



Warsaw 2023 **Production of major industrial products  
in May 2023**





## **Production of major industrial products in May 2023**

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## Preface

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 confidentiality) or providing data impossible or purposeless
(*)	revised data
of which	indicates that not all elements of the sum are given

## Main abbreviations

Symbol	Description
Cu	copper
dam <sup>3</sup>	cubic decametre
GWh	gigawatt-hour
hm <sup>3</sup>	cubic hectometre
km	kilometer
MVA	megavolt-ampere
MW	megawatt
PLN	Polish zloty
thousand hectolitre 10%	thousand hectolitre of converted volume of product with 10% component content



## Introduction

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 May 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 May 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 May 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 May 2023, manufactured production of 125 items and sold production of 75 items was higher than in May 2022. Decrease was noted on manufactured production for 323 items and on sold production for 226 items. Data on production of wheat bread, homogenised composite food preparations for infant food or dietetic purposes, vodka, rectified spirit, float glass, seamless tubes, steel barbed wire, other centrifugal pumps for liquids and soap with disinfectant properties 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 May 2023 in comparison to May 2022**, in the divisions covering energy raw materials production decreased of e.g. lignite (by 36.4%), hard coal (by 13.4%), petroleum oils and oils obtained from bituminous minerals (by 5.6%), natural gas (by 3.1%). In the division *Food products* production decreased of e.g. edible rock salt (by 63.8%), canned beef and veal meat (by 54.9%), frozen salt water fish (by 54.9%), edible evaporated salt (by 48.8%), canned poultry meat (by 44.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of e.g. waterproof footwear, with uppers in rubber or plastics (by 63.8%), men's or boys' overcoats and similar articles, knitted or crocheted (by 48.6%), footwear with uppers of textile materials (by 44.5%), women's or girls' trousers, overalls and shorts, not knitted (by 42.6%), women's or girls' blouses and shirts, not knitted (by 32.4%). 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 61.7%), other paper and paperboard for graphic purposes (by 36.5%), flat pallets and pallet collars of wood (by 33.5%), assembled parquet panels of wood other than for mosaic floors (by 32.3%), sacks and bags of paper (by 25.9%), windows of wood (by 24.7%). In the division *Chemical products* production decreased of e.g. polyvinyl chloride not mixed with any other substances (by 55.2%), potassic fertilizers (by 51.4%), oleum (by 51.1%), anhydrous ammonia (by 49.5%), 6-hexanelactam (by 47.0%), phosphatic fertilizers (by 46.3%). In the division *Rubber and plastic products* production decreased of e.g. tyres for agricultural machinery (by 45.7%), tyres for tractors (by 36.4%), tyres for lorries and buses (by 26.3%), plastic sacks and bags (by 20.6%), plastic windows (by 20.6%), rigid tubes, pipes and hoses of polymers of ethylene (by 20.1%). In the division *Other non-metallic mineral products* production decreased of e.g. ceramic ridge tiles (by 72.5%), building blocks of light concrete (by 57.2%), products of heat insulation of mineral wools (by 41.5%), calcium-silicate brick (by 38.8%), lime (by 35.1%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 34.8%). In the division *Basic metals* production decreased of e.g. brass (by 80.7%), copper plates, sheets and strip (by 47.9%), hot-rolled steel rods and bars (by 45.2%), pig iron (by 34.1%), crude steel (by 31.1%), cold-rolled steel sheet width 600 mm or wider (by 30.5%). In the division *Fabricated metal products* production decreased of e.g. nails (by 41.1%), radiators for central heating of iron or steel (by 34.1%), steel doors (by 25.0%), food cans of tinfoil (by 22.5%), aluminium doors (by 21.0%), aluminium windows (by 20.5%). In the division *Electrical equipment* production decreased of e.g. primary cells and batteries (by 58.3%), automatic drying machines (by 40.2%), gas-electric cookers (by 32.3%), dish washing machines (by 28.9%), vacuum cleaners (by 27.4%), automatic washing and washing-drying machines (by 26.3%). In the division *Machinery and equipment* production decreased of e.g. concrete

mixers (by 65.9%), ploughs (by 49.5%), loaders for general use in agriculture (by 30.6%), field sowers (by 29.4%), refrigerated show-cases and counters (by 28.5%), hydraulic pumps (by 26.7%). In the division *Furniture* production decreased of e.g. seats convertible into beds (by 17.2%), seats with wooden frames (by 17.1%), kitchen furniture of wood (by 16.5%).

In May 2023 in comparison to May 2022, production increase was recorded for, among others: textile floor coverings (by 157.3%), reciprocating displacement compressors (by 156.5%), bronze (by 133.9%), rail goods wagons (by 117.3%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 76.7%), women's or girls' overcoats and similar articles, not knitted (by 75.3%), phenol (by 69.0%), women's or girls' overcoats and similar articles, knitted or crocheted (by 67.6%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 g/m<sup>2</sup>, for clothing (by 59.0%), electricity meters (by 54.8%), filament lamps for a voltage < 100 V, for general use (by 53.5%), asphalt (by 52.2%), paints and varnishes, based on polyesters, weight of the solvent more than 50% (by 51.2%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 50.7%), roasted decaffeinated coffee (by 49.7%), cash registers (by 45.8%), panty hose and tights (by 44.6%), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by 43.6%), denatured ethyl alcohol with a vol. strength of 60% and more (by 41.3%), syringes, with or without needles (by 40.3%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 34.7%), electric motors and generators, excluding traction motors (by 34.6%).

In May 2023 in comparison to May 2022, unchanged remained the production of kefir, sour milk and sour cream.

**Compared to April 2023, in May 2023** manufactured production increased for 277 products. In the divisions covering energy raw materials production increased of e.g. hard coal (by 9.8%). In the division *Food products* production increased of e.g. vegetable pickles (by 143.4%), chocolate buttons (by 113.7%), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by 101.2%), buckwheat groats and meal (by 93.3%), crispbread (by 51.3%), tomato juice (by 43.6%). In the division *Wearing apparel* production increased of e.g. women's or girls' overcoats and similar articles, not knitted (by 44.0%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 37.8%), men's or boys' trousers, overalls and shorts, not knitted (by 35.4%), women's or girls' trousers, overalls and shorts, not knitted (by 28.2%), men's or boys' overcoats and other similar articles, not knitted (by 27.2%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased of e.g. wadding; other articles of wadding (by 36.6%), sacks and bags of paper (by 30.2%), other paper and paperboard for graphic purposes (by 26.4%), folding cartons, boxes and cases of non-corrugated paper or paperboard (by 21.1%), assembled parquet panels of wood for mosaic floors (by 17.9%). In the division *Chemical products* production increased of e.g. acetic acid (by 89.1%), phenol (by 56.7%), denatured ethyl alcohol and other denatured spirits; of any strength (by 37.5%), paints and varnishes, based on polyesters, weight of the solvent more than 50% (by 35.2%), pesticides and agrochemicals used in agriculture and forestry (by 32.6%). In the division *Rubber and plastic products* production increased of e.g. tyres for tractors (by 64.7%), tableware and kitchenware of plastic (by 34.8%), tyres for agricultural machinery (by 16.5%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 14.6%), plates, sheet, film, foil of cellular polymers of styrene (by 11.4%). In the division *Other non-metallic mineral products* production increased of e.g. building bituminous felt (by 41.0%), structural-wall clay hollow bricks (by 35.0%), double glazed units (by 33.5%), gypsum plasters (by 28.3%), boards, sheets and similar articles of plaster, other than faced or reinforced only with paper (by 19.4%). In the division *Basic metals* production increased of e.g. copper and copper alloy bars, rods and profiles (by 25.6%), wire of steel (by 14.6%), zinc, electrolytic (by 8.1%), flat bars, rods and profiles of aluminium (by 6.8%), cathodes of copper (by 5.4%). In the division *Fabricated metal products* production increased of e.g. food cans of tinfoil (by 56.7%), aluminium reservoirs, tanks and similar containers for any

material (other than compressed or liquefied gas), of a capacity > 300 litres (by 42.2%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 23.2%), aluminium windows (by 18.4%), steel doors (by 11.0%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of e.g. filament lamps for a voltage < 100 V, for general use (by 32.0%), primary cells and batteries (by 29.0%), electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 19.1%), gas meters (by 14.8%), electric motors and generators, excluding traction motors (by 14.8%). In the division *Machinery and equipment* production increased of e.g. machine tools for machining metals (by 95.6%), kitchen and bathroom mixing valves (by 51.8%), machinery for construction, road and drainage work (by 43.5%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 25.0%), reciprocating displacement compressors (by 24.5%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. , city/touring bicycles (by 44.6%), rail goods wagons (by 39.0%), goods vehicles, with spark-ignition internal combustion piston engine; other goods vehicles (by 35.3%), containers for freight transport (by 10.2%).

Compared with the previous month, production decrease was recorded for 167 products, among others for: women's or girls' overcoats and similar articles, knitted or crocheted (by 61.4%), filament lamps (by 60.5%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 58.6%), ploughs (by 58.3%), brass (by 57.9%), wire of aluminium (by 56.2%), inside aerials for radio or television reception (by 54.2%), millet groats (by 49.4%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 g/m<sup>2</sup>, for household linen or home furnishing textiles (by 48.6%), face masks used in medicine (by 48.5%), woven fabrics of artificial staple fibre (by 42.4%), polyvinyl chloride not mixed with any other substances (by 41.3%), ceramic ridge tiles (by 39.6%), scarifiers and cultivators (by 38.7%), protective clothing (overalls, aprons) (by 35.2%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 35.1%), women's or girls' jackets, not knitted (by 34.4%), frozen fruit and nuts (by 32.8%), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by 30.9%), articles of bedding filled other than with feathers or down (by 30.4%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 29.8%), concrete mixers (by 29.7%), hot-rolled steel rods and bars (by 29.6%), non-woven glass fibre webs, felts, mattresses and boards (by 27.7%).

Production of canned pig meat, lathes for working metal and wooden furniture for the dining-room and living-room remained at the same level as in the previous month.

**Summarizing the manufactured production in the period January–May 2023**, in comparison with the corresponding period of the previous year decrease of production was recorded for 316 items, among others: bricks made of clay (by 98.4%), face masks used in medicine (by 97.0%), other protective face masks (by 93.9%), wire of aluminium (by 93.0%), toluene (by 89.7%), food grinders, mixers and juice extractors (by 82.9%), structural-floor clay hollow bricks (by 80.1%), woven fabrics of carded wool or carded fine animal hair (by 61.3%), bed linen (by 56.7%), concrete mixers (by 55.0%), buckwheat groats and meal (by 54.1%), assembled parquet panels of wood for mosaic floors (by 53.3%), city/touring bicycles (by 51.8%), disinfectant wipes (by 51.4%), outside aerials for radio or television reception via satellite (by 51.2%), ceramic ridge tiles (by 51.1%), structural-wall clay hollow bricks (by 50.0%), woven fabrics of synthetic or artificial filament yarns (by 48.5%), filament lamps of a power ≤ 200 W and for a voltage > 100 V (by 48.0%), waterproof footwear, with uppers in rubber or plastics (by 46.7%), women's or girls' trousers, overalls and shorts, not knitted (by 46.3%), filament lamps (by 45.5%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 g/m<sup>2</sup>, for household linen or home furnishing textiles (by 44.3%), barley groats and meal (by 43.8%).

In January - May compared with the corresponding period of the previous year, production increase was recorded for 132 products, among others for: goods vehicles, with compression-ignition internal combustion piston engine (by 71.7%), rail goods wagons (by 69.8%), lorries and

road tractors for semi-trailers (by 68.2%), electric conductors, for a voltage  $\leq 1\,000$  V, fitted with connectors (by 67.3%), mechanical non-invasive ventilation apparatus (by 66.7%), road tractors for semi-trailers (by 53.5%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 52.1%), textile floor coverings (by 49.7%), women's or girls' overcoats and similar articles, not knitted (by 49.0%), reciprocating displacement compressors (by 48.8%), air-cooled transformers (by 47.8%), asphalt (by 46.5%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity  $> 300$  litres (by 43.0%), rubberised textile fabrics, except tyre cord fabric (by 42.8%), woven fabrics of synthetic staple fibre (by 41.9%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 41.8%), roasted decaffeinated coffee (by 41.7%), vehicle compression-ignition engines (by 37.1%), electricity meters (by 36.8%), bronze (by 36.0%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 35.3%), lead-acid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by 33.2%), textile fabrics, impregnated, coated or covered n.e.c. (by 33.1%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity  $> 300$  litres (by 33.0%), filament lamps for a voltage  $< 100$  V, for general use (by 32.9%), compressors for refrigeration equipment (by 28.4%), woven fabrics of cotton, not of yarns of different colours, weighing  $> 200$  g/m<sup>2</sup>, for clothing (by 28.2%). Production of tomato juice and motor oils was at the same level as in the corresponding period of the previous year.

### SOLD PRODUCTION

The indicators of the dynamics of sold production of industrial products varied in individual sectors. **In May 2023 in comparison to May 2022**, in the divisions covering energy raw materials production decreased of hard coal (by 25.3%). In the division *Food products* production decreased of e.g. buckwheat groats and meal (by 42.6%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 41.6%), tea in immediate packings of a content  $\leq 3$  kg (by 37.0%), canned pig meat (by 30.7%), rendered pork fat suitable for consumption (by 29.6%), frozen salt water fish (by 29.3%), extracts, essences and concentrates, of coffee, and preparations with a basis of them or with a basis of coffee (by 28.2%), edible evaporated salt (by 27.5%). 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 67.5%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 58.1%), waterproof footwear, with uppers in rubber or plastics (by 54.7%), women's or girls' trousers, overalls and shorts, not knitted (by 45.2%), footwear with uppers of textile materials (by 44.8%). 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 66.5%), wooden flooring materials (by 39.5%), veneers (by 36.3%), other paper and paperboard for graphic purposes (by 32.0%), sacks and bags of paper (by 30.2%), flat pallets and pallet collars of wood (by 28.6%), windows of wood (by 27.7%), coniferous sawnwood (by 23.9%), sawnwood (by 23.1%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. phosphatic fertilizers (by 69.7%), potassic fertilizers (by 62.5%), chemical fibres (by 37.8%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 35.8%), distilled ethyl alcohol (by 26.8%), synthetic calcium sulphate (by 23.0%), diesel oils (by 19.0%). In the division *Rubber and plastic products* production decreased of e.g. rigid tubes, pipes and hoses of polymers of ethylene (by 27.0%), plastic sacks and bags (by 20.0%), plastic windows (by 20.0%), tyres (by 14.6%). In the division *Other non-metallic mineral products* production decreased of e.g. bricks made of clay (by 94.9%), ceramic ridge tiles (by 63.7%), structural-floor clay hollow bricks (by 55.4%), ceramic roof tiles (by 47.2%), autoclaved cellular concrete (by 46.5%), products of heat insulation of mineral wools (by 46.4%), building blocks of light concrete (by 46.1%), non-refractory clay building bricks (by 43.2%), structural-wall clay hollow bricks (by 40.1%). In the division *Basic metals* production decreased of e.g. hot-rolled steel rods and bars (by 35.5%), cold-rolled steel sheet width 600 mm or wider (by 30.0%), copper and copper alloy bars, rods and profiles (by 21.8%), wire of steel (by 21.2%). In the division



*Fabricated metal products* production decreased of e.g. food cans of tinfoil (by 57.3%), nails (by 38.5%), aluminium windows (by 27.3%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 25.9%), aluminium doors (by 22.3%). In the division *Electrical equipment* production decreased of e.g. domestic gas cookers with an oven (by 46.9%), single-phase current motors (by 43.4%), automatic drying machines (by 36.3%), dish washing machines (by 34.8%), automatic washing and washing-drying machines (by 25.7%), electric ovens for building-in (by 25.1%). In the division *Machinery and equipment* production decreased of e.g. ploughs (by 59.6%), field sowers (by 45.7%), rotary displacement compressors (by 44.5%), machinery for construction, road and drainage work (by 29.8%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. bicycles (by 25.0%), containers for freight transport (by 19.1%), sea-going boats for pleasure or sports (by 9.7%). In the division *Furniture* production decreased of e.g. kitchen furniture of wood (by 25.0%), seats with wooden frames (by 20.7%), seats convertible into beds (by 18.9%), wooden bedroom furniture (by 15.3%). Compared with the corresponding month of the previous year, production increase was recorded for, among others: electric conductors, for a voltage  $\leq 1\,000$  V, fitted with connectors (by 238.3%), rail goods wagons (by 86.7%), women's or girls' overcoats and similar articles, knitted or crocheted (by 76.4%), orthopaedic appliances, splints and other fracture appliances (by 65.1%), basic pharmaceutical products (by 56.5%), electric motors and generators, excluding traction motors (by 52.9%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 52.2%), tomato juice (by 50.0%), electricity meters (by 49.0%), cash registers (by 45.1%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by 43.2%), reciprocating displacement compressors (by 42.1%), vehicle compression-ignition engines (by 40.9%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 39.8%), air-cooled transformers (by 34.2%), lead-acid accumulators for motor vehicles (by 29.9%), butter (by 25.5%), internal combustion engines for vehicles (by 24.0%), roasted coffee, not decaffeinated (by 23.6%), textile fabrics, impregnated, coated or covered n.e.c. (by 23.4%), prepared meals and dishes based on vegetables (by 21.9%), medicaments, containing penicillins or other antibiotics (by 19.6%).

In comparison with the corresponding month of the previous year, production of refrigerators and freezers, including combined refrigerators-freezers was at the same level.

**Compared to April 2023, in May 2023** sold production increased for 203 products. In the division *Food products* production increased of e.g. vegetable pickles (by 90.7%), tomato juice (by 62.6%), sugar confectionery containing cocoa (by 58.9%), pasta (by 47.7%), liquid buttermilk (by 38.9%), canned poultry meat (by 33.8%), standardized cream (by 27.5%), butter (by 27.1%). In the divisions *Wearing apparel* and *Leather and related products* production increased of e.g. women's or girls' trousers, overalls and shorts, not knitted (by 76.8%), women's or girls' dresses and skirts, not knitted (by 53.3%), men's or boys' trousers, overalls and shorts, not knitted (by 29.0%), footwear with uppers of textile materials (by 20.0%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased of e.g. assembled parquet panels of wood for mosaic floors (by 25.0%), sacks and bags of paper (by 17.8%), other paper and paperboard for graphic purposes (by 17.1%), corrugated paperboard (by 15.0%), wooden flooring materials (by 13.1%), paper and paperboard (by 11.8%). In the division *Chemical products* production increased of e.g. nitrogenous fertilizers (by 66.5%), glues and adhesives based on synthetic resins (by 19.2%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 19.0%). In the division *Rubber and plastic products* production increased of e.g. tableware and kitchenware of plastic (by 48.9%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 25.3%), plastic sacks and bags (by 12.3%). In the division *Other non-metallic mineral products* production increased of e.g. building bituminous felt (by 91.7%), structural-floor clay hollow bricks (by 41.4%), double glazed units (by 32.9%), factory made mortars (by 30.7%). In the division *Basic metals* production increased of e.g. wire of steel (by 13.1%), copper and copper alloy bars, rods and profiles (by 12.3%), flat cold-rolled steel products width less than 600 mm (by 8.2%). In the division *Fabricated metal products* production increased of

e.g. hand tools of a kind used in agriculture, horticulture or forestry (by 59.9%), food cans of tinfoil (by 39.8%), steel doors (by 32.9%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of e.g. vacuum cleaners (by 21.9%), lead-acid accumulators for motor vehicles (by 17.9%), gas meters (by 12.2%). In the division *Machinery and equipment* production increased of e.g. machine tools for machining metals (by 97.9%), cash registers (by 70.9%), rotary displacement compressors (by 22.0%), loaders for general use in agriculture (by 20.4%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. rail goods wagons (by 34.9%), city/touring bicycles (by 14.6%), vehicle compression-ignition engines (by 12.0%).

Compared with the previous month, production decrease was recorded for 96 products, among others for: woven fabrics of synthetic or artificial filament yarns (by 74.9%), ploughs (by 61.1%), syringes, with or without needles (by 59.2%), frozen salt water fish fillets (by 49.7%), scarifiers and cultivators (by 39.0%), women's or girls' blouses and shirts, not knitted (by 32.8%), veneers (by 31.1%), field sowers (by 30.7%), sodium hydroxide in aqueous solution (by 30.4%), ceramic ridge tiles (by 28.7%), automatic drying machines (by 28.5%), phosphatic fertilizers (by 27.3%), hot-rolled steel rods and bars (by 27.1%), soil machinery for agriculture and forestry (by 26.1%), domestic gas cookers with an oven (by 21.6%), millet groats (by 19.5%).

Production of soups and broths and preparations therefor, water meters and wooden bedroom furniture remained at the same level as in the previous month.

**In the period January – May 2023**, compared with the corresponding period of the previous year, sold production decrease was recorded for 226 products, among others for: structural-floor clay hollow bricks (by 59.9%), women's or girls' trousers, overalls and shorts, not knitted (by 56.9%), phosphatic fertilizers (by 52.2%), single-phase current motors (by 51.6%), non-refractory clay building bricks (by 47.5%), autoclaved cellular concrete (by 47.3%), footwear with uppers of textile materials (by 47.0%), building blocks of light concrete (by 46.3%), structural-wall clay hollow bricks (by 45.0%), ceramic roof tiles (by 43.2%), waterproof footwear, with uppers in rubber or plastics (by 42.0%), products of heat insulation of mineral wools (by 42.0%), buckwheat groats and meal (by 41.3%), wooden flooring materials (by 41.0%), automatic drying machines (by 36.0%), chemical fibres (by 34.4%), calcium-silicate brick (by 33.5%), special fabrics including pile fabrics and terry towelling (by 33.2%), nails (by 33.1%), nitrogenous fertilizers (by 33.0%).

In the period January – May 2023 compared with the corresponding period of the previous year, production increase was recorded for 76 products, among others for: first-aid boxes and kits (by 75.7%), air-cooled transformers (by 45.7%), electricity meters (by 41.3%), vehicle compression-ignition engines (by 40.7%), passenger cars (by 31.1%), medicaments, containing penicillins or other antibiotics (by 25.6%), panty hose and tights (by 24.9%), prepared meals and dishes based on meat (by 23.3%), polyurethane adhesives (by 23.0%), frozen salt water fish fillets (by 22.7%), asphalt (by 20.4%), cash registers (by 19.0%), soap in the form of paste or liquid soap (by 18.4%), lead-acid accumulators for motor vehicles (by 16.6%), roasted coffee, not decaffeinated (by 15.2%).

## 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](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.