

Production of major industrial products in December 2023


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Statistics Poland

## Content-related works

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This publication contains data on the production of major products or assortment groups representing particular divisions of the Polish Classification of Goods and Services (PKWiU 2015) for Section B "Products of Mining and Quarrying" and section C "Manufacturing Products" obtained in the monthly survey.

The aim of the publication is to present changes in the production of industrial products based on data expressed in physical units of measure in particular months of the last two years. Selection of presented industrial products reflects the needs of a wide range of users, including among others, government administration, producers' associations and individual producers and scientific research institutions.

Presenting this publication we hope that the data will be a valuable source of information on production of the most significant products in Poland. At the same time, we will appreciate any comments and suggestions regarding the scope of data contained in this publication, which will allow for its better adaptation to the needs of users.

Taking the opportunity, we would like to thank all the respondents participating in the monthly survey on the production of industrial products, carried out on the P-02 form "Report on production and inventory of industrial products". Your commitment contributed to compiling this publication.

Director
of Enterprises Department
/-/ Katarzyna Walkowska
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## Symbols

| Symbol | Description |
| :---: | :--- |
| $(-)$ | magnitude zero |
| $(0)$ | magnitude not zero, but less than 0.5 of a unit |
| $()$. | data not available, classified data (statistical <br> confidentiality) or providing data impossible or <br> purposeless |
| $(*)$ | revised data |
| of which | indicates that not all elements of the sum are given |

## Main abbreviations

| Symbol | $\quad$ Description |
| :---: | :--- |
| Cu | copper |
| $\mathrm{dam}^{3}$ | cubic decametre |
| GWh | gigawatt-hour |
| $\mathrm{hm}^{3}$ | cubic hectometre |
| km | kilometer |
| MVA | megavolt-ampere |
| MW | megawatt |
| PLN | Polish zloty |
| thousand hectolitre 10\% | thousand hectolitre of converted volume of product <br> with 10\% component content |

The survey of the production of industrial products in physical units of measure complements the survey of sold production of industry, and allows for monthly assessment of trends of domestic production. The publication contains data on manufactured production in Poland for 462 products or assortment groups representing major fields of industrial production.

The data were prepared on the basis of a monthly product survey carried out on the P-02 form "Report on production and inventory of industrial products". The survey covers enterprises manufacturing industrial products regardless of their type of business activity, with number of persons employed exceeding 49 persons.

Products or assortment groups are presented according to the PRODPOL nomenclature based on the Polish Classification of Goods and Services (PKWiU 2015) and the European PRODCOM List. In some cases, products are presented according to additional groupings, constituting the sum of selected items from the PRODPOL nomenclature. Data on manufactured production of products related to the prevention of spreading / combating COVID-19 previously presented in a separate table are included in table 1 and table 2.

Table 1 presents the data on manufactured production of products in December 2023 along with production dynamics indicators in relation to the previous month and to corresponding period of the previous year.

Table 2 presents the data on manufactured production of products retrospectively, by the months of the current and previous year.

Table 3 presents the data on sold production of products in December 2023 along with production dynamics indicators in relation to the previous month and to corresponding period of the previous year.

Table 4 presents the data on sold production of products retrospectively, by the months of the current and previous year.

Indices shown in table 1 and table 3 take account of corrections made for previous periods.
The sum of data from particular months in table 2 and table 4 does not always have to be consistent with the cumulative data (i.e. from the beginning of the year to the end of the reporting month), because minor adjustments of up to $3 \%$ at country level for a given product are taken into account only in cumulative data. Data corrected in relation to the data presented in the previous month are marked with an asterisk.

The reasons of differences that may occur between the amount of manufactured production and sold production are presented in the Methodological notes.

## Executive summary

In December 2023, the product survey carried out on the P-02 form "Report on production and inventory of industrial products" covered more than 7,000 statistical units with 50 or more persons employed that manufactured products specified in the PRODPOL nomenclature for monthly surveys in 2023.
The publication presents data on manufactured production for 462 products and assortment groups and on sold production for 308 products and assortment groups. In December 2023, manufactured production of 171 items and sold production of 97 items was higher than in December 2022. Decrease was noted on manufactured production for 279 items and on sold production for 205 items. Data on production of slaughter products of pigs, frozen salt water fish and fillets, wheat bread, iron or steel reservoirs, tanks, vats and similar containers for solids, of a capacity more than 300 litres and barbed wire and barbed wire entanglements made from steel or steel wire is not published as it was not possible to obtain production data from some economic entities.

## MANUFACTURED PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. In December 2023 in comparison to December 2022, in the divisions covering energy raw materials production decreased of e.g. lignite (by 17.2\%), hard coal (by 8.8\%), petroleum oils and oils obtained from bituminous minerals (by $8.6 \%$ ). In the division Food products production decreased of e.g. edible rock salt (by $56.2 \%$ ), canned poultry meat (by $30.0 \%$ ), poultry carcasses (by $29.2 \%$ ). In the divisions Wearing apparel and Leather and related products production decreased of e.g. jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by $55.7 \%$ ), footwear with uppers of textile materials (by $51.5 \%$ ), men's or boys' suits and ensembles, not knitted (by 49.0\%), unsplit bovine leather for shoes (by $38.5 \%$ ). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. assembled parquet panels of wood for mosaic floors (by $53.4 \%$ ), wooden flooring materials (by 29.5\%), fluting paper (by 28.3\%), assembled parquet panels of wood other than for mosaic floors (by 26.6\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of e.g. sodium hydroxide, solid (by $69.3 \%$ ), light fuel oils (by $60.9 \%$ ), sodium hydroxide in aqueous solution (by 59.3\%), motor oils (by $55.0 \%$ ). In the division Rubber and plastic products production decreased of e.g. tableware and kitchenware of plastic (by 41.0\%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by $18.9 \%$ ), tyres for lorries and buses (by 16.6\%), tyres for passenger cars (by 12.6\%). In the division Other nonmetallic mineral products production decreased of e.g. ceramic ridge tiles (by 68.1\%), ceramic roof tiles (by $59.4 \%$ ), sanitary fixtures of porcelain (by $51.6 \%$ ). In the division Basic metals production decreased of e.g. seamless tubes (by 39.7\%), copper plates, sheets and strip (by $32.7 \%$ ), refined unwrought lead (by 22.3\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. electricity meters (by 46.1\%), telephone sets, excluding cellular phones (by 45.9\%), air-cooled transformers (by 39.2\%). In the division Machinery and equipment production decreased of e.g. concrete mixers (by 66.1\%), ploughs (by 63.2\%), machinery for construction, road and drainage work (by 47.9\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. sea-going boats for pleasure or sports (by 55.2\%), bicycles (by 49.2\%), goods vehicles, with spark-ignition internal combustion piston engine; other goods vehicles (by 43.5\%), public transport vehicles (by 29.3\%). In the division Furniture production decreased of e.g. kitchen furniture of wood (by 18.0\%), seats convertible into beds (by 17.4\%), seats with wooden frames (by 16.8\%), wooden furniture for the dining-room and living-room (by 14.8\%).
In December 2023 in comparison to December 2022, production increase was recorded for, among others: machining centres, unit construction machines and multi-station transfer
machines for working metal (by 325.0\%), tyres for tractors (by 286.4\%), protective clothing (overalls, aprons) (by 211.8\%), disinfectant wipes (by 211.1\%), vegetable pickles (by 209.3\%), coldrolled steel sheet width 600 mm or wider (by 196.1\%), reciprocating displacement compressors (by 187.2\%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by $176.2 \%$ ), woven fabrics of flax, containing $\geq 85 \%$ by weight of flax (by $142.9 \%$ ), rugs (by $141.7 \%$ ), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 136.7\%), potassic fertilizers (by 131.7\%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by $126.7 \%$ ), woven fabrics of synthetic staple fibre (by 124.7\%), sheets and strips of non-alloy steel coated with zinc (by 115.8\%), wire of steel (by 108.9\%), crispbread (by 105.9\%), electric motors and generators, excluding traction motors (by 95.6\%), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by 89.4\%), radiators for central heating of iron or steel (by 87.9\%), automatic drying machines (by $87.8 \%$ ), copper and copper alloy bars, rods and profiles (by 79.1\%), acetic acid (by 75.3\%).
In December 2023 in comparison to December 2022, unchanged remained the production of woven fabrics of cotton, not of yarns of different colours, weighing $>200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses and mechanical non-invasive ventilation apparatus.
Compared to November, in December 2023 manufactured production decreased for 334 products, among others for: vacuum pumps (by $91.9 \%$ ), disinfectant wipes (by 81.1\%), women's or girls' suits and ensembles, not knitted (by $79.3 \%$ ), bricks made of clay (by $69.8 \%$ ), woven fabrics of carded wool or carded fine animal hair (by 69.4\%), rubberised textile fabrics, except tyre cord fabric (by $69.2 \%$ ), machining centres, unit construction machines and multi-station transfer machines for working metal (by 68.5\%), flax yarn (by 68.0\%), ploughs (by 66.2\%), asphalt (by $65.5 \%$ ), wire of aluminium (by $64.4 \%$ ), bronze (by $59.1 \%$ ), concrete mixers (by $58.5 \%$ ), apple juice (by $58.2 \%$ ), polyurethane adhesives (by $58.2 \%$ ), light fuel oils (by $57.4 \%$ ), non-woven glass fibre webs, felts, mattresses and boards (by $57.3 \%$ ), yarn of carded wool (by $56.6 \%$ ), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by $56.6 \%$ ), woven fabrics of synthetic or artificial filament yarns (by $56.5 \%$ ), motor oils (by $52.1 \%$ ), assembled parquet panels of wood for mosaic floors (by $50.8 \%$ ).
Compared with the previous month, production increase was recorded for 118 products, among others for: mechanical non-invasive ventilation apparatus (by $100.0 \%$ ), woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for clothing (by $87.8 \%$ ), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by $85.9 \%$ ), vegetable pickles (by $85.4 \%$ ), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by $83.3 \%$ ), woven fabrics of cotton weighing less than $200 \mathrm{~g} / \mathrm{m}^{2}$ (excluding gauze, denim and yarns of different colours) (by $62.3 \%$ ), crispbread (by $56.7 \%$ ), woven fabrics of cotton weighing more than $200 \mathrm{~g} / \mathrm{m}^{2}$ (by $50.0 \%$ ), ethylene (by $48.3 \%$ ), ceramic ridge tiles (by 48.2\%), polypropylene (by 47.3\%), syringes, with or without needles (by 45.4\%), copper plates, sheets and strip (by 39.4\%), polyethylene (by $36.1 \%$ ), women's or girls' overcoats and similar articles, knitted or crocheted (by $30.6 \%$ ), barley groats and meal (by $28.8 \%$ ), men's or boys' trousers, overalls and shorts, not knitted (by $28.6 \%$ ), gas meters (by $28.1 \%$ ), other polyamides filament tow and staple fibres (by 26.9\%), propylene (by $26.7 \%$ ).

Summarizing the manufactured production in the period January-December 2023, compared with the corresponding period of the previous year, production increase was recorded for 132 products. In the division Food products production increased of e.g. cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 59.8\%), sugar (by 58.1\%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 57.8\%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 38.6\%), other prepared dishes and meals (by 29.4\%). In the division Wearing apparel production increased of e.g. women's or girls' overcoats and similar articles, not knitted (by 44.3\%), women's or girls' jackets, not knitted (by 9.0\%), panty hose and tights (by 7.3\%), men's or boys' jackets and blazers,
not knitted (by 7.1\%). In the divisions Wood and products of wood and Paper and paper products production increased of e.g. other plywood, veneered panels and similar laminated wood, of coniferous wood (by $99.2 \%$ ), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by $58.5 \%$ ), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by $12.3 \%$ ). In the divisions Coke, briquette and refined petroleum products and Chemical products production increased of e.g. paints and varnishes, based on polyesters, weight of the solvent more than $50 \%$ (by $28.5 \%$ ), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by $24.7 \%$ ), heavy fuel oils (by $22.2 \%$ ), soap in bars etc. (by $18.5 \%$ ), motor gasoline (by $18.2 \%$ ). In the divisions Rubber and plastic products and Machinery and equipment production increased of e.g. reciprocating displacement compressors (by 65.5\%), compressors for refrigeration equipment (by $27.6 \%$ ), rubberised textile fabrics, except tyre cord fabric (by $25.4 \%$ ), plastic floor, wall, ceiling coverings (by 17.3\%), lathes for working metal (by 15.4\%). In the divisions Basic metals and Fabricated metal products production increased of e.g. iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by $22.3 \%$ ), wire of aluminium (by $22.2 \%$ ), iron or steel reservoirs, tanks and similar containers for gases, of a capacity $>300$ litres (by $18.0 \%$ ), railway or tramway steel rails (by $14.3 \%$ ), wire of steel (by $8.3 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production increased of e.g. lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by $48.8 \%$ ), electric motors and generators, excluding traction motors (by $38.6 \%$ ), lead-acid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by 32.6\%), air-cooled transformers (by $28.6 \%$ ), lead-acid accumulators of a kind used for starting piston engines in motor vehicles, working with liquid electrolyte (by $16.2 \%$ ). In the divisions Motor vehicles and Other transport equipment production increased of e.g. rail goods wagons (by $61.9 \%$ ), road tractors for semi-trailers (by $45.2 \%$ ), goods vehicles, with compression-ignition internal combustion piston engine (by $38.8 \%$ ), lorries and road tractors for semi-trailers (by 37.9\%).
In January - December compared with the corresponding period of the previous year, production decrease was recorded for 321 products. In the divisions covering energy raw materials production decreased of e.g. lignite (by $26.6 \%$ ), hard coal (by $8.5 \%$ ), petroleum oils and oils obtained from bituminous minerals (by 7.1\%). In the division Food products production decreased of e.g. edible rock salt (by 33.1\%), buckwheat groats and meal (by 31.0\%), canned beef and veal meat (by 29.5\%). In the divisions Wearing apparel and Leather and related products production decreased of e.g. men's or boys' overcoats and similar articles, knitted or crocheted (by 65.6\%), women's or girls' trousers, overalls and shorts, not knitted (by 42.2\%), footwear with uppers of textile materials (by 41.3\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 39.9\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 53.7\%), wooden flooring materials (by 33.5\%), folding cartons, boxes and cases of noncorrugated paper or paperboard (by $32.1 \%$ ), other paper and paperboard for graphic purposes (by $27.3 \%$ ), sacks and bags of paper (by $24.1 \%$ ). In the division Chemical products production decreased of e.g. toluene (by 95.0\%), disinfectant wipes (by 45.5\%), polyvinyl chloride not mixed with any other substances (by 44.6\%), phosphatic fertilizers (by $35.7 \%$ ), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $35.5 \%$ ). In the division Rubber and plastic products production decreased of e.g. tyres (by 13.5\%), plastic sacks and bags (by 12.2\%), plastic doors, windows and their frames (by 11.7\%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 7.2\%). In the division Other non-metallic mineral products production decreased of e.g. ceramic ridge tiles (by $69.2 \%$ ), structural-floor clay hollow bricks (by $62.4 \%$ ), structural-wall clay hollow bricks (by $37.0 \%$ ), ceramic roof tiles (by $36.0 \%$ ). In the division Basic metals production decreased of e.g. brass (by 41.4\%), copper plates, sheets and strip (by $39.5 \%$ ), seamless tubes (by $22.1 \%$ ), hot-rolled steel rods and bars (by $19.0 \%$ ), crude steel
(by 13.3\%). In the division Fabricated metal products production decreased of e.g. nails (by 29.3\%), hand tools of a kind used in agriculture, horticulture or forestry (by $23.9 \%$ ), radiators for central heating of iron or steel (by 20.0\%), iron or steel containers for compressed or liquefied gas (by 19.1\%), steel doors (by 13.9\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. food grinders, mixers and juice extractors (by 71.6\%), filament lamps (by 63.9\%), LED light bulbs (by 43.8\%), outside aerials for radio or television reception excluding for satellite broadcast (by 38.9\%), primary cells and batteries (by $32.2 \%$ ). In the division Machinery and equipment production decreased of e.g. concrete mixers (by 39.0\%), machinery for construction, road and drainage work (by 35.5\%), ploughs (by 32.0\%), pick-up straw and fodder balers (by 26.8\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. bicycles (by 47.6\%), sea-going boats for pleasure or sports (by 17.8\%), containers for freight transport (by 14.6\%). In the division Furniture production decreased of e.g. kitchen furniture of wood (by $15.0 \%$ ), seats with wooden frames (by 13.5\%).
Production of mechanical non-invasive ventilation apparatus was at the same level as in the corresponding period of the previous year.

## SOLD PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. In December 2023 in comparison to December 2022 in the division Food products production decreased of e.g. rusks, toasted bread and similar toasted products (by 65.0\%), millet groats (by 50.4\%), edible evaporated salt (by 40.0\%), buckwheat groats and meal (by 35.0\%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 32.8\%). In the divisions Wearing apparel and Leather and related products production decreased of e.g. men's or boys' overcoats and similar articles, knitted or crocheted (by 89.0\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 58.4\%), women's or girls' trousers, overalls and shorts, not knitted (by 55.4\%), women's or girls' blouses and shirts, not knitted (by 45.9\%), footwear with uppers of textile materials (by 42.1\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. veneers (by 61.6\%), non-coniferous sawnwood (by 40.6\%), assembled parquet panels of wood for mosaic floors (by 34.8\%), wooden flooring materials (by 29.8\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by $26.3 \%$ ), fluting paper (by 25.0\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of e.g. sodium hydroxide in aqueous solution (by 58.7\%), phosphatic fertilizers (by 46.7\%), motor oils (by 46.4\%), chemical fibres (by 45.8\%), rectified spirit (ethyl alcohol) (by 34.6\%). In the division Other non-metallic mineral products production decreased of e.g. ceramic roof tiles (by $55.8 \%$ ), ceramic ridge tiles (by 49.5\%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 39.0\%), porcelain or china tableware and kitchenware (by 38.8\%), building blocks of light concrete (by 31.4\%). In the division Fabricated metal products production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 56.8\%), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by $46.6 \%$ ), hand saws; blades for saws of all kinds (by 33.0\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. electricity meters (by $60.3 \%$ ), air-cooled transformers (by 46.8\%), multi-phase current motors, excluding traction motors (by 46.4\%), domestic gas cookers with an oven (by 45.0\%), gas meters (by 42.3\%), optical fibre cables (by 41.6\%). In the division Machinery and equipment production decreased of e.g. ploughs (by 68.0\%), scarifiers and cultivators (by 47.8\%), field sowers (by 43.7\%), machinery for construction, road and drainage work (by 42.6\%), machine tools for machining metals (by 28.5\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. seagoing boats for pleasure or sports (by 54.2\%), bicycles (by 39.6\%), public transport vehicles (by 36.4\%).
Compared with the corresponding month of the previous year, production increase was recorded for, among others: electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors
(by $132.0 \%$ ), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 121.1\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by $109.8 \%$ ), articles of bedding of feathers or down (by $109.1 \%$ ), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by 83.8\%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by $82.9 \%$ ), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by $69.2 \%$ ), wire of steel (by $67.6 \%$ ), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 65.7\%), electric motors and generators, excluding traction motors (by 59.6\%), rail goods wagons (by $56.2 \%$ ), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by $56.0 \%$ ), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by $51.3 \%$ ), automatic drying machines (by 48.2\%), frozen fruit and nuts (by 47.9\%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity $>300$ litres (by $37.4 \%$ ), kitchen and bathroom mixing valves (by $37.0 \%$ ), glues and adhesives based on synthetic resins (by 32.4\%), other prepared dishes and meals (by $30.9 \%$ ), soap and organic surface-active products in bars, etc., for toilet use (by 30.9\%), nails (by $30.6 \%$ ), aluminium windows (by $30.5 \%$ ), reciprocating displacement compressors (by $30.2 \%$ ), vegetable pickles (by $29.5 \%$ ), vehicle compression-ignition engines (by $29.3 \%$ ), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 28.9\%), copper and copper alloy bars, rods and profiles (by $24.3 \%$ ), butter (by $23.2 \%$ ), rotary displacement compressors (by 22.9\%), panty hose and tights (by 21.4\%).
Compared to November 2023, in December 2023 sold production decreased for 245 products, among others for: woven fabrics of synthetic or artificial filament yarns (by 87.1\%), ploughs (by $69.6 \%$ ), asphalt (by $63.7 \%$ ), phosphatic fertilizers (by $54.6 \%$ ), women's or girls' trousers, overalls and shorts, not knitted (by 53.9\%), potassic fertilizers (by 52.7\%), woven fabrics of cotton weighing less than $200 \mathrm{~g} / \mathrm{m}^{2}$ (excluding gauze, denim and yarns of different colours) (by $52.5 \%$ ), polyurethane adhesives (by $52.4 \%$ ), toilet waters (by $52.0 \%$ ), first-aid boxes and kits (by $50.0 \%$ ), woven fabrics of synthetic staple fibre (by 48.2\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 46.7\%), building bituminous felt (by 45.8\%), chemical fibres (by 45.2\%), air-cooled transformers (by 45.0\%), television receivers (by 43.8\%), crispbread (by $43.3 \%$ ), sheets and strips of non-alloy steel coated with zinc (by $43.2 \%$ ), electricity meters (by $43.0 \%$ ), factory made mortars (by $42.6 \%$ ), basic pharmaceutical products (by $42.4 \%$ ), soups and broths and preparations therefor (by 41.7\%), bicycles (by 41.4\%), reciprocating displacement compressors (by 40.9\%), structural-floor clay hollow bricks (by 40.5\%), plates, sheet, film, foil of cellular polymers of styrene (by 40.0\%), water meters (by 39.7\%), ceramic ridge tiles (by 39.1\%), women's or girls' dresses and skirts, not knitted (by 39.0\%), leather of bovine animals (by 39.0\%), electric conductors, for a voltage > 1000 V (by $38.7 \%$ ).

Compared with the previous month, production increase was recorded for 57 products, among others for: machinery for construction, road and drainage work (by 116.1\%), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by $111.8 \%$ ), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by 99.8\%), syringes, with or without needles (by 87.8\%), rusks, toasted bread and similar toasted products (by $56.7 \%$ ), fruit wines (by 49.1\%), pick-up straw and fodder balers (by 49.1\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 40.7\%), pesticides and agrochemicals used in agriculture and forestry (by 39.6\%), orthopaedic appliances, splints and other fracture appliances (by 33.4\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 33.0\%), hot-rolled steel rods and bars (by 32.5\%), men's or boys' shirts, not knitted (by 29.0\%), gas meters (by 27.0\%), sweetened or flavoured waters (by 26.1\%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by $24.1 \%$ ), vodka (by $24.0 \%$ ), butter (by $23.9 \%$ ).

In the period January - December 2023, compared with the corresponding period of the previous year, production decrease was recorded for 216 products. In the divisions Food products and Beverages production decreased of e.g. buckwheat groats and meal (by $25.1 \%$ ), canned pig meat (by $18.4 \%$ ), vodka (by $16.8 \%$ ). In the divisions Wearing apparel and Leather and related products production decreased of e.g. women's or girls' trousers, overalls and shorts, not knitted (by $56.1 \%$ ), footwear with uppers of textile materials (by $39.8 \%$ ), women's or girls' dresses and skirts, not knitted (by 19.8\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. assembled parquet panels of wood for mosaic floors (by $53.8 \%$ ), sacks and bags of paper (by $25.0 \%$ ), flat pallets and pallet collars of wood (by 21.9\%). In the division Chemical products production decreased of e.g. nitrogenous fertilizers (by 30.1\%), rectified spirit (ethyl alcohol) (by 28.3\%), sodium hydroxide in aqueous solution (by 27.2\%). In the division Rubber and plastic products production decreased of e.g. tyres (by 13.4\%), plastic sacks and bags (by $11.8 \%$ ), plastic doors, windows and their frames (by $11.6 \%$ ). In the division Other non-metallic mineral products production decreased of e.g. products of heat insulation of mineral wools (by 29.3\%), non-refractory clay building bricks (by 26.4\%), lime (by $24.3 \%$ ). In the division Basic metals production decreased of e.g. refined unwrought lead (by $22.6 \%$ ), hot-rolled steel rods and bars (by 20.8\%), copper and copper alloy bars, rods and profiles (by $12.2 \%$ ). In the division Fabricated metal products production decreased of e.g. hand saws; blades for saws of all kinds (by 16.1\%), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by 12.1\%), steel doors (by 10.3\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. single-phase current motors (by $40.9 \%$ ), domestic gas cookers with an oven (by $28.9 \%$ ), gas meters (by $26.6 \%$ ), dish washing machines (by 14.4\%). In the division Machinery and equipment production decreased of e.g. ploughs (by 35.5\%), machinery for construction, road and drainage work (by 31.9\%), pick-up straw and fodder balers (by 28.8\%), rotary displacement compressors (by $28.3 \%$ ). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. city/touring bicycles (by $35.6 \%$ ), containers for freight transport (by 15.3\%), sea-going boats for pleasure or sports (by 9.0\%).

In the period January-December 2023 production increased for 86 products. In the division Food products production increased of e.g. prepared meals and dishes based on meat (by 19.6\%), crude rape and colza oil and their fractions, for human consumption (by 18.6\%), croasted coffee, not decaffeinated (by 9.1\%). In the divisions Wearing apparel and Leather and related products production increased of e.g. panty hose and tights (by $25.5 \%$ ), women's or girls' overcoats and similar articles, knitted or crocheted (by 20.9\%), leather of bovine animals (by 5.4\%). In the divisions Wood and products of wood and Paper and paper products production increased of e.g. other plywood, veneered panels and similar laminated wood, of coniferous wood (by 113.0\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by $56.3 \%$ ), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by $12.3 \%$ ). In the divisions Coke, briquette and refined petroleum products and Chemical products production increased of e.g. polyurethane adhesives (by 12.0\%), hair care products (by $9.6 \%$ ), asphalt (by $6.9 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production increased of e.g. electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $66.4 \%$ ), electric motors and generators, excluding traction motors (by $32.8 \%$ ), air-cooled transformers (by $26.5 \%$ ). In the divisions Motor vehicles and Other transport equipment production increased of e.g. rail goods wagons (by 61.6\%), vehicle compression-ignition engines (by 31.6\%), passenger cars (by 13.3\%).

Production of woven fabrics of cotton weighing less than $200 \mathrm{~g} / \mathrm{m}^{2}$ (excluding gauze, denim and yarns of different colours) was at the same level as in the corresponding period of the previous year.

## Methodological notes

The data were compiled on the basis of a monthly survey of production of industrial products on the P-02 form "Report on production and inventory of industrial products". In case of electricity, the data are derived from specialist surveys conducted by Minister responsible for energy and the President of Energy Regulatory Office.

Data are collected according to groupings indicated in the PRODPOL nomenclature for monthly surveys in the reporting year. The nomenclature is based on the Polish Classification of Goods and Services (PKWiU 2015) - introduced on January 1, 2016 for use in statistics, registration, documentation and accounting, and also in official registers and public administration information systems (Regulation of the Council of Ministers of 4 September 2015, Journal of Laws, item 1676) and on the PRODCOM List used in the European Union.

## 1. Scope of units and products surveyed

The monthly survey covers legal entities, organizational units without legal personality (excluding budgetary units and establishments) and natural persons conducting business activities, with the number of persons employed exceeding 49. Units producing electricity are included in the survey regardless of the number of persons employed. The survey applies to all business entities which manufacture products specified in the PRODPOL nomenclature for a given reporting year, regardless of the kind of economic activity classified according to the Polish Classification of Activities (PKD 2007).

The survey of production of industrial products does not include the following units:

- trade units, which ordered the manufacture of goods in a production company and did not provide raw materials for the manufacture of these goods,
- running only publishing activities and not directly involved in the printing preparation process or printing process,
- engaged only in activities related to the production of films, video recordings, television programs, sound and music recordings and not directly involved in the process of reproduction of sound recordings, video recordings or reproduction of computer storage media.

The survey provides data on the quantity of production of finished products manufactured on own account or under subcontracting, from material provided by the principal, as of the end of the reporting month. The processing or modification of a purchased product, which did not change the characteristics of its use and purpose, is not considered as production.
The basic principle in determining the quantity of production is its homogeneity which allows aggregation of particular product ranges.

In order to obtain comparable data on the production of industrial products, the PRODPOL nomenclature is used. It contains a list of products with the symbol and the name of the product or assortment group and assigned to them units of measure in which production should be reported. This allows the units to report the data on production of products which belong to the same category but are traded under different own names, in one PRODPOL grouping under the same name and in the same unit of measure.

The PRODPOL nomenclature is compliant at six-digit level with the PKWiU 2015 classification and at eight-digit level with the PRODCOM List. 10- and 12-digit groupings result from the demands reported by domestic users. The PRODPOL nomenclature is updated annually and is available on the Statistics Poland website
https://stat.gov.pl/Klasyfikacje/doc/prodpol/opis mc2023.html.

It is very important to determine the unit of measurement for each grouping that corresponds to physical characteristics and intended use of particular type of product.

In most cases, the data is collected in the physical units of measure. For non-homogeneous product groupings, if they have at least one common feature defining their properties, conventional units of measure are used. A typical example of the use of conventional units of measure are chemical products in which the quantity is expressed in terms of pure ingredient. For groupings containing products of considerable diversity, e.g. pharmaceutical products, it is not possible to use physical units of measure. In this case, data are collected only on the value of sold production in current prices expressed in thousands zloty.
In cases where one unit of measure does not specify sufficiently the functional features of a given product as well as the volume of its production, several units of measure are used at the same time.

Differences between manufactured production and sold production in the monthly surveys result from the fact that:

- products can be produced for stock and sold in the following reporting periods, e.g. due to the seasonal availability of raw materials for production (e.g. frozen vegetables), increased seasonal sales of certain products (e.g. mineral waters, beer in the summer), in connection with planned holidays or downtime for maintenance,
- products can be sold from stock,
- the products were manufactured under subcontracting, and the contractor or principal is not covered by the P-02 surveys (this especially applies to products from the Wearing apparel division),
- some products may be manufactured by enterprises for their own purposes and used in the further production of other products, therefore they do not appear in the course of trade or appear only in small quantities (this applies especially to basic chemicals).

Monthly data on production of industrial products may be subject to monthly revisions up to 14 months after the end of the reporting year. The revisions result from the specificity of the survey of production of industrial products related to difficulties in classifying certain products to relevant headings of PRODPOL nomenclature and to short period for preparing monthly data by reporting units.

## 2. Explanation of basic concepts

Manufactured production is the result of manufacturing processes mutually interrelated and conditioned, occurring at a given time.

Manufactured production includes the total quantity of finished products produced in the reporting period, both from manufacturer's own raw material and from raw material provided by another enterprise or natural person. It also includes the total volume of semi-finished products, parts, sets of machinery and equipment, regardless of whether they were intended for sale or to the parent company, to other plants of the same company, or intended for further processing (assembly) in the enterprise. Therefore, manufactured products include products manufactured by the enterprise, meeting certain standards, technical conditions or contractual terms concluded between the contractor and the recipient. Products made of secondary raw material are considered as production, if they are of utility and are a direct result of the manufacturing work of the enterprise. The production also includes the so-called by-products, created in the production process simultaneously with the main product.

Sold production of industrial products is the quantity and value of products of own production or production ordered in another enterprise from provided materials, sold outside of the enterprise in the reporting period, regardless of the moment of their production.

Production under subcontracted operations is the production made on order by the contractor, from materials provided by the ordering company (principal).

Finished products are products that are not further processed within the same enterprise in which they were produced, that means products completely finished and completed, after passing the entire production process. Finished products should comply with certain standards, and in case of lack of such requirements - with specifications or contractual conditions concluded between the manufacturer and the recipient.

