

# Production of major industrial products in February 2023 

Statistics Poland

## Content-related works

Statistics Poland, Enterprises Department

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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 February 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 February 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 February 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 February 2023, manufactured production of 137 items and sold production of 100 items was higher than in February 2022. Decrease was noted on manufactured production for 308 items and on sold production for 202 items. Data on production of wheat bread, fibreboard of wood or ligneous materials and other plywood, veneered panels and similar laminated wood of coniferous wood, structural-floor clay hollow bricks and ceramic sanitary fixtures 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 February 2023 in comparison to February 2022, in the divisions covering energy raw materials production decreased e.g. of hard coal (by 17.3\%), lignite (by 13.2\%). In the divisions Food products and Beverages production decreased e.g. of sugar confectionery containing cocoa (by 42.6\%), buckwheat groats and meal (by 41.2\%), barley groats and meal (by 33.4\%), fruit wines (by 28.3\%), frozen vegetables (by 25.4\%), non-alcoholic beer (by 21.9\%), canned pig meat (by 18.7\%), liquid buttermilk (by 17.2\%). In the divisions Wearing apparel and Leather and related products production decreased e.g. of women's or girls' overcoats and similar articles, knitted or crocheted (by 49.7\%), footwear with uppers of textile materials (by 49.0\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 44.3\%), waterproof footwear, with uppers in rubber or plastics (by 41.4\%), women's or girls' trousers, overalls and shorts, not knitted (by $35.3 \%$ ). In the divisions Wood and products of wood and Paper and paper products production decreased e.g. of assembled parquet panels of wood for mosaic floors (by 48.4\%), wooden flooring materials (by 40.1\%), flat pallets and pallet collars of wood (by 33.4\%), other paper and paperboard for graphic purposes (by 32.2\%), windows of wood (by 26.8\%). In the division Chemical products production decreased e.g. of phosphatic fertilizers (by 56.4\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $54.1 \%$ ), polyvinyl chloride not mixed with any other substances (by $43.1 \%$ ), paints and varnishes other than colodium containing in solution more than $50 \%$ of solvent by weight (by $41.7 \%$ ), potassic fertilizers (by $37.2 \%$ ). In the division Rubber and plastic products production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 34.2\%), tyres for tractors (by 31.0\%), plastic sacks and bags (by 19.8\%), tyres for agricultural machinery (by 19.7\%), plastic floor, wall, ceiling coverings (by 17.0\%). In the division Other non-metallic mineral products production decreased e.g. of non-refractory clay building bricks (by $75.7 \%$ ), structuralwall clay hollow bricks (by $75.0 \%$ ), products of heat insulation of mineral wools (by 43.4\%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 35.9\%), ceramic tiles and flags (by 33.8\%), ceramic ridge tiles (by $33.8 \%$ ). In the division Basic metals production decreased e.g. of flat cold-rolled steel products width less than 600 mm (by 24.6\%), copper plates, sheets and strip (by 22.9\%), wire of steel (by 22.7\%), seamless tubes (by 21.3\%). In the division Fabricated metal products production decreased e.g. of radiators for central heating of iron or steel (by $30.8 \%$ ), hand tools of a kind used in agriculture, horticulture or forestry (by 29.3\%), hand saws; blades for saws of all kinds (by $24.9 \%$ ), nails (by $24.7 \%$ ), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by $20.7 \%$ ). In the division Electrical equipment production decreased e.g. of gas-electric cookers (by 33.7\%), automatic drying machines (by $33.4 \%$ ), vacuum cleaners (by $33.1 \%$ ), primary cells and batteries
(by 29.6\%), electric ovens for building-in (by 28.9\%), dish washing machines (by 27.3\%). In the division Machinery and equipment production decreased e.g. of concrete mixers (by 51.4\%), refrigerated show-cases and counters (by 39.7\%), vacuum pumps (by 37.3\%), kitchen and bathroom mixing valves (by 27.8\%). In the division Furniture production decreased e.g. of seats convertible into beds (by 38.2\%), kitchen furniture of wood (by 32.9\%), wooden bedroom furniture (by 26.5\%).
In February 2023 in comparison to February 2022, production increase was recorded for, among others: woven fabrics of artificial staple fibre (by 181.3\%), frozen salt water fish (by 139.5\%), bronze (by 134.1\%), woven fabrics of synthetic staple fibre (by 132.6\%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 130.8\%), barbed wire and barbed wire entanglements made from steel or steel wire (by 126.1\%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 122.4\%), dried grapes (by 113.4\%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 94.7\%), polyurethane adhesives (by 91.1\%), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by 89.3\%), asphalt (by 87.3\%), canned poultry meat (by $85.9 \%$ ), rail goods wagons (by $69.8 \%$ ), non-woven glass fibre webs, felts, mattresses and boards (by 66.6\%), inside aerials for radio or television reception (by 61.3\%), outside aerials for radio or television reception via satellite (by 58.7\%), goods vehicles, with compression-ignition internal combustion piston engine (by 56.1\%), antibiotics (by 56.0\%), reciprocating displacement compressors (by 52.3\%), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by 52.1\%), air-cooled transformers (by 48.9\%), roasted decaffeinated coffee (by 47.9\%), lorries and road tractors for semi-trailers (by 47.2\%), men's or boys' overcoats and other similar articles, not knitted (by 46.5\%), millet groats (by 40.3\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 40.2\%).
In February 2023 in comparison to February 2022, unchanged remained the production of woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses and of soap and organic surface-active products in bars, etc.

Compared to January 2023, in February 2023 manufactured production decreased for 262 products. In the divisions coverings energy raw materials production decreased of lignite (by 17.3\%), hard coal (by 12.6\%), petroleum oils and oils obtained from bituminous minerals (by 10.0\%), natural gas (by 7.9\%). In the division Food products production decreased of edible rock salt (by $35.1 \%$ ), wheat groats and meal (by 29.8\%), sugar confectionery containing cocoa (by 27.6\%), fresh bread (by 20.0\%), frozen salt water fish fillets (by 19.3\%). In the divisions Wearing apparel and Leather and related products production decreased of footwear with uppers of textile materials (by $38.9 \%$ ), women's or girls' suits and ensembles, not knitted (by 31.2\%), footwear (including waterproof footwear), incorporating a protective metal toecap, with outer soles and uppers of rubber or of plastics (by 19.3\%), men's or boys' suits and ensembles, not knitted (by 13.6\%). In the division Paper and paper products production decreased of fluting paper (by 27.5\%), uncoated, unbleached kraftliner (by 22.8\%), other paper and paperboard for graphic purposes (by 19.4\%), toilet paper (by 18.6\%), soda or sulphate wood pulp (by 18.1\%). In the division Chemical products production decreased of disinfectant wipes (by 65.5\%), disinfectant liquids and gels (by 55.7\%), soap and organic surface-active products in bars, etc., for toilet use (by 48.7\%), denatured ethyl alcohol and other denatured spirits; of any strength (by 38.2\%), polyvinyl chloride not mixed with any other substances (by 34.5\%). In the division Rubber and plastic products production decreased of rubberised textile fabrics, except tyre cord fabric (by 31.8\%), tyres for agricultural machinery (by 8.9\%), plastic sacks and bags (by 7.0\%), plates, sheet, film, foil of cellular polymers of styrene (by $6.8 \%$ ), plastic boxes, cases, crates (by 5.4\%). In the division Other non-metallic mineral products production decreased of flagstones and similar articles of concrete (by 23.2\%), structural-wall clay hollow bricks (by 20.8\%), products of heat insulation of mineral wools (by 18.4\%), bottles of colourless glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 18.3\%), porcelain or china
tableware and kitchenware (by 14.7\%). In the division Basic metals production decreased of brass (by $57.6 \%$ ), cold-rolled steel sheet width 600 mm or wider (by $13.3 \%$ ), wire of steel (by 11.1\%), unwrought unalloyed refined copper (by 10.1\%), refined unwrought lead (by 10.0\%). In the division Fabricated metal products production decreased of conductors not electrically insulated (by 27.8\%), chain (except articulated link chain) and parts thereof (by 10.9\%), iron or steel reservoirs and similar containers for solids, of a capacity > 300 litres (by 9.7\%), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by $5.7 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of LED light bulbs (by $52.2 \%$ ), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by $45.3 \%$ ), optical fibre cables (by $22.7 \%$ ), computers (by $18.3 \%$ ), lead-acid accumulators of a kind used for starting piston engines in motor vehicles, working with non-liquid electrolyte (by $17.9 \%$ ), electricity meters (by $17.2 \%$ ). In the division Machinery and equipment production decreased of vacuum pumps (by 56.1\%), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by $24.7 \%$ ), machining centres, unit construction machines and multi-station transfer machines for working metal (by $23.5 \%$ ), single stage turbo-compressors (by $11.5 \%$ ), lathes for working metal (by $10.8 \%$ ). In the divisions Motor vehicles and Other transport equipment production decreased of goods vehicles, with spark-ignition internal combustion piston engine; other goods vehicles (by $29.3 \%$ ), rail goods wagons (by $23.2 \%$ ), containers for freight transport (by 17.3\%), sea-going boats for pleasure or sports (by 8.7\%).
Compared to the previous month, in February 2023 production increased for 186 products, among others for: citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by $211.1 \%$ ), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $183.4 \%$ ), outside aerials for radio or television reception via satellite (by $172.1 \%$ ), woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses (by $166.7 \%$ ), railway or tramway steel rails (by $150.2 \%$ ), protective head caps (by $127.9 \%$ ), road tractors for semi-trailers (by $117.0 \%$ ), frozen salt water fish (by $107.4 \%$ ), concrete mixers (by $94.6 \%$ ), chocolate buttons (by $93.2 \%$ ), unsplit bovine leather for shoes (by $90.7 \%$ ), clinker (by $83.8 \%$ ), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 78.9\%), asphalt (by 72.7\%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 66.7\%), non-alcoholic beer (by $62.5 \%$ ), gas masks (by $53.3 \%$ ), women's or girls' overcoats and similar articles, knitted or crocheted (by 45.9\%), protective face shields (by $42.7 \%$ ), hot-rolled steel rods and bars (by 41.6\%), aluminium windows (by $39.9 \%$ ), pesticides and agrochemicals used in agriculture and forestry (by $39.6 \%$ ), tomato juice (by $38.8 \%$ ), woven fabrics of artificial staple fibre (by $38.5 \%$ ), public transport vehicles (by $38.4 \%$ ), copper plates, sheets and strip (by $37.9 \%$ ), motor oils (by $31.2 \%$ ), textile hosepiping and similar textile tubing (by 31.0\%).
Production of food preparations for infants, excluding homogenised composite food preparations and of mechanical non-invasive ventilation apparatus remained at the same level as in the previous month.

Summarizing the manufactured production in the period January-February 2023, in comparison with the corresponding period of the previous year decrease of production was recorded for 294 items, among others: parts of therapeutic respiration apparatus (by 86.3\%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 79.6\%), toluene (by 78.6\%), non-refractory clay building bricks (by 73.5\%), disinfectant wipes (by 65.2\%), filament lamps of a power $\leq 200 \mathrm{~W}$ and for a voltage > 100 V (by 59.9\%), filament lamps (by 57.3\%), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by $56.9 \%$ ), fire-fighting vehicles (by $55.3 \%$ ), polypropylene synthetic tow and staple (by $52.4 \%$ ), woven fabrics of flax, containing $\geq 85 \%$ by weight of flax (by $52.2 \%$ ), woven fabrics of synthetic or artificial filament yarns (by $52.1 \%$ ), city/touring bicycles (by $52.1 \%$ ), concrete mixers (by $50.7 \%$ ), sugar (by $47.6 \%$ ), assembled parquet panels of wood for mosaic floors (by $47.5 \%$ ),
bicycles (by 46.3\%), denatured ethyl alcohol and other denatured spirits; of any strength (by 45.8\%), phosphatic fertilizers (by 43.0\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $40.9 \%$ ), products of heat insulation of mineral wools (by 39.5\%), wooden flooring materials (by 39.4\%), paints and varnishes other than colodium containing in solution more than $50 \%$ of solvent by weight (by $39.2 \%$ ), denatured ethyl alcohol with a vol. strength of $60 \%$ and more (by 37.7\%), fruit wines (by 37.5\%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by $37.5 \%$ ).
In the period January-February 2023 compared with the corresponding period of the previous year, production increased for 155 items, among others for: iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by $213.5 \%$ ), woven fabrics of synthetic staple fibre (by 143.2\%), antibiotics (by 132.4\%), asphalt (by 119.6\%), canned poultry meat (by 98.4\%), polyurethane adhesives (by 96.9\%), rail goods wagons (by $90.2 \%$ ), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by $84.0 \%$ ), inside aerials for radio or television reception (by $76.4 \%$ ), reciprocating displacement compressors (by $75.2 \%$ ), woven fabrics of artificial staple fibre (by $70.3 \%$ ), frozen salt water fish (by $67.8 \%$ ), men's or boys' overcoats and other similar articles, not knitted (by 57.9\%), other prepared dishes and meals (by $56.7 \%$ ), air-cooled transformers (by $56.3 \%$ ), lorries and road tractors for semi-trailers (by $52.2 \%$ ), soap with disinfectant properties (by 47.8\%), women's or girls' suits and ensembles, not knitted (by 45.3\%). Unchanged remained the production of dentifrices.

## SOLD PRODUCTION

The indicators of the dynamics of sold production of industrial products varied in individual sectors. In February 2023 in comparison to February 2022, in the divisions covering energy raw materials sold production decreased of hard coal (by 18.5\%). In the divisions Food products and Beverages production decreased of sugar confectionery containing cocoa (by $36.8 \%$ ), barley groats and meal (by $34.7 \%$ ), buckwheat groats and meal (by $30.4 \%$ ), apple juice (by $30.3 \%$ ), wheat groats and meal (by 26.4\%), fruit wines (by $23.7 \%$ ), vodka (by 23.0\%). In the divisions Wearing apparel and Leather and related products production decreased of footwear with uppers of textile materials (by 61.2\%), men's or boys' overcoats and similar articles, knitted or crocheted (by $53.8 \%$ ), women's or girls' trousers, overalls and shorts, not knitted (by 46.9\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 43.2\%). In the divisions Wood and products of wood and Paper and paper products production decreased of assembled parquet panels of wood for mosaic floors (by 49.2\%), other paper and paperboard for graphic purposes (by 41.1\%), wooden flooring materials (by $35.8 \%$ ), flat pallets and pallet collars of wood (by 34.4\%), veneers (by 31.1\%), windows of wood (by $28.1 \%$ ). In the division Chemical products production decreased of phosphatic fertilizers (by $70.1 \%$ ), potassic fertilizers (by $53.9 \%$ ), denatured ethyl alcohol and other denatured spirits; of any strength (by 44.9\%), nitrogenous fertilizers (by 37.4\%), chemical fibres (by 33.6\%). In the division Rubber and plastic products production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by $31.2 \%$ ), tableware and kitchenware of plastic (by $26.6 \%$ ), plastic sacks and bags (by $16.1 \%$ ), rigid tubes, pipes and hoses of polymers of ethylene (by 15.8\%), plastic boxes, cases, crates (by $15.2 \%$ ). In the division Other non-metallic mineral products production decreased of structural-floor clay hollow ceramic ridge tiles (by 69.5\%), autoclaved cellular concrete (by $56.7 \%$ ), ceramic roof tiles (by $56.3 \%$ ), building blocks of light concrete (by $55.4 \%$ ), nonrefractory clay building bricks (by $51.7 \%$ ), structural-wall clay hollow bricks (by 49.9\%). In the division Basic metals production decreased of flat cold-rolled steel products width less than 600 mm (by 22.1\%), copper and copper alloy bars, rods and profiles (by 17.3\%), hot-rolled steel rods and bars (by $14.6 \%$ ). In the division Fabricated metal products production decreased of hand tools of a kind used in agriculture, horticulture or forestry (by 36.5\%), nails (by 26.1\%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 20.1\%),
aluminium doors (by 18.5\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of single-phase current motors (by $54.2 \%$ ), domestic gas cookers with an oven (by 35.3\%), electric cookers including gas-electric cookers (by 30.7\%), automatic drying machines (by 29.8\%), gas meters (by 29.7\%), dish washing machines (by 28.9\%), electric ovens for building-in (by 28.3\%). In the division Machinery and equipment production decreased of rotary displacement compressors (by 38.0\%), refrigerated show-cases and counters (by $34.3 \%$ ), pick-up straw and fodder balers (by $24.6 \%$ ), kitchen and bathroom mixing valves (by $22.3 \%$ ), ploughs (by $22.3 \%$ ). In the division Other transport equipment production decreased of bicycles (by $50.8 \%$ ), containers for freight transport (by $5.4 \%$ ). In the division Furniture production decreased of seats convertible into beds (by $37.2 \%$ ), kitchen furniture of wood (by 24.7\%), wooden furniture for the dining-room and living-room (by 14.4\%).
Compared with the corresponding month of the previous year, production increase was recorded for, among others: iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 662.5\%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by $325.2 \%$ ), woven fabrics of synthetic staple fibre (by 157.6\%), first-aid boxes and kits (by 136.4\%), vegetable pickles (by 131.6\%), polyurethane adhesives (by 119.2\%), reciprocating displacement compressors (by 118.2\%), rail goods wagons (by 107.0\%), canned poultry meat (by $104.7 \%$ ), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $93.3 \%$ ), air-cooled transformers (by $84.2 \%$ ), crude rape and colza oil and their fractions, for human consumption (by $74.1 \%$ ), basic pharmaceutical products (by 51.1\%), asphalt (by 48.0\%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by $37.6 \%$ ), chocolate buttons (by $36.8 \%$ ), panty hose and tights (by $36.0 \%$ ), motor oils (by $32.1 \%$ ), vehicle compression-ignition engines (by $31.2 \%$ ), lubricating petroleum oils and heavy preparations n.e.c. (by $30.9 \%$ ), orthopaedic appliances, splints and other fracture appliances (by 29.8\%), prepared meals and dishes based on meat (by 29.7\%), internal combustion engines for vehicles (by $27.6 \%$ ), electricity meters (by $24.3 \%$ ), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 23.7\%).
Compared to January 2023, in February 2023 sold production decreased for 175 products. In the division Food products production decreased of other prepared dishes and meals (by 34.1\%), frozen salt water fish fillets (by 31.6\%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 30.8\%), apple juice (by 25.6\%), fresh bread (by 19.8\%), poultry carcasses (by $19.4 \%$ ), sugar confectionery containing cocoa (by $18.2 \%$ ), fruit and vegetable juice (by $16.7 \%$ ), wheat groats and meal (by $16.5 \%$ ). In the divisions Wearing apparel and Leather and related products production decreased of men's or boys' suits and ensembles, not knitted (by 36.8\%), footwear (including waterproof footwear), men's or boys' shirts, not knitted (by 17.2\%), waterproof footwear, with uppers in rubber or plastics (by 6.7\%). In the divisions Wood and products of wood and Paper and paper products production decreased of toilet paper (by 18.3\%), assembled parquet panels of wood other than for mosaic floors (by $16.1 \%$ ), fluting paper (by $13.8 \%$ ), particle and similar boards of wood and ligneous materials (by $13.1 \%$ ), veneers (by $12.2 \%$ ). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of asphalt (by 63.0\%), phosphatic fertilizers (by 40.0\%), rectified spirit (ethyl alcohol) (by 23.4\%), liquefied propane and butane (by 20.9\%), motor oils (by 20.7\%), diesel oils (by 17.0\%), chemical fibres (by 16.0\%), motor gasoline (by 15.9\%). In the division Rubber and plastic products production decreased of plastic sacks and bags (by 33.8\%), rigid tubes, pipes and hoses of polymers of ethylene (by 8.3\%), plastic boxes, cases, crates (by 8.1\%). In the division Other non-metallic mineral products production decreased of ceramic ridge tiles (by $37.8 \%$ ), flagstones and similar articles of concrete (by $27.2 \%$ ), autoclaved cellular concrete (by $25.8 \%$ ), building blocks of light concrete (by $24.8 \%$ ), ceramic roof tiles (by $21.0 \%$ ). In the division Basic metals production decreased of copper and copper alloy bars, rods and profiles (by $13.6 \%$ ), flat cold-rolled steel products width less than 600 mm (by $9.3 \%$ ). In the division

Fabricated metal products production decreased of and tools of a kind used in agriculture, horticulture or forestry (by 13.4\%), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by 13.4\%). In the division Electrical equipment production decreased of optical fibre cables (by 13.4\%), domestic gas cookers with an oven (by 12.5\%), electric cookers including gas-electric cookers (by 12.1\%), lead-acid accumulators for motor vehicles (by 10.3\%), refrigerators and freezers, including combined refrigerators-freezers (by 10.0\%). In the division Machinery and equipment production decreased of fire extinguishers (by 40.5\%), kitchen and bathroom mixing valves (by 25.1\%), machine tools for machining metals (by 12.5\%), ploughs (by $7.9 \%$ ). In the divisions Motor vehicles and Other transport equipment production decreased of sea-going boats for pleasure or sports (by 20.9\%), containers for freight transport (by 14.7\%), city/touring bicycles (by 11.7\%), passenger cars (by 11.3\%).
Compared with the previous month, production increase was recorded for 128 products, among others for: electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by 182.5\%), chocolate buttons (by 98.1\%), pesticides and agrochemicals used in agriculture and forestry (by $90.2 \%$ ), vegetable pickles (by $65.6 \%$ ), rusks, toasted bread and similar toasted products (by $45.8 \%$ ), leather of bovine animals (by $45.2 \%$ ), nitrogenous fertilizers (by $45.1 \%$ ), steel doors (by 44.7\%), panty hose and tights (by 41.8\%), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 39.4\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 39.2\%), pick-up straw and fodder balers (by 37.3\%), orthopaedic appliances, splints and other fracture appliances (by 34.7\%), building bituminous felt (by 32.3\%), public transport vehicles (by 28.5\%), canned fish (by 24.5\%), reciprocating displacement compressors (by 24.3\%), women's or girls' blouses and shirts, not knitted (by 24.2\%), edible evaporated salt (by 22.9\%), cold-rolled steel sheet width 600 mm or wider (by 21.9\%), polyurethane adhesives (by 21.7\%), roasted coffee, not decaffeinated (by 21.5\%), tomato juice (by $21.4 \%$ ), refrigerated show-cases and counters (by 21.2\%), aluminium windows (by $21.0 \%$ ).

In January - February 2023 compared with the corresponding period of the previous year, sold production decrease was recorded for 191 products, among others for: ceramic ridge tiles (by 63.5\%), woven fabrics of synthetic or artificial filament yarns (by 62.9\%), potassic fertilizers (by 59.1\%), phosphatic fertilizers (by 57.6\%), women's or girls' trousers, overalls and shorts, not knitted (by 50.2\%), ceramic roof tiles (by 48.3\%), nitrogenous fertilizers (by 47.8\%), nonrefractory clay building bricks (by 47.7\%), bottles of coloured glass of a nominal capacity $<2,5$ litres, for beverages and foodstuff (by 47.5\%), single-phase current motors (by 46.7\%), assembled parquet panels of wood for mosaic floors (by 46.6\%), structural-wall clay hollow bricks (by 45.9\%), denatured ethyl alcohol and other denatured spirits; of any strength (by 45.8\%), autoclaved cellular concrete (by 41.6\%), products of heat insulation of mineral wools (by 40.7\%), building blocks of light concrete (by 40.3\%), bicycles (by 40.0\%), seats convertible into beds (by 37.1\%), fruit wines (by 36.1\%), special fabrics including pile fabrics and terry towelling (by 36.1\%), other paper and paperboard for graphic purposes (by 36.1\%), sugar confectionery containing cocoa (by 35.9\%), refrigerated show-cases and counters (by 35.6\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 35.2\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by $35.1 \%$ ), wooden flooring materials (by 34.8\%), footwear with uppers of textile materials (by 34.2\%), flat pallets and pallet collars of wood (by 33.0\%).
In January - February 2023 compared with the corresponding period of the previous year, production increase was recorded for 111 products, among others for: woven fabrics of synthetic staple fibre (by 127.1\%), asphalt (by 110.3\%), canned poultry meat (by 98.0\%), polyurethane adhesives (by 97.1\%), rail goods wagons (by 88.3\%), vegetable pickles (by 77.6\%), reciprocating displacement compressors (by $72.9 \%$ ), crude rape and colza oil and their fractions, for human consumption (by 71.9\%), air-cooled transformers (by 58.8\%), basic pharmaceutical products (by 58.3\%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 56.1\%), fire extinguishers (by 39.6\%), medicaments, containing penicillins or other antibiotics (by 39.5\%),
vehicle compression-ignition engines (by 35.4\%), electric conductors, for a voltage > 1000 V (by 31.0\%), panty hose and tights (by 30.0\%), public transport vehicles (by 29.7\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 28.3\%), prepared meals and dishes based on meat (by 27.8\%), motor oils (by 27.1\%), internal combustion engines for vehicles (by 26.2\%), electricity meters (by 26.0\%), hosiery (by 24.7\%), medicaments and other pharmaceutical preparations (by 24.5\%).
In January - February 2023 compared with January - February 2022, unchanged remained the production of men's or boys' shirts, not knitted.

## 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.

