EU TRADE EXPLORER

Market evolution: Moulds for metals and plastics (CN 8480) — 2015–2025

Introduction

Moulds and moulding boxes (heading 8480) are a capital-good category that reflects the health of manufacturing industries from automotive to glass-making. Over the decade 2015–2025, EU trade in these products has undergone a profound transformation: the bloc has moved from a comfortable surplus to a significant deficit, import sources have become highly concentrated, and a series of price shocks have rewritten several bilateral relationships. This report describes and interprets these dynamics using the full set of trade indicators.

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1. From surplus to deficit: the EU's growing import dependency

The EU sells less tonnage but at higher unit prices, while imports surge in both volume and value

Total extra-EU exports of CN 8480 grew moderately in value, from €2.08 billion in 2015 to €2.21 billion in 2025 (+6.4 %), while the exported quantity fell by almost a fifth (–19.4 %). Imports, on the other hand, jumped from €1.75 billion to €2.56 billion (+46.0 %) and import tonnage increased even faster (+47.5 %). The gap between export and import unit values widened sharply: the average export price rose from €22 805/t to €30 111/t (+32.0 %), whereas the import unit price barely moved, moving from €18 935/t to €18 738/t (–1.0 %).
Trade overview dashboard

A yawning price gap opens up between EU exports and imports

In 2015 the value of one tonne of exported moulds was only 20 % higher than a tonne of imports; by 2025 it was 61 % higher. This divergence suggests that EU exporters are specialising in high-value, often complex injection and compression moulds for plastics and metals, while the bloc increasingly sources simpler, volume-driven products from lower-cost suppliers abroad. The product-segment breakdown confirms that injection/compression moulds for rubber or plastics (848071) dominate both flows, but the EU's export unit price for this segment climbed from €41 284/t to €49 264/t, far above the stable import price of around €22 600-24 000/t.

Product segment comparison

The trade balance flips, exposing net reliance on foreign moulds

The EU's trade surplus of €323 million in 2015 turned into a deficit of –€349 million in 2025, a swing of over €670 million. The balance worsened in every year from 2019 onward, reaching its lowest point in 2025. This shift is structural: even with premium-priced exports, the sheer volume of imports (now 1.86 times the exported weight) overwhelms the higher unit export revenue.

Trade overview dashboard

Indicator	2015 value	2025 value	Change
Exports (value, €m)	2 076.8	2 209.7	+6.4 %
Imports (value, €m)	1 753.3	2 559.3	+46.0 %
Trade balance (€m)	+323.4	–349.3	–208.0 %
Exports (kg, t)	91 066	73 388	–19.4 %
Imports (kg, t)	92 594	136 576	+47.5 %
Export unit price (€/t)	22 805	30 111	+32.0 %
Import unit price (€/t)	18 935	18 738	–1.0 %

2. China becomes the indispensable supplier while export markets realign

China's share of EU imports rises to over 60 %, dramatically increasing supplier concentration

Imports from China nearly doubled, growing from €835 million to €1 588 million (+90.1 %). China's weight in extra-EU imports rose from 47.6 % in 2015 to 62.0 % in 2025. This single supplier now accounts for almost two-thirds of all external mould purchases, pushing the import-side Herfindahl–Hirschman Index (HHI) from 2 673 to 4 063 (+52 %). Meanwhile, other Asian sources show diverse trends: South Korea's shipments fell by 19.1 % (from €191 million to €154 million), India's tripled but remains modest, and Turkey's rose by 41 %.

Top import partners | Concentration indicators

Traditional European export partners lose ground, while the US and Morocco surge

EU export markets experienced a dramatic realignment. Shipments to Russia collapsed from €163 million in 2015 to €26 million in 2024 (and effectively zero in 2025), a drop of 84 %, following sanctions and trade restrictions. In contrast, exports to the United States rose by 58 % (€341 million → €539 million), cementing it as the top destination. A remarkable new outlet is Morocco, where exports jumped 349 %, from €17 million to €78 million, likely linked to automotive investment. The United Kingdom recovered to €200 million after a post-Brexit dip, while Switzerland remained a stable high-value market.

Top export partners

Germany remains the bloc’s export engine, but Italy and France lose momentum

On the export side, intra-EU reporters show a mixed picture. Germany increased its extra-EU mould exports by 18 % to €773 million, consolidating its position as the leading exporter (20.8 % of all EU exports of this product). Italy, the second exporter, saw a decline of 11.4 % to €363 million, and France dropped 11.6 % to €137 million. Among the more specialised economies, Portugal’s exports held steady around €125 million, while Luxembourg and Spain posted moderate gains. The export HHI among reporting member states rose from 772 to 1 016 (+31.6 %), indicating a slight move towards concentration away from the once-dominant trio of Germany-Italy-France.

Top reporters

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3. Price shocks and heightened volatility disrupt trading relationships

A series of price shocks hit key trade flows – from Korean imports to Russian and Brazilian exports

The algorithm identified several statistically significant price shocks. On the import side, South Korea experienced a price drop of –11.5 % in 2019-2020 (abnormality score 89.5), while volumes subsequently collapsed, suggesting a sudden supply adjustment. On the export side, EU moulds shipped to Brazil saw a massive unit-price spike of +129.7 % in 2023, accompanied by a halving of volumes, pointing to a shift towards very high-end products or very small batches. Exports to Switzerland recorded a price jump of +28.5 % in 2023, and prices remained elevated thereafter. China’s EU-bound exports did not register a price shock, but EU exports *to* China saw a price surge of +47.1 % in 2022, again with a sharp volume contraction. The most disruptive event was the virtual disappearance of exports to Russia after 2022, where both volume and price volatility were extreme.

Price shock events

Shock event	Flow	Period	Price shift	Volume change context
Korea (import)	Imports	2019-2020	–11.5 %	Volume down 33 % in subsequent years
Brazil (export)	Exports	2023	+129.7 %	Volume fell to ~1 300 t
Switzerland (export)	Exports	2023	+28.5 %	Volume slightly lower
China (export)	Exports	2022	+47.1 %	Volume more than halved
Russia (export)	Exports	2023	+56.3 %	Volume collapsed to near zero
Serbia (export)	Exports	2020	+39.5 %	Volume recovered later

High volatility characterises several smaller but strategic supply sources

Beyond the headline shocks, the coefficient of variation (CV) for import quantities reveals strong volatility for several non-Chinese partners. The United Kingdom (CV=0.45), India (0.40), Japan (0.42), Taiwan (0.46), and Hong Kong (0.42) exhibit highly erratic import flows, reflecting their niche or intermediary roles. On the export side, Morocco (CV=0.31), Brazil (0.37), Saudi Arabia (0.37), and China (0.34) display above-average volatility, often linked to project-based demand or geopolitical shifts. In contrast, the largest flows – imports from China (CV=0.19) and Switzerland (0.07), and exports to the United States (0.14) and Switzerland (0.08) – remain relatively stable in volume terms, providing a predictable backbone for the EU's trade.

Volatility dashboard

The EU's high-value export segments prove resilient, but their stability is tested

The product-level data confirm that the EU's comparative advantage lies in higher-value categories. Injection/compression moulds for rubber or plastics (848071) represent about 65 % of export value, and their unit price reached €49 264/t in 2025, compared to only €22 628/t for the same products imported. Moulds for glass (848050) and moulds for metal/metal carbides (848041) also command handsome export prices, while the EU imports large quantities of cheaper moulds for mineral materials (848060) at around €5 656/t. Despite the overall deficit, these high-end segments have kept export revenue growing, even as volumes contracted in the post-pandemic period. However, the widening price gap and the concentration of import supply in China create a dual dependency: the EU competes at the top but remains reliant on a single supplier for the bulk of its mould imports.

Product segment breakdown

Conclusion

Between 2015 and 2025, EU trade in moulds (CN 8480) transitioned from a €323 million surplus to a €349 million deficit, driven by an enormous increase in imports from China, which now supplies 62 % of the bloc's external mould needs. EU exporters have successfully moved up the value ladder, obtaining 32 % higher unit prices and expanding sales to the US and Morocco while coping with the collapse of the Russian market. However, the resulting trade structure is highly asymmetric: imports are stable in price but highly concentrated, while exports are high-value but exposed to volatile, project-driven demand and occasional price shocks. The data underscore the strategic importance of moulds for EU manufacturing and the challenges of balancing competitiveness with supply-chain resilience.

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If you need advice on European trade policy, or representation for your interests in Brussels, feel free to contact me at support@tradedashboard.eu. You can find my CV at this address.