nota informativa

Industrial production index

Updating of the calculation (weighting) base

- The monthly industrial production index is calculated using the chaining method introduced with the publication of the indices relating to the month of January 2022. From January 2026, the calculation weights are set at year 2025, while the reference base, in line with the other economic indicators, remains the year 2021.The methodological aspects and the main effects produced by the rebasing on the evolution of the indices are illustrated in this note.
- The innovations introduced, in continuity with the 2024 weighting base, concern the sources used, with an increase in the sectors for which the turnover volume indices are used, the updating of the sample of companies, the revision of the weighting system, the updating of the basket of goods.
- The indices are calculated according to the Laspeyres formula using a weight structure updated annually. The indices, elaborated with reference to the previous year, are subsequently brought back to the reference base.
- A comparison of the weighting structures of the 2024 and 2025 calculation bases reveals some changes in the weights for the various groupings: the share of capital goods increased (+1.6 percentage points) and that of consumer goods (+0,9 percentage points), driven by the non-durable component. Intermediate goods, while remaining the most important grouping, recorded a decline of 1.5 percentage points, followed by energy (-1.0 percentage point). Among the sectors, despite the decline compared to the previous base, the predominant importance of the metallurgy and fabrication of metal products industry (15.3%) and the manufacture of machinery and equipment not classified elsewhere (12.9%) remains confirmed.
- With the adoption of the 2025 weighting base, the product basket was also revised. 195 products were eliminated, 116 of which were due to the integration of survey data with that from the industrial turnover survey. At the same time, 26 new products were introduced, some having become significant over time, others resulting from modifications to existing products. With the transition to the 2025 calculation base, the previous basket of 584 product macro-items was reduced to 532 items. Of the 74 macroproducts removed from the basket, 11 of the 22 new ones correspond to the economic activity groups identified by the turnover survey.
- For the 2025 base, the companies involved in the survey are just over 4,600, while the responding units are instead 4,900 and communicate data relating to over 7,800 monthly production flows.
- The industrial production indices starting from 1990 and up to the economic activity class level with a reference base of 2021=100 are published on the IstatData website at https://esploradati.istat.it. Previous year based data are available upon request.

CHART 1. INDUSTRIAL PRODUCTION INDEX. January 2025-december 2025, percentage changes on the same month of the previous year, data adjusted for calendar effects.

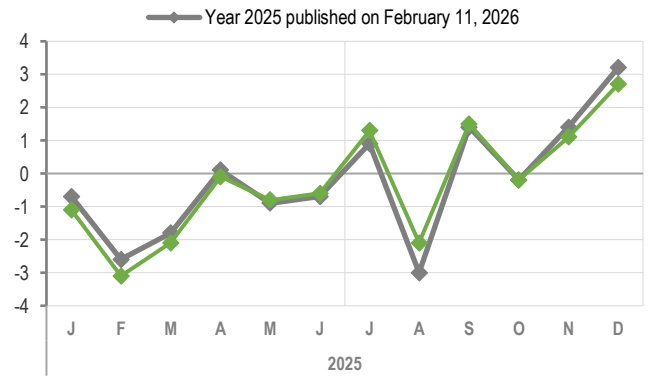

TABLE 1. INDUSTRIAL PRODUCTION INDEX. Comparison between the weighting structure of 2024 and 2025.

MAIN INDUSTRIAL GROUPINGS	2024	2025
Consumer goods	24.4123	25.2875
Consumer durable goods	4.0157	3.9054
Consumer non-durable goods	20.3966	21.3821
Capital goods	28.2451	29.8007
Intermediate goods	35.0074	33.5535
Energy	12.3353	11.3583
Total	100.0000	100.0000

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Industrial production index

The industrial production index measures the change of the volume of goods produced over time by industry (excluding construction).

The aim is to provide an estimate a high frequency indicator that is promptly available, of the evolution over time of the economic output in the industrial sector, measured in gross production terms.

Gross production is estimated through the *proxy* variable approach, the proxies used allow to represent the target variable accurately as they are easily measureable on a monthly basis by enterprises. This helps to reduce the statistical burden on businesses. The *proxies* used to catch the evolution of production are: the physical quantities of each individual output (different production processes use different units of measurement), the deflated output value and the hours worked (corrected using a labour productivity indicator).

For the indices of the year 2026, the calculation base is set at the year 2025 while the reference base in line with other short-term indicators, remains at 2021.

The innovations introduced are recommended by main methodological manuals and by Eurostat[1]. In detail, they concern the introduction of the new weighting system, the renewal of the sample of companies used in the survey, the updating of the basket of goods.

Enterprises provide detailed monthly information regarding the production of specific products, belonging to a reference basket chosen to be representative of the entire production activities present in Italian industry. The collected data, appropriately aggregated, give rise to index numbers for individual product items. The elementary indices are then summarized by economic activity, according to the Laspeyres formula, using a weighting structure that reflects the sectoral distribution of industrial value added (it refers to 2023, the latest version available). Elementary indexes are then linked to calculate the index with reference year 2021=100; more specifically, for each level of aggregation, the first link of the series is represented by the average of the indices for the year 2021 based on 2021, while for subsequent years, it is the product of 2021 and the annual averages of the indices based on the calculation basis for each year after 2021 up to the year preceding the current one.

From a quality perspective, the chain-linking approach is expected to provide more accurate estimates. In particular:

- more frequent update of the weighting structure will limit the loss of representativeness of the base and the timeliness of the weights reflecting the industrial production structure;
- updating the sample of enterprises allows monitoring enterprises' births and deaths more effectively, enabling a more frequent sample rotation too;
- annual update of basket of goods will allow to quickly detect new relevant products and remove obsolete items.

Besides these advantages, chain-linking have drawbacks both for the user and for the producer of statistics. For users, disadvantage of chain-linked estimates is non-additivity that causes greater complexity to analyse aggregates that are not in the dissemination plan; for producers, the adoption of chain-linking requires a considerable additional commitment to monitor the sample of enterprises and the basket of goods.

The calculation method based upon chain-linking

The European regulation on short-term statistics recommends the adoption of chain-linking method whenever the economic structure is rapidly developing. For those sectors where relative prices do not change significantly, the chain-linking method is still recommended to improve the quality of the indicator, overcoming typical limitations of a fixed-based index.

[1] Recommendations for the Index of Industrial Production 2010 (IRIIP 2010), Department of Economic and Social Affairs, International United Nations New York, 2013 - https://unstats.un.org/unsd/industry/docs/f107_edited.pdf.
Final Report Task Force Chain-Linking in STS- Doc Eurostat/G3 STS TF Chain-Linking SEP 2012 EN- https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Short-term_business_statistics_and_(annual)_chain_linking

Chain-linking allows for a better representation of economic evolution, as it uses more up-to-date information on the weighting system, on the basket of goods and on enterprises. It also reduces the problem of revisions related to the five-yearly rebasing.

In order to achieve comparability of data across countries EU strongly advises countries willing to implement the annual update of weights in STS in combination with chain-linking to follow several recommendations regarding these common target methodologies.

With regard to the weighting structure, an annual update is recommended, while for the chain-linking of STS volume indices the recommended common target methodology is the annual *overlap technique* that implies compiling estimates for each reference period at the weighted annual average of the previous year, with subsequent linking through annual linking factors to scale the monthly data upward to the base year[2].

The indices of industrial production are constructed and disseminated at different levels of Ateco classification; both fixed-base indices and indices with previous year base periods are obtained starting from elementary indices.

The calculation of the chain-linking indices for different economic aggregates is performed at different processing levels.

At the first level, the elementary indices are calculated with reference to the link period, i.e. the ratios between current production flows in the month *i* and year *t* and the respective monthly bases of the year *t-1* (average flows of the previous year). In this phase of the calculation procedure, values are appropriately deflated using current prices, while coefficients are applied to data expressed in hours worked, which measure the evolution of productivity in the link period[3].

The second level of processing concerns a higher level of aggregation: these indices are weighted averages (concatenated Laspeyres-type formula) which are obtained, for all aggregates, starting from elementary indices. The weighting structure is derived from a nested classification, where the sum of the weights of each aggregation level is equal to the weight of the overall index. Indices calculated at different aggregation level are subsequently brought back to the reference base using the respective rescaling coefficients.

Innovations on the sources used for survey

Starting with the introduction of the 2023 calculation base, for some economic sectors, data from the monthly survey on industrial turnover are used, appropriately deflated by industrial producer prices (volume indices). This innovation aims to reduce the statistical burden on businesses by exploiting synergies between surveys, without reducing the informational capacity of the survey.

From a sectoral disaggregation perspective, turnover indices are available up to the ATECO groups (3 digits), while production indices are available up to the ATECO classes (4 digits).

For the integration of data from the two surveys, the focus is primarily on the ATECO classes that coincide with the ATECO groups[4], as this option ensures users have access to the current information detail. In other words, for the ATECO classes that coincide with the ATECO groups, the source substitution does not result in the economic class indices being removed from the dissemination.

With the 2025 calculation base, the source change has been extended to an additional 11 economic sectors. Overall, starting with the 2023 calculation base, this solution has been adopted for 31 ATECO classes corresponding to the relevant ATECO groups and for 10 classes for which this coincidence does not occur.

The selection of the sectors was carried out based on several criteria:

- comparison of the temporal dynamics of the index series;
- representativeness of the company panels;

[2] Chain-linking can be performed using either the short formula (average of the previous year's chained index) or the formula with link factors (averages of indices related to the link period) up to the latest base year.

[3] Compared to the fixed base, where the productivity coefficients are related to the base year, in chain-linking productivity is related to the previous year.

[4] ATECO classes that coincide with ATECO groups are those whose four-digit code ends in zero, and for which the economic activity covered by the class essentially corresponds exactly to that of the economic group. For example, the economic activity of class 1310 and group 131 both correspond to the Preparation and spinning of textile fibers: thus resulting in the production index for class 1310 being equal to the index for group 131. On the other hand, economic group 109 (Production of animal feed products), which is broken down into two classes: 1091 (Production of feed for livestock) and 1092 (Production of pet food products), is an example of an activity that does not exactly correspond. In this case, replacing the source with turnover indices means that the indices for classes 1091 and 1092 will no longer be processed, while only the production index for group 109 will be disseminated.

- ability/difficulty to follow products subject to frequent changes[5];
- units of measurement used for the survey;
- typology of the responding subjects.

From a methodological perspective, the possibility of integrating production data with turnover data is attributed to the operational flexibility associated with the use — for industrial production — of the rolling basis index calculation method. However, the operation requires the use of certain measures aimed at making the two different index calculation structures complementary, namely the rolling basis and the fixed basis. Specifically, turnover indicators are considered in relation to the average of the previous year, thus making the two information structures consistent in terms of the type of variation detected.

With the 2025 base, the impact of the classes and groups for which the source integration was implemented represents 16% of the overall weight (in terms of value added) of the economic sectors covered by the monthly survey of industrial production.

Table 2 lists the sectors affected by the change starting from the 2025 base.

TABLE 2. NEW SECTORS DETECTED WITH THE TURNOVER SURVEY DATA. Calculation base 2025

DESCRIPTION	Classes	Groups	Division	Sub section
Grain processing, starch and starch products		106	10	CA
Manufacture of animal feed products		109	10	CA
Weaving	1320	132	13	CB
Manufacture of footwear	1520	152	15	CB
Manufacture of other porcelain and ceramic products		234	23	CG
Manufacture of abrasive products and non-metallic mineral products n.e.c.		239	23	CG
Manufacture of tanks, reservoirs, radiators, and containers of metal		252	25	CH
Manufacture of other electrical equipment	2790	279	27	CJ
Manufacture of bodies for motor vehicles, trailers, and semi-trailers	2920	292	29	CL
Manufacture of transport equipment n.e.c.		309	30	CL
Manufacturing industries n.e.c.		329	32	CM

The basket of goods

In keeping with the past, for the 2025, the use of turnover data also affects the size of the product basket and the panel of companies included in the survey.

Starting with the 2025 baseline, the industrial production survey involves a panel of companies that provide monthly information on 782 products (including 99 car models, calculated using both weight and power parameters).

The products are grouped into homogeneous sets to form a basket of product items (macroproducts). For these, elementary indices are calculated, which are then aggregated by classes, groups, divisions, subsections, Ateco sections, and main industrial groupings (RPI), resulting in the overall index.

The list of surveyed products may be updated annually based on the results of the Annual Industrial Production Survey (ProdCom). The goal is to ensure that the most representative products are surveyed for each class of economic activity.

The renewal of the base, as is well known, represents an opportunity to update the basket of products observed, taking into account changes in their weight and simultaneously reducing the response burden on businesses. The assessments also include the opportunity to continue collecting product classes whose weight in terms of added value is not significant, or products under observation that over time have not reached the values required for inclusion in the index calculation.

[5] These assessments refer to a different ability of the two surveys to intercept these dynamics. If on the one hand IPI respondents present greater difficulty in promptly reporting new products, the turnover data could overcome this criticality by being more connected to the accounting concepts of the business.

With the adoption of the 2025 calculation base, 195 products were eliminated, 116 of which were due to the expansion of the sectors for which the turnover-deflated indices are used, others due to the exclusion of some Ateco classes from the survey, and others due to the aggregation of existing products[6]. At the same time, 26 new products were introduced, the majority because they became significant, and in the remaining cases, as mentioned, due to the merger of previously more detailed products (see Annexes 1, 2, and 3). With the 2025 calculation base, the previous basket of 584 macro-product items has been reduced to 532 items. Of the 74 macro-products removed from the basket, 11 of the 22 new ones correspond to the economic activity groups identified by the turnover survey.

With the update of the weighting structure, the incidence of the proxies used to measure the trend in industry output has also undergone changes compared to the previous basis (Table 3).

Using deflated turnover data, the share – expressed in terms of their relative weight on the general index – of products measured by value increases, detracting from the other two measures. The share of products measured by quantity remains predominant, although declining compared to the previous baseline (from 69.8% to 65.0%), followed by products measured by production value (24.0%), whose share has increased by over 14 percentage points compared to the 2021 baseline. The share of products measured by hours worked (11.0%) is declining compared to the 2021 baseline, but stable compared to last year.

TABLE 3. PROXIES USED TO MEASURE PRODUCTS. Weight structure from 2021 to 2025.

PROXY	Base 2021	Base 2023 (provisional)	Base 2023 (revised)	Base 2024 (provisional)	Base 2024 (revised)	Base 2025 (provisional)
Physical quantities (a)	76.6	72.7	73.6	70.5	69.8	65.0
Hours worked	13.6	12.2	12.0	10.6	11.0	11.0
Value of production	9.8	15.1	14.4	18.9	19.2	24.0
TOTALE	100.0	100.0	100.0	100.0	100.0	100.0

(a) These include: kilograms, quintals, tons, kilowatts, liters, hectoliters, hecto-pounds, pairs, pieces, meters, square meters, and cubic meters.

The sample of enterprises

Net of the companies excluded from the survey following the integration of the source with turnover volume indices, the definition of the panel of companies included in the 2025 base is based on the analysis of the results from the annual ProdCom survey (in this case, Prodcom 2024).

The panel is updated to reconcile two objectives:

- maximize coverage, in terms of production share, for each of the product groups considered;
- reduce the response burden on companies.

Responding units are primarily selected from those with at least 20 employees. To reduce the statistical burden, we try to limit the presence of small units in economic sectors where their presence is prevalent (such as the dairy industries).

With the new base, firms excluded[7] from the survey exceed new entries. In this case, the production associated with the various firms monitored in the survey for at least one year *in the observation state*[8] is transferred to *the index state*, as it is deemed representative of the products included in the basket of goods defined for the new baseline.

In summary, for the 2025 base, the companies contributing to the calculation of the monthly industrial production index are 4,639, the responding units[9] are 4,906, for a total of 7,827 monthly production flows.

[6] Other 23 products under observation have also been discontinued.

[7] The reasons for the exclusion, as already mentioned, are attributable to the substitution of the source, the low significance of the company in the product classes observed, as well as the small size of the employment.

[8] This method does not concern totalitarian sectors, that is, those in which the entire production of the universe's companies is recorded and not just a fraction of it considered significant.

[9] A company may have one or more respondent units, which correspond to different production sites, factories, registered offices, which could be distinct from the places where production takes place and in several separate physical locations.

TABLE 4. THE SAMPLE. Comparison between link period 2024 and 2025.

UNITS	AMOUNT		FLOWS BETWEEN LINK PERIOD		
	2024	2025	Outgoing from period 2024	Incoming from period 2024	Entering link period 2025
Enterprises	5,203	4,639	820	4,383	256
Respondent units[a]	5,507	4,906	834	4,673	233
Productions [b]	9,234	7,827	1,858	7,376	451

(a) They correspond to the detection units (each company can have multiple responding units). It also includes the 41 responding units from turnover survey.

(b) Monthly flows provided for each single production (products by respondent units).It also includes the 41productions units from turnover survey.

The comparison between the last two calculation bases highlights business turnover. The balance, as mentioned, is negative both among incoming and outgoing businesses (256 versus 820), among responding units (233 versus 834), and for the number of productions recorded monthly (451 versus 1,858).

The new sectors recorded through the turnover indices account for 68% and 79% of the responding units and outgoing productions, respectively.

Table 5 presents flows by sector of economic activity. The impact of source substitution is clearly visible in CB - Textiles, clothing, leather, and accessories; CL - Manufacture of transport equipment; and CA - Food, beverage, and tobacco. CE - Manufacture of chemical products reflects the exclusion of some classes from the survey, while CH - Metallurgy and fabrication of metal products (excluding machinery and equipment) has seen a reduction in production due to the aggregation of some products. In no sector do inflows exceed outflows.

TABLE 5. THE PANEL. Comparison between link period 2024 and 2025 by economic sector.

ECONOMIC ACTIVITY		PRODUCTIONS [a]				
		Amount		Flows between different link periods		
		2024	2025	Outgoing from period 2024	Incoming from period 2024	Entering link period 2025
B	**Mining and quarrying**	**10**	**10**	**0**	**10**	**0**
C	**Manufacturing**	**9,222**	**7,815**	**1,858**	**7,364**	**451**
CA	Manufacture of food products, beverages and tobacco products	1,469	1,171	333	1,136	35
CB	Manufacture of textiles, apparel, leather and related products	1,134	672	524	610	62
CC	Manufacture of wood and paper products, and printing	606	554	84	522	32
CD	Manufacture of coke, and refined petroleum products	323	323	0	323	0
CE	Manufacture of chemicals and chemical products	778	681	115	663	18
CF	Manufacture of pharmaceuticals, medicinal chemical and botanical products	2	2	0	2	0
CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	840	783	88	752	31
CH	Manufacture of basic metals and fabricated metal products (except machinery and equipment)	1,357	1,246	209	1,148	98
CI	Manufacture of computer, electronic and optical products, electro-medical equipment, measuring equipment and watches	109	102	13	96	6
CJ	Manufacture of electrical equipment and non-electric domestic appliances	351	300	74	277	23
CK	Manufacture of machinery and equipment n.e.c.	1,181	1,154	99	1,082	72
CL	Manufacture of transport equipment	578	403	222	356	47
CM	Other manufacturing, and repair and installation of machinery and equipment	494	424	97	397	27
D	**Electricity, gas, steam and air-conditioning supply**	**2**	**2**	**0**	**2**	**0**
Total		**9.234**	**7,827**	**1,858**	**7,376**	**451**

(a) Monthly flows provided for each single production (products by respondent units)

In the numbers considered, sources different than enterprises are also included. In particular, the production survey makes use of other information such as:

- data from the monthly survey on livestock slaughtered for red and white meat conducted by Istat at authorized slaughterhouses;
- information from the Ministry of the Environment and Energy Security (MASE) for gas distribution;
- the values on electricity production that are provided by Terna, operator of the electricity transmission networks.

The weighting structure

The weighting system of industrial production indices is determined using different sources.

Weights of all aggregates, from economic activity classes (4-digit Ateco 2007) up to the total industry are calculated on the basis of the gross value added of factor costs measured by the SBS Frame statistical register and by the structural economic surveys that contributes to the ‘‘Enterprises economic indicators”. For the definition of the weighting structure of the 2025 base, the most recent data available relate to the year 2023.

The source for calculating weighting coefficients for aggregating quantities of products to elementary indices is annual ProdCom survey on industrial production, currently referring to year 2024. Products selected for the link period 2025 were recoded[10] according to the ProdCom list corresponding to the Nace Rev.2 classification and relative weights are derived from the total production value (net of any reuse). Attribution of weights for each level of aggregation is based on the assumption that, at each level, the products and the economic activities surveyed are representative of those not involved in the survey, so that the total weight of the higher level is distributed among products.

The use of annual chain-linking implies the annual update of weights, therefore the latest releases of ProdCom and SBS Frame will be used for this purpose. The timeliness of the release of SBS causes a misalignment when compared to the industrial production index, consequently to guarantee the best representativity of the weighting structure, weights are also updated for the previous year. Based on the current schedule of data release, the weights will be updated as follows:

- for the provisional/revised indices of year *t*, ProdCom referring to year *t-2* and SBS Frame referring to year *t-3* will be used;
- for the annual revised indices of year *t*, ProdCom *t-1* and SBS Frame at *t-2* will be used.

The weights update requires that for each *“year index”* two weighting structures will be calculated on two different ProdCom/SBS Frame datasets, one for the provisional and revised indices and one for the annually revised indices.

Together with the dissemination of the indices based on the 2025 calculation, the new weights are made available.

Table 6, relating to the large aggregates corresponding to the Main Industrial Groupings (MPI), presents a comparison between the weighting structures for the 2023, 2024 and 2025 calculation bases. For the 2023 and 2024 bases, the weighting structure is also proposed in both the provisional and updated versions. Starting from the final version of the 2024 base weights, a decline in the incidence of intermediate goods (-1.5 percentage points) and, to a lesser extent, energy (-1.0 percentage point) emerges, while the relevance of capital goods (+1.6 percentage points) and consumer goods (+1.0 percentage point) increases, determined by the positive trend in the weight of non-durable goods.

TABLE 6. INDUSTRIAL PRODUCTION INDEX. Comparison between the weighting structures of base 2023, 2024 e 2025 by main industrial groupings

MAIN INDUSTRIAL GROUPINGS	2023 (provisional)	2023 (revised)	2024 (provisional)	2024 (revised)	2025 (provisional)
Consumer goods	24.8350	24.3658	24.4123	25.3129	25.2875
Durable	4.0910	3.9690	4.0157	3.9312	3.9054
Non-durable	20.7439	20.3968	20.3966	21.3817	21.3821
Capital goods	28.6116	28.2751	28.2451	29.7746	29.8007
Intermediate goods	34.4035	35.0216	35.0074	33.5532	33.5535
Energy	12.1500	12.3376	12.3353	11.3593	11.3583
Total	**100.0000**	**100.0000**	**100.0000**	**100.0000**	**100.0000**

[10] A correspondence table is defined annually, which links each single product detected by the monthly survey to one or more codes of the ProdCom list.

Comparing the weighting structure of the two bases at economic activity level appears useful to catch all changes occurred (Table 7).

At the macro-sector level, a slight decrease in the weight of Section C - Manufacturing (-0.4 percentage points) was observed, in favour of both Section B - Mining and quarrying (+0.3 percentage points) and Section D - Electricity, gas, steam, and air conditioning supply (+0.1 percentage points)[11].

Within the manufacturing sector, despite decreases in CD - Manufacture of coke and refined petroleum products (-1.4 percentage points) and CH - Metallurgy and fabrication of fabricated metal products (excluding machinery and equipment) (-1.1 percentage points), it is observed an increase in the weight of CA - Manufacture of food, beverages, and tobacco (+1.0 percentage point) and CL - Manufacture of transport equipment (+0.7 percentage points), followed by CK - Manufacture of machinery and equipment n.e.c. (+0.4 percentage points). CC - Wood, paper, and printing industries also declined slightly. The remaining sectors remained stable.

However, the order of the sectors with the greatest importance in the industrial production index remains unchanged, such as the metallurgy and metal products manufacturing industry (whose share in base 25 is equal to 25.3%)and the manufacturing of machinery and equipment not classified elsewhere (incidence of 12.9% in base 25).

TABLE 7. INDUSTRIAL PRODUCTION INDEX. Comparison between the weighting structure of link period 2024 and 2023.

ECONOMIC ACTIVITY		Link period 2024 (provisional)	Link period 2024 (revised)	Link period 2025 (provisional)
B	**Mining and quarrying**	**0.6026**	**0.8826**	**0,8826**
C	**Manufacturing**	**90.1650**	**89.7589**	**89,7598**
CA	Manufacture of food products, beverages and tobacco products	9.0601	10.0129	10,0130
CB	Manufacture of textiles, apparel, leather and related products	7.5612	7.5308	7.5314
CC	Manufacture of wood and paper products, and printing	5.0570	4.7737	4.7738
CD	Manufacture of coke, and refined petroleum products	2.9157	1.5238	1.5238
CE	Manufacture of chemicals and chemical products	4.0269	4.0632	4.0633
CF	Manufacture of pharmaceuticals, medicinal chemical and botanical products	3.0816	3.1490	3.1490
CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	8.4277	8.5042	8.5044
CH	Manufacture of basic metals and fabricated metal products (except machinery and equipment)	16.3720	15.2735	15.2732
CI	Manufacture of computer, electronic and optical products, electro-medical equipment, measuring equipment and watches	2.7826	2.7714	2.7714
CJ	Manufacture of electrical equipment and non-electric domestic appliances	3.6904	3.7764	3.7763
CK	Manufacture of machinery and equipment n.e.c.	12.5743	12.9415	12.9417
CL	Manufacture of transport equipment	7.4290	8.1282	8.1281
CM	Other manufacturing, and repair and installation of machinery and equipment	7.1865	7.3103	7.3104
D	**Electricity, gas, steam and air-conditioning supply**	**9.2324**	**9.3585**	**9.3576**
Total		**100.0000**	**100.0000**	**100.0000**

Working days and seasonal adjustment

The treatment of the deterministic components and seasonality is carried out with the methodology already used for the indices on a fixed basis for 2015.

[11] Starting from the final version of the 2024 base, to smooth out the effect of the large fluctuations present in the estimate of value added at factor cost of the energy sectors (Frame-SBS), the weights of section B - Mining and quarrying, section D - Supply of electricity, gas, steam and air conditioning and subsection CD - Manufacture of coke and refined petroleum products have been calculated as a three-term centered moving average over the last three available years (from 2021 to 2023).

The correction procedure for calendar effects was carried out with the regression method (applied using the TRAMO procedure), which identifies the effect of working days, leap years and Easter by introducing a set of variables into the statistical model that describes the trend of the series.

The seasonally adjusted indices were obtained through the TRAMO-SEATS+ procedure. TRAMO-SEATS+ assumes that each intra-year time series is constituted of different components, not directly observable: the trend-cycle that represents the underlying medium and long-term movement; the seasonal component that causes intra-year fluctuations; an irregular component, due to erratic factors.

TRAMO-SEATS+ uses a model-based approach consisting in identifying a reliable and representative model for the time series to be seasonally adjusted. In order to eliminate the seasonal component, it is necessary to select a decomposition model of the raw series into the previously listed different elements: the industrial production indices are seasonally adjusted using either an additive decomposition (the observed data are equal to the sum of the non-observable elements), or a multiplicative decomposition (the observed data are equal to the product of the non-observable elements).

The industrial production indices are calendar and seasonally adjusted separately for each economic activity sector, Main Industrial Grouping and for the overall index (direct approach).

The transition to the rolling base calculation method has led to a revision of the treatment of the series relating to total consumer goods, previously obtained by weighted aggregation of the component series of durable and non-durable consumer goods, which from 2021 has been seasonally adjusted using the direct approach.

With the transition to the index calculation system, the statistical models used for seasonal adjustment and correction have been revised to ensure their ability to accurately represent the trend of the individual time series. Specifically, the models for the major aggregates (Main Industrial Groupings) of durable consumer goods and intermediate goods, for the macro-sectors C - Manufacturing and B - Mining and quarrying, and for the sectors CF - Manufacture of pharmaceutical products and pharmaceutical preparations and CG - Manufacture of rubber and plastic products, other non-metallic mineral products, have been updated.

Consistently with the previous base, estimated series starts from January 2001.

Further details on models used for seasonal and calendar adjustment are available upon request.

Revision policy

The industrial production indices of the most recent month are provisional and subject to a revision, occurring with the dissemination of the following month and considering additional information received from enterprises (revised indices are disseminated in the press release).

A second type of revision occurs annually and concerns the time series of the indices. This revision aims at incorporating four types of information, which become available after the publication of the first revision. Specifically, the elements considered in the revision process are the following.

1. The release of the most recent data to define the weighting structure. As previously highlighted, at the moment for the indices of the year *t* there is a misalignment between the year of the link period (*t-1*) and the data available for calculating the structure of their weights (*t-3* for the SBS Frame and *t-2* for ProdCom). When the indices for the year *t+1* are released (where link period is *t*) also data *t-2* for the SBS Frame and *t-1* for the ProdCom become available, therefore data for year *t* are revised to update the weighting structure.

2. The updating and periodic review of the short-term statistics (turnover index and hours worked) on which the annual productivity coefficients used for the products detected through the monthly flows of hours worked are based. These products, whose weight represents 11.0% in the link period 2024 (final), are concentrated in some sectors (in particular, mechanical machinery and equipment, electrical and precision equipment, means of transport, repairs and installation of systems). It follows that the effect of the revision of the coefficients may be significant for those specific sectors.

3. The responses received from companies after the closure of the revised indices (which usually occurs around 60 days after the end of the reference period): this is a very limited share of responses, which on average weighs around 0.5% of the sample (measured in terms of production volume) but which can determine corrections of some significance on the disaggregated indices.

4. Subsequent corrections of information previously received from enterprises that have been reported as inaccurate by consistency checks. Usually these modifications have a minor effect on the aggregated indices, however they occasionally may cause significant revisions for specific sectors.

The revisions for the year 2025

A comparison between the average annual growth rates of the 2025 indices published on February 11th, 2026 and the revised ones – data adjusted for calendar effects – shows a very slight worsening of the annual trend for the general index (from -0.2% to -0.3%).

Here, as mentioned, the following factors are at play:
- delayed responses and subsequent corrections of information already received from companies (which, however, have a very marginal impact);
- productivity, which has an impact primarily on capital goods, but which has had no effect for 2025, as the change has remained unchanged (-0.4%);
- the role of weight updates, visible, for example, in the change in energy (from +1.0% to +1.6%).

TABLE 8. INDUSTRIAL PRODUCTION INDEX BY MAIN INDUSTRY GROUPING. Data corrected for calendar effects. Revisions for the year 2025. Average annual changes year 2025/2024

MAIN INDUSTRIAL GROUPINGS	AVERAGE ANNUAL CHANGES	
	2025 (published on February 11, 2026)	2025 (revised data)
Consumer goods	-0.5	-0.4
Durable	-0.8	-0.8
Non-durable	-0.6	-0.5
Capital goods	-0.4	-0.4
Intermediate goods	-0.6	-0.9
Energy	+1.0	1.6
Total	**-0.2**	**-0.3**

ANNEX 1. CHANGES MADE TO THE PRODUCT BASIS. 2025 base

ATECO CLASS 2007	PRODUCT DESCRIPTION	MACROPRODUCT DESCRIPTION
	REPLACED	
Class/group	Products of classes/groups detected through turnover index (volume)	See attachment 2
	ELIMINATED	
1042 (a)	Margarine	Margarine
1394 (a)	Strings, ropes, cords, etc.; Artificial or synthetic nets for agriculture, construction, gardening, and industrial applications	Cords and strings of any fiber
	Artificial or synthetic nets for agriculture, construction, gardening and industrial applications	Artificial or synthetic nets
1413 (b)	Children's jackets, blazers (including skirts and trousers)	Children's skirts and trousers
1419 (b)	Knitted clothing for babies and children up to 1 year (T-shirts, rompers, panties); Rompers (children)	Baby clothes
1419 (b)	Gloves, mittens and half-gloves in any material	Gloves in any material
1622 (a)	Wooden floors	Wooden floors
2012 (a)	Synthetic organic colors	Colorants
	Organic and inorganic pigments	Pigments
2017 (a)	Ethylene-propylene (EPR rubbers)	EPR rubbers
2052 (a)	Synthetic adhesives, adhesives for furniture and furnishings, adhesives for footwear, adhesives for construction, adhesives for transport vehicles, adhesives for paper and packaging, adhesives for other industries, adhesives for retail outlets	Adhesives
	Glues and other natural adhesives	Glues and other natural adhesives
2053 (a)	Aromas, fragrances and essential oils	Aromas, fragrances and essential oils
2443 (a)	Lead from ore, zinc from ore, lead and its alloys, zinc and its alloys	Lead, zinc, semi-finished products and alloys
2571 (a)	Cutlery items	Knives
	Scissors, poultry shears, nutcrackers	Scissors
	Cutlery (excluding knives)	Cutlery
2591 (a)	Drums, barrels, cans, etc. with a capacity of < 300 l	Steel containers for transport
2731 (a)	Fiber Optic Telecommunications Cables, Other Fiber Optic Cables	Fiber optic cables
2824 (a)	Power tools (drills, saws, polishers, grinders, etc.)	Power tools
3103 (a)	Mattresses	Mattresses

(a) Products falling into low weight classes.
(b) Products/macroproducts with negligible weight within the class.

Attachment 1 follows

ATECO CLASS 2007	PRODUCT DESCRIPTION	MACROPRODUCT DESCRIPTION
	MERGE INTO OTHER PRODUCTS	
1419	Swimwear - for children; for men and boys: two products merged into a new, unique product in its class	Swimwear
1419	Headwear in felt, wool, fur and other fabrics; Ties, bow ties and scarves in any fabric; Shawls, scarves, foulards, neckerchiefs in any fabric: three products merged into the new, unique product in the class	Accessories (hats and caps, scarves and foulards, ties, excluding gloves))
2420	Helical welded tubes (over 406.4 mm), Helical welded tubes (up to 406.4 mm), Other welded tubes, Shaped tubes, Furniture tubes, Other alloyed and non-alloyed precision tubes, Stainless steel and refractory tubes (welded), Irrigation tubes, Pipes for water and gas pipelines at low and medium pressures, Pipes for oil and gas pipelines, Tubes for structural work (up to 468.3 mm), Other alloyed smooth tubes, Stainless steel and refractory smooth tubes, Tubes with plain ends, Gas pipes (welded): 15 products merged into the new product unique in its class	Closely coupled, crimped, welded and similar pipes
2451	Cast iron castings for boilers for automatic systems (malleable grey iron, spheroidal), Cast iron castings for boilers for central plants (malleable grey iron, spheroidal), Other cast iron castings for construction (malleable grey and spheroidal), Cast iron castings for radiators (malleable grey and spheroidal), Cast iron castings for road products (manhole covers, etc.) (malleable grey iron, spheroidal), Other cast iron castings (malleable): 16 products merged into the new product, unique in its class	Cast iron castings for construction
2821	Hot water boilers for automatic heating systems, Hot water boilers for central heating systems: two products merged into a new, unique product in its class.	Boilers for centralized systems, Boilers for autonomous systems
2892	Screening, transport and feeding machines, Machines and equipment for breaking, crushing and pulverising: two products merged into the new product, unique in its class	Crushing machines, mineral grinding, mining, screening, transportation and feeding machines
	NEW	
Numerous classes / groups	Products belonging to the classes/groups detected through the turnover indices	See attachment 2: for each replaced class/group the product and the related macroproduct have been created
1083	Production and/or packaging of tea, mate and similar herbal products	Production and/or packaging of tea, mate and similar herbal products
1396	Labels, badges and similar articles, of textile materials	Labels, badges and similar articles, of textile materials
1711	Recycled paper pulp and cardboard	Inserted into the existing macro Mechanical wood pulp
1419	Accessories (hats and caps, scarves and foulards, ties, excluding gloves)	Accessories (hats and caps, scarves and foulards, ties, excluding gloves)
2015	Fluids	Fluids
2361	Reinforced concrete beams, prestressed or vibrated	Inserted into the existing macro POLES which has changed its name to POLES AND BEAMS
2420	Pipes of all types and purposes (e.g. joined, stapled, welded, etc.)	Pipes of all types and purposes)
2451	Cast iron castings for construction	Cast iron castings for construction
2733	Plugs, sockets, switches, disconnectors, commutators and other connections	Plugs, sockets, switches, disconnectors, commutators and other connections
2821	Hot water boilers for heating systems (independent and centralized)	Hot water boilers for heating systems (independent and centralized)
2891	Parts of machines for the iron and steel industry, metallurgy and foundry	Parts of machines for the iron and steel industry, metallurgy and foundry
2892	Macchine ed apparecchi per selezionare, vagliare, separare, mescolare terre, pietre	Machines and apparatus for selecting, sifting, separating, mixing earth, stones
2899	Machines for hot working glass or glass objects	Machines for hot working glass or glass objects
2931	Electrical parts for automotive and bicycles (ignition, starting, lighting, signaling, cooling)	Electrical parts for automotive and bicycles
3317	Repair and maintenance of locomotives and railway and tramway rolling stock (excluding their engines)	Repair and maintenance of locomotives and railway and tramway rolling stock

ANNEX 2. LIST OF PRODUCTS AND MACROPRODUCTS REPLACED WITH TURNOVER INDICES (VOLUME). 2025 base

SUB-SECTION	CLASS	CLASS DESCRIPTION	MACROPRODUCT	PRODUCTS
CA	1061	Manufacture of grain mill products	Flour from other cereals	Flour from other cereals
			Flour from durum wheat	Flour from durum wheat
			Soft wheat flour	Soft wheat flour
			Thoroughly milled rice	Thoroughly milled rice
			Flours and bread-making mixes	Flours and bread-making mixes
	1091	Manufacture of prepared feeds for farm animals	Milk replacers	Milk replacers
			Concentrated compound feed for pigs, cattle and poultry	Concentrated compound feed for pigs, cattle, poultry
			Integrated compound feed for pigs, cattle, poultry	Integrated compound feed for pigs, cattle, poultry and other livestock
	1092	Manufacture of prepared pet foods	Manufacture of prepared pet foods	Manufacture of prepared pet foods
CB	1320	Weaving	Cotton fabrics, other cotton system fibres	Tessuti (esclusi velluti e spugna), Velluti, Tessuti a spugna
			Carded wool fabrics	Carded wool fabrics
			Worsted wool weaving	Worsted wool weaving
			Silk fabrics	Silk fabrics
			Fabrics made of other fibres with a silk system	Continuous synthetic yarn fabrics, Continuous artificial yarn fabrics
			Hemp, linen and jute fabrics	Hemp, linen and hard fibre fabrics, Jute fabrics
	1520	Footwear manufacturing	Other footwear with non-leather uppers	Men's rubber-uppered shoes, Women's rubber-uppered shoes, Children's rubber-uppered shoes, Other men's shoes, Other women's shoes
			Men's shoes with leather uppers	Men's City Shoes, Men's Sandals, Men's Boots & Ankle Boots
			Women's shoes with leather uppers	Women's City Shoes, Women's Sandals, Women's Boots & Ankle Boots
			Children's shoes with leather uppers	Children's City Shoes, Children's Sandals, Children's Boots and Booties
			Slippers and flip-flops	Leather slippers and flip-flops for men, Other types of slippers and flip-flops for children, Other types of slippers and flip-flops for women, Other types of slippers and flip-flops for men, Leather slippers and flip-flops for women, Leather slippers and flip-flops for children
			Boots and sports shoes with leather uppers	Men's work boots, Women's work boots, Other men's sports shoes, Other women's sports shoes, Other children's sports shoes

Attachment 2 follows

SUB-SECTION	CLASS	CLASS DESCRIPTION	MACROPRODUCT	PRODUCTS
CG	2341	Manufacture of ceramic products for household and ornamental purposes	Porcelain tableware	Porcelain tableware (including vitreous china)
	2342	Manufacture of ceramic sanitary ware	Porcelain, earthenware and fire-clay sanitary ware	Porcelain, earthenware and fire-clay sanitary ware
	2391	Production of abrasive products	Coated abrasives	Coated abrasives (paper, cloth, fiber, and combinations)
			Rigid abrasives	Rigid abrasives (with inorganic and organic conglomerates)
CH	2521	Manufacture of steel drums and similar containers	Non-electric radiators	Non-electric radiators
	2529	Manufacture of other metal tanks, reservoirs and containers	Tanks for liquid and gaseous materials	Non-pressure tanks and caissons for solid materials, Tanks for liquids or gases
CJ	2790	Manufacture of other electrical equipment	Electric welders	Electric welders
			Static machines	Static machines
			Electrical parts of machines and appliances	Electrical parts of machines and appliances
			Parts of electrical safety, control and signalling equipment and devices (for railways, etc.)	Parts of electrical safety, control and signalling equipment and devices (for railways, etc.)
CL	2920	Manufacture of bodies for motor vehicles, trailers and semi-trailers	Trailers: chassis and complete units	Trailers: chassis and complete units
			Semi-trailers: chassis and complete units	Semi-trailers: chassis and complete units
			Others bodywork	Special transport bodies (tankers, thermal transport), general transport bodies (vans, flatbeds, cabs), concrete mixer bodies, and other uses (garage, fire, ambulance, etc.)
	3091	Manufacture of motorcycles (including engines)	Mopeds and cycle carts (up to 50 cm3)	Mopeds and cycle carts (up to 50 cm3)
			Motor scooters and motorcycles (51-125 cm3)	Motorcycles from 51 to 125 cubic centimeters, Motorcycle scooters from 51 to 125 cubic centimeters, Motorcycles over 500 cubic centimeters, Motorcycle scooters over 125 cubic centimeters, Motorcycles from 251 to 350 cubic centimeters, Motorcycles from 351 to 500 cubic centimeters, Motorcycles from 126 to 250 cubic centimeters
			Separate parts for mopeds and motorcycles	Hubs for motorboats, mopeds, Other separate parts for motorcycles (frames, forks, handlebars, saddles, etc. excluding electrical parts)
			Engines for motorcycles and mopeds	Engines from 51 to 350 cubic centimeters, Engines over 350 cubic centimeters, Engines up to 50 cubic centimeters
	3092	Manufacture of bicycles and vehicles for the disabled	Normal, folding, children's bicycles	Regular bicycles (including racing, track, mountain bikes, etc.), folding bicycles, exercise bikes, children's bicycles
			Bicycle spare parts	Other bicycle parts (frames, forks, handlebars, saddles, etc. excluding electrical parts), Bicycle hubs
			Prams and strollers	Prams and strollers
CM	3291	Manufacture of brooms and brushes	Brooms and brushes	Brooms and brushes for domestic and industrial use, for street cleaning or for pet grooming, brushes and shaving brushes, for hair, for artists, for painting or whitewashing
	3299	Other manufacturing industries nca	Buttons	Buttons of any material (including snap buttons)
			Zippers	Zippers

ANNEX 3. LIST OF PRODUCTS INCLUDED TO COMPLETE TURNOVER INDICES (VOLUME). 2025 base

SUB-SECTION	PRODUCTS/MACROPRODUCTS
CA	106 - Grain processing, starch and starch products production
	109 - Animal feed production
CB	132 - Weaving
	152 - Footwear manufacturing
CG	234 - Manufacture of other porcelain and ceramic products
	239 - Manufacture of abrasive products and non-metallic mineral products n.e.c.
CH	252 - Manufacture of tanks, reservoirs, radiators, and containers of metal
CJ	279 - Manufacture of other electrical equipment
CL	292 - Manufacture of bodies for motor vehicles, trailers, and semi-trailers
	309 - Manufacture of transport equipment n.e.c.
CM	329 - Manufacturing industries n.e.c.