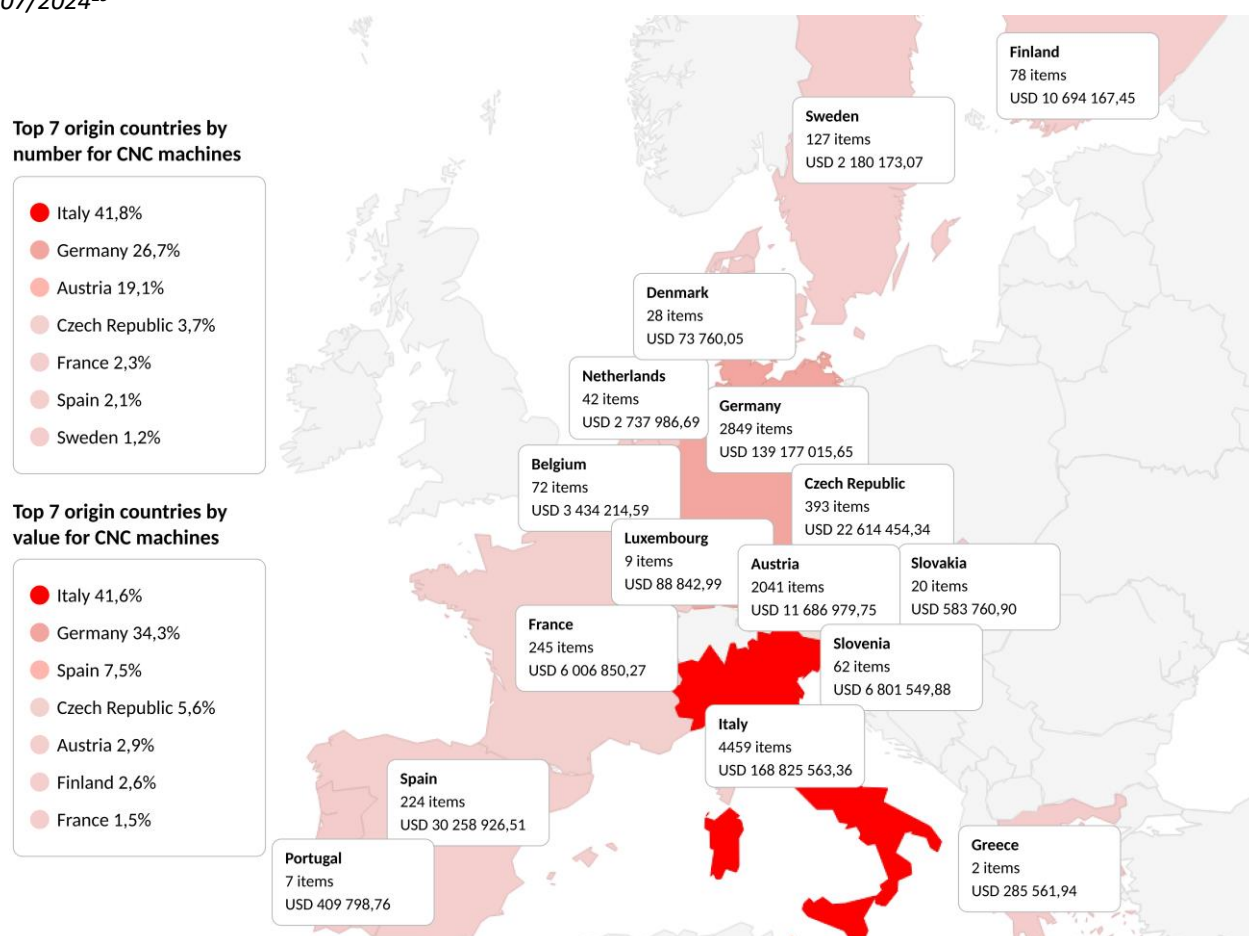


Annex 1: Russian imports of CNC machine tools in the period from 01/01/2023 to 31/07/2024

Table 1. Top 10 countries of origin of CNC machines in supplies to the Russian Federation

Origin country	Volume of supplies	Percentage
PRC	USD 2 619 204 829,66	62,86%
Taiwan	USD 371 170 896,18	8,91%
South Korea	USD 228 063 037,70	5,47%
Turkey	USD 220 064 555,55	5,28%
Italy	USD 168 825 563,36	4,05%
Japan	USD 130 565 281,43	3,13%
India	USD 53 178 179,02	1,28%
Spain	USD 30 258 926,51	0,73%
Czech Republic	USD 22 614 454,34	0,54%
Switzerland	USD 13 560 906,88	0,33%
Total:	USD 4 166 521 341,77	

Image 1. Volumes of supplies of CNC machines manufactured in European countries in the period from 01/01/2023 to 31/07/2024²⁹



²⁹ The map shows the number of CNC machines supplied and their total value, including as a percentage of total Russian imports of machine tools manufactured in European countries.



Annex 2: Subsidiaries of European brands whose CNC machines were supplied to the Russian Federation

<i>Name of the European company and country of registration</i>	<i>Name of the subsidiary and country of registration</i>	<i>Volume of products delivered in January 2023 - July 2024</i>	<i>Number of items supplied</i>	<i>HS code of the supplied products</i>	<i>Raw manufacturer/supplier</i>
EMAG (Germany)	EMAG Salach GmbH (Turkey)	USD 14 735 552,69	17	8458	Raw manufacturer
TRUMPF (Germany)	TRUMPF China Co., Ltd (PRC)	USD 131 948,94	2	8456 8462	Raw manufacturer
	Jiangsu Jinfangyuan CNC Machine Co. Ltd. (PRC)	USD 959 837,79	22	8462	Raw manufacturer
DMG Mori Aktiengesellschaft / MAHO (Germany)	DMG MORI Tianjin Factory (PRC)	USD 697 537,00	2	8457	Raw manufacturer
	DMG Mori Manufacturing Solutions Co. Ltd (PRC)	USD 708 438,00	2	8457	Raw manufacturer
CHIRON (Germany)	CHIRON Machine Tool (Taicang) Co., Ltd (PRC)	USD 787,42	1	8457	Raw manufacturer
GROB (Germany)	GROB-Machine Tools (China) Co.Ltd (PRC)	USD 3 892 092,00	5	8457	Raw manufacturer
Huron Graffenstaden (France)	JYOTI CNC Automation Ltd. (India)	USD 5 435 943,06	5	8457 8458	Raw manufacturer
Schneider Electric (France)	Schneider Electric (China) (PRC)	USD 25 185,40	1	8465	Supplier ³⁰

³⁰ Information on Chinese export trade data seen by ESCU.



Annex 3: Russian imports of components for CNC machines in the period from 01/01/2023 to 31/07/2024

Table 1. Top 10 countries of origin of components for CNC machines in supplies to the Russian Federation

Origin country	Volume of supplies	Percentage
PRC	USD 6 411 428 828,42	49,87%
Switzerland	USD 2 607 491 383	20,28%
Germany	USD 437 196 266,47	3,40%
Taiwan	USD 426 392 919,04	3,32%
USA	USD 354 013 553,75	2,75%
Italy	USD 243 389 467,46	1,89%
South Korea	USD 203 434 951,93	1,58%
Turkey	USD 203 118 544,49	1,58%
Malaysia	USD 131 203 159,47	1,02%
Thailand	USD 128 389 455,52	1,00%
Total: USD 12 853 289 517,26		

Image 1. Volumes of supplies of components for CNC machines manufactured in European countries in the period from 01/01/2023 to 31/07/2024³¹

³¹ The map shows the number of components supplied and their total value, including as a percentage of total imports of components manufactured in European countries.

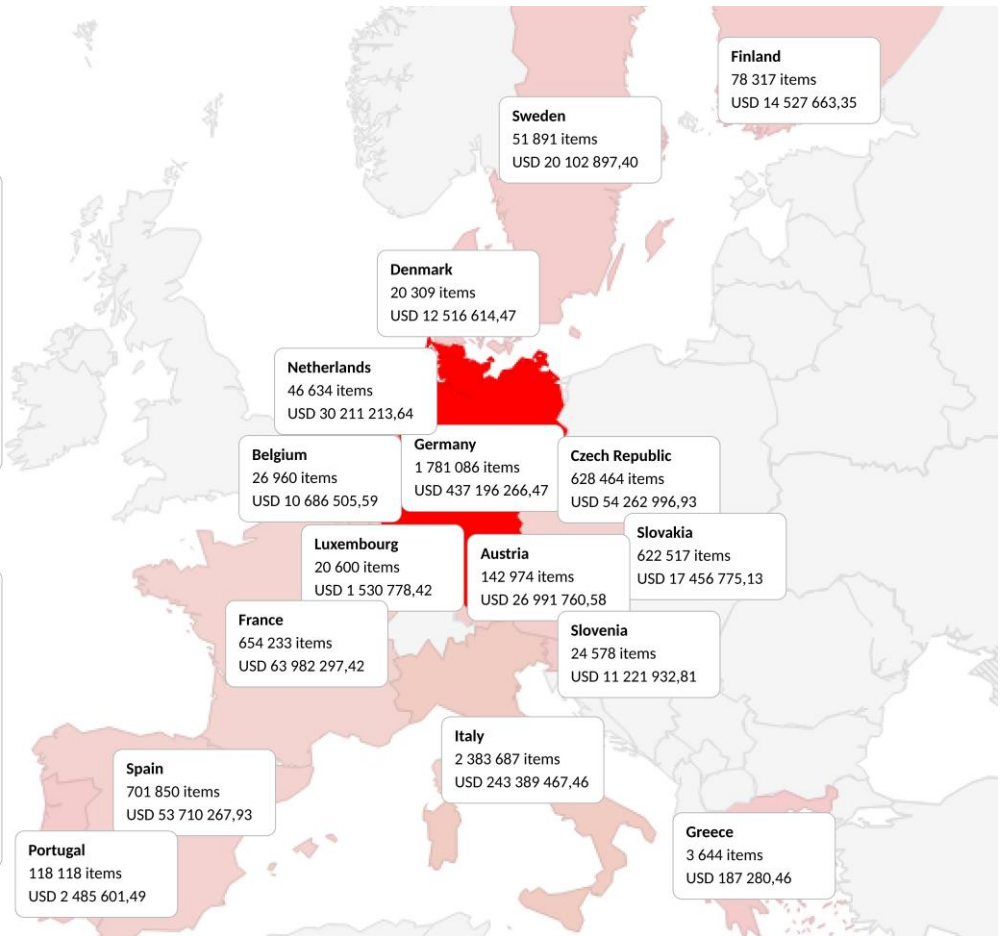


Top 7 origin countries by number of components for CNC machines

- Italy 32,6%
- Germany 24,4%
- Spain 9,6%
- France 9,0%
- Czech Republic 8,6%
- Slovakia 8,5%
- Austria 2,0%

Top 7 origin countries by value of components for CNC machines

- Germany 43,7%
- Italy 24,3%
- France 6,4%
- Czech Republic 5,4%
- Spain 5,4%
- Netherlands 3,0%
- Austria 2,7%





Annex 4: Subsidiaries of European brands whose components for CNC machines were supplied to the Russian Federation

<i>Name of the European company and country of registration</i>	<i>Name of the subsidiary and country of registration</i>	<i>Volume of products delivered in January 2023 - July 2024³²</i>	<i>HS code of the supplied products</i>	<i>Raw manufacturer/supplier</i>
EMAG (Germany)	EMAG (China) Machinery Co., Ltd (PRC)	USD 43 905,69	8466, 8483	Raw manufacturer
	EMAG Salach GmbH (Turkey)	USD 21 677,3	8466	Raw manufacturer
TRUMPF (Germany)	Jiangsu Jinfangyuan CNC Machine Co. Ltd. (PRC)	USD 8 068,26	8466	Raw manufacturer
Breton SpA (Italy)	Breton Beijing Trading Ltd (PRC)	USD 60 524,36	8466, 8482, 8483	Raw manufacturer/supplier
Siemens (Germany)	Siemens Ltd., China (PRC)	USD 84 472,1	8471, 8483, 8501, 8537, 8538	Raw manufacturer
	Siemens Numerical Control Ltd., Nanjing (PRC)	USD 71 616,68	8483, 8501	Raw manufacturer
	Siemens San. ve Tic. A.Ş. (Turkey)	USD 15 601,27	8537, 8538	Raw manufacturer
	Siemens Limited (India)	USD 2 548,86	8538	Raw manufacturer
	Siemens Malaysia Sdn Bhd (Malaysia)	USD 16 649,05	8537, 8538	Raw manufacturer
Guhring KG (Germany)	Guhring Takim San. Tic. Ltd.Şti. (Turkey)	USD 1 537,75	8466	Raw manufacturer
	Guhring India Pvt. Ltd. (India)	USD 266,73	8466,	Raw manufacturer
Eurotherm (Italy)	Eurotherm China (PRC)	USD 705,6	8537, 8538	Raw manufacturer
Danfoss (Denmark)	Danfoss Industries Pvt Ltd (India)	USD 83,86	8537	Raw manufacturer
Heidenhain (Germany)	Dr. Johannes Heidenhain (China) Co., Ltd (PRC)	USD 57 999,39	8471, 8537	Raw manufacturer
Schneider Electric (France)	Schneider Electric (PRC)	USD 460 429,85	8471, 8501, 8537, 8538	Raw manufacturer
	Schneider Electric India Pvt. Ltd. (India)	USD 186 846,87	8537, 8538	Raw manufacturer
	Schneider Electric Taiwan Co Ltd (Taiwan)	USD 14 558,54	8537, 8538	Raw manufacturer
Beckhoff Automation (Germany)	Beckhoff Automation (Shanghai) Co., Ltd. (PRC)	USD 1 293,05	8501, 8537, 8538	Raw manufacturer
B&R (Austria)	B&R Industrial Automation (China) Co., Ltd. (PRC)	USD 5 057,17	8537	Raw manufacturer
Sick AG (Germany)	SICK TAIWAN CO., LTD. (Taiwan)	USD 1 234,49	8501	Raw manufacturer
	SICK (Thailand) Co., Ltd. (Thailand)	USD 210,83	8537	Raw manufacturer
Bosch Rexroth (Germany)	Bosch Rexroth India Pvt Ltd (India)	USD 120,79	8482, 8483	Raw manufacturer
	Bosch Rexroth Ltda (Brazil)	USD 3 281,31	8483	Raw manufacturer
SEW Eurodrive (Germany)	SEW-Eurodrive (Suzhou) (PRC)	USD 587 295,22	8483, 8501	Raw manufacturer
	SEW- Eurodrive (Guangzhou) (PRC)	USD 125 635	8501	Raw manufacturer

³² The information on the amount of goods supplied in the trade data is incomplete.



	SEW- Eurodrive (Shenyang) (PRC)	USD 134,82	8501	Raw manufacturer
	SEW- Eurodrive (Wuhan) (PRC)	USD 1 172,38	8501,	Raw manufacturer
	SEW- Eurodrive (Tianjin) (PRC)	USD 278 988	8483, 8501	Raw manufacturer
	SEW- Eurodrive India Pvt.Ltd. (India)	USD 5 373,05	8501	Raw manufacturer
	Sew Eurodrive Hareket Sistemleri San. Tic. Ltd. Şti (Turkey)	USD 1 264,78	8501	Raw manufacturer
Schaeffler Group (Germany)	Schaeffler Holding (China) Co., Ltd. (PRC)	USD 245 615,73	8482, 8483	Raw manufacturer
	Schaeffler Hong Kong Co., Ltd. (Hong Kong)	USD 3 770,26	8482	Raw manufacturer
	Schaeffler Trading (Shanghai) Co., Ltd. (PRC)	USD 473 058,83	8482, 8483	Raw manufacturer
	Schaeffler (Nanjing) Co., Ltd (PRC)	USD 2 815,6	8482	Raw manufacturer
	Schaeffler (Ningxia) Co., Ltd. (PRC)	USD 6 595,85	8482	Raw manufacturer
	Schaeffler India Limited (India)	USD 76 061,56	8482, 8538	Raw manufacturer
	Schaeffler Taiwan Co., Ltd. (Taiwan)	USD 1 746,63	8482	Raw manufacturer
SKF (Sweden)	SKF (China) Sales Co Ltd (PRC)	USD 13 443,3	8482	Raw manufacturer
	SKF Turk San. Ve Tic. Ltd. Sti. (Turkey)	USD 19 967,68	8482, 8483	Raw manufacturer
	SKF India Limited (India)	USD 710 813,26	8482, 8483	Raw manufacturer
	SKF Malaysia Sdn. Bhd.	USD 9 032,43	8482, 8483	Raw manufacturer
	SKF Bearing Ind. (Malaysia) Sdn. Bhd.	USD 229,68	8482	Raw manufacturer
	SKF (Thailand) Ltd.	USD 8 792,6	8483	Raw manufacturer
Festo SE & Co. KG (Germany)	Festo (China) Ltd. (PRC)	USD 469 786,04	8466, 8483, 8501, 8537, 8538	Raw manufacturer
	Festo India Private Limited (India)	USD 203,11	8483	Raw manufacturer
Weidmüller (Germany)	Weidmüller Interface (Shanghai) Co. Ltd. (PRC)	USD 5 208,15	8538	Raw manufacturer
	Weidmüller Interface (Suzhou) Co. Ltd. (PRC)	USD 434,81	8538	Raw manufacturer
SCHUNK (Germany)	SCHUNK Intec Precision Machinery Trading (Shanghai) Co., Ltd. (PRC)	USD 1 546,71	8466	Raw manufacturer
	SCHUNK Intec India Private Limited	USD 782,33	8466	Raw manufacturer
Kessler (Germany)	Kessler (Shanghai) Spindle Service Co., Ltd. (PRC)	USD 64 766	8483	Raw manufacturer
WTO Werkzeug-Einrichtungen GmbH (Germany)	WTO Asia (PRC)	USD 168,08	8466	Raw manufacturer
Ceratizit S.A. (Luxembourg)	CB-Ceratizit (Xiamen) (PRC)	USD 41 015,15	8466	Raw manufacturer
Seco Tools AB (Sweden)	Seco Tools (Shanghai) Co., Ltd. (PRC)	USD 25 101,41	8466	Raw manufacturer
	Seco Tools India (P) Ltd	USD 11 548,5	8466	Raw manufacturer



Sandvik Coromant (Sweden)	Sandvik Mining and Construction (China) Co Ltd (PRC)	USD 127 872,83	8482, 8483	Raw manufacturer
	Sandvik Mining and Construction (Luoyang) Co Ltd	USD 7 831,28	8482, 8483	Raw manufacturer
Nanotec Electronic GmbH & Co. KG (Germany)	Nanotec Electronics (ChangZhou) Co., Ltd. (PRC)	USD 2 609,69	8501	Raw manufacturer
Knitter-switch (Germany)	Knitter-switch Asia Ltd. (PRC)	USD 235,77	8538	Raw manufacturer
Faulhaber Group (Germany)	Faulhaber Drive System Technology (Taicang) Co. Ltd. (PRC)	USD 190 628,55	8501	Raw manufacturer
	Faulhaber Asia Pacific Pte Ltd (Singapore)	USD 19 431	8501	Raw manufacturer
Baumüller Nürnberg GmbH (Germany)	Baumüller Automation (Suzhou) Co., Ltd. (PRC)	USD 67,36	8538	Raw manufacturer
STC-Steyr Wälzlager Deutschland GmbH (Germany)	STC Steyr Rulman Ve Danismanlik Tic Ltd (Turkey)	USD 2 074 839,98	8482, 8483	Supplier
Norelem Normelemente GmbH & Co. KG (Germany)	Norelem Trading (Taicang) Co., Ltd. (PRC)	USD 1 341,48	8483	Raw manufacturer
KSB SE & Co. KGaA (Germany)	KSB Shanghai Pump Co., Ltd. (PRC)	USD 244 367,44	8482, 8483	Raw manufacturer
Pilz GmbH & Co. KG (Germany)	Pilz Industrial Automation (Shanghai) Co., Ltd. (PRC)	USD 4 674,86	8471	Raw manufacturer



Annex 5: Russian import of consumables for CNC machines in the period from 01/01/2023 to 31/07/2024

Table 1. Top 10 countries of origin of consumables for CNC machines in supplies to the Russian Federation

Origin country	Volume of supplies	Percentage
PRC	USD 675 258 869,31	56,27%
South Korea	USD 130 219 147,47	10,85%
Germany	USD 94 655 804,50	7,89%
Turkey	USD 51 155 195,59	4,26%
Italy	USD 35 717 183,14	2,98%
Israel	USD 33 549 225,69	2,80%
Sweden	USD 31 406 094,20	2,62%
Taiwan	USD 25 192 308,40	2,10%
Japan	USD 22 037 786,04	1,84%
India	USD 18 953 129,71	1,58%
Total: USD 1 199 972 184,27		

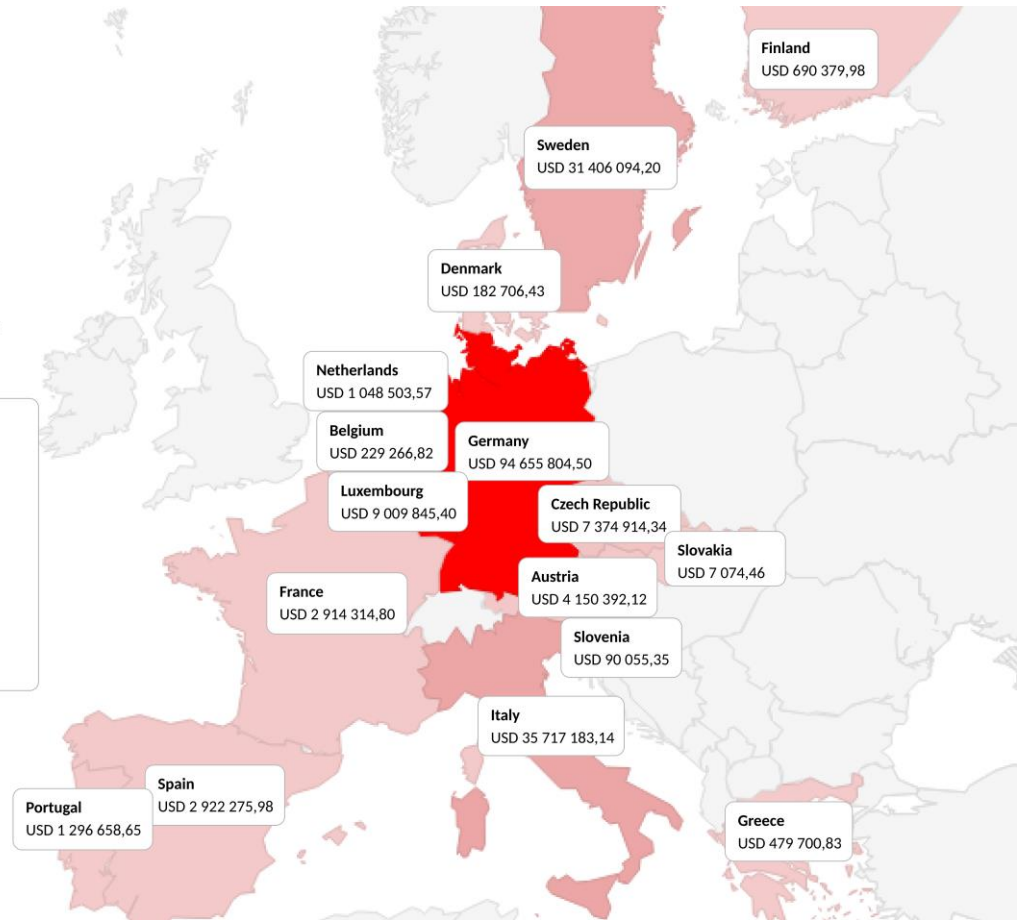
Image 1. Volumes of supplies of consumables for CNC machines manufactured in European countries in the period from 01/01/2023 to 31/07/2024³³

³³ The map shows the number of components supplied and their total value, including as a percentage of total imports of components manufactured in European countries.



Top 7 countries by value of consumables for CNC machines

- Germany 49,3%
- Italy 18,6%
- Sweden 16,3%
- Luxembourg 4,7%
- Czech Republic 3,8%
- Austria 2,2%
- Spain 1,5%





Annex 6: Subsidiaries of European brands whose consumables for CNC machines were supplied to the Russian Federation

<i>Name of the European company and country of registration</i>	<i>Name of the subsidiary and country of registration</i>	<i>Volume of products delivered in January 2023 - July 2024³⁴</i>	<i>HS code of the supplied products</i>	<i>Raw manufacturer/supplier</i>
Breton SpA (Italy)	Breton Beijing Trading Ltd (PRC)	USD 166,39	8207	Raw manufacturer/supplier
Gühring KG (Germany)	Guhring (Changzhou) Cutting Tools Co., Ltd. (PRC)	USD 203 062,68	8207	Raw manufacturer
	Guhring India Pvt. Ltd.	USD 25 451,83	8207, 8209	Raw manufacturer
Festo SE & Co. KG (Germany)	Festo (China) Ltd. (PRC)	USD 7,59	8207	Raw manufacturer
EMUGE-FRANKEN (Germany)	EMUGE-FRANKEN Precision Tools (Suzhou) Co., Ltd. (PRC)	USD 576,81	8209	Raw manufacturer
Ceratizit S.A. (Luxembourg)	CB-Ceratizit (Xiamen) (PRC)	USD 1 694 102,6	8207, 8209	Raw manufacturer
	CB-Ceratizit Cutting Tools (Suzhou) (PRC)	USD 416,63	8207	Raw manufacturer
	Ceratizit India Pvt. Ltd.	USD 174,12	8207	Raw manufacturer
Seco Tools AB (Sweden)	Seco Tools (Shanghai) Co., Ltd. (PRC)	USD 277 262,04	8207, 8209	Raw manufacturer
	Seco Tools India (P) Ltd	USD 100 802,41	8207, 8209	Raw manufacturer
Sandvik Coromant (Sweden)	Sandvik Coromant Cutting Tools (Shanghai) Co., Ltd (PRC)	USD 70 189,31	8207, 8209	Raw manufacturer
	Sandvik Tooling Production (Langfang) Co. Ltd (PRC)	USD 288 200,66	8207, 8209	Raw manufacturer
Horn (Germany)	Horn (Shanghai) Trading Co. Ltd (PRC)	USD 1 739,52	8207	Raw manufacturer

³⁴ The information on the amount of goods supplied in the trade data is incomplete.