



Warsaw 2023

Production of major industrial products in September 2023



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Content-related works

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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 ³	cubic decametre
GWh	gigawatt-hour
hm ³	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 September 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 September 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 September 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 September 2023, manufactured production of 160 items and sold production of 94 items was higher than in September 2022. Decrease was noted on manufactured production for 290 items and on sold production for 208 items. Data on production of slaughter products of pigs, wheat bread; woven fabrics of synthetic filament yarns and artificial filament yarn, hosiery, barbed wire and barbed wire entanglements made from steel or steel wire and other centrifugal pumps for liquids; other pumps 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 September 2023 in comparison to September 2022**, in the divisions covering energy raw materials production decreased of e.g. lignite (by 30.4%), petroleum oils and oils obtained from bituminous minerals (by 13.3%). In the divisions *Food products* and *Beverages* production decreased of e.g. edible rock salt (by 74.4%), fruit wines (by 56.6%), vinegar (by 46.0%), canned beef and veal meat (by 45.0%). 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 63.7%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 49.5%), waterproof footwear, with uppers in rubber or plastics (by 47.0%), footwear with uppers of textile materials (by 39.2%). 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 54.0%), fluting paper (by 36.3%), wooden flooring materials (by 28.8%), other paper and paperboard for graphic purposes (by 28.3%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. light fuel oils (by 63.7%), potassic fertilizers (by 40.2%), butadiene-1,3 (by 36.0%), motor oils (by 33.0%), phosphatic fertilizers (by 29.7%). In the division *Rubber and plastic products* production decreased of e.g. tyres for tractors (by 30.0%), tyres for agricultural machinery (by 28.6%), tyres for lorries and buses (by 24.8%), tyres for passenger cars (by 17.1%), plastic windows (by 14.1%). In the division *Other non-metallic mineral products* production decreased of e.g. structural-floor clay hollow bricks (by 69.8%), ceramic roof tiles (by 55.1%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 29.0%). In the division *Basic metals* production decreased of e.g. cold-rolled steel sheet width 600 mm or wider (by 77.8%), copper plates, sheets and strip (by 37.5%), hot-rolled steel rods and bars (by 28.6%), railway or tramway steel rails (by 25.2%), seamless tubes (by 24.5%). In the division *Fabricated metal products* production decreased of e.g. nails (by 31.9%), iron or steel containers for compressed or liquefied gas (by 31.8%), Iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 27.0%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 26.8%). In the division *Electrical equipment* production decreased of e.g. nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron and other electric accumulators (by 38.0%), electric hobs for building-in (by 37.7%), multi-phase current motors, excluding traction motors (by 37.3%), gas-electric cookers (by 35.0%). In the division *Machinery and equipment* production decreased of e.g. machinery for construction, road and drainage work (by 51.7%), pick-up straw and fodder balers (by 51.6%), ploughs (by 39.6%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 36.8%). In the

divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. bicycles (by 55.6%), sea-going boats for pleasure or sports (by 48.8%), public transport vehicles (by 27.9%), vehicle compression-ignition engines (by 16.0%), containers for freight transport (by 11.9%). In the division *Furniture* production decreased of e.g. seats with wooden frames (by 11.4%), seats convertible into beds (by 10.3%).

In September 2023 in comparison to September 2022, production increase was recorded for, among others: disinfectant wipes (by 364.9%), denatured ethyl alcohol with a vol. strength of 60% and more (by 342.0%), oleum (by 295.0%), anhydrous ammonia (by 214.7%), mechanical non-invasive ventilation apparatus (by 200.0%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 195.6%), nitric acid (by 177.4%), wire of aluminium (by 155.0%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 g/m², for clothing (by 132.3%), ammonia in aqueous solution (by 117.1%), parts of therapeutic respiration apparatus (by 108.5%), nitrogenous fertilizers (by 106.0%), electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 104.5%), gas masks (by 99.1%), woven fabrics of carded wool or carded fine animal hair (by 88.9%), frozen salt water fish (by 87.7%), protective face shields (by 79.0%), sodium hydroxide, solid (by 75.6%), rail goods wagons (by 70.5%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 66.3%), electric motors and generators, excluding traction motors (by 58.5%), printed children's picture, drawing or colouring books (by 57.2%), soap with disinfectant properties (by 56.2%), textile floor coverings (by 55.7%), vacuum cleaners (by 55.1%), paints and varnishes, based on polyesters, weight of the solvent more than 50% (by 54.6%), plastic floor, wall, ceiling coverings (by 54.4%), road tractors for semi-trailers (by 53.5%).

In September 2023 in comparison to September 2022, unchanged remained the production of footwear (including waterproof footwear), incorporating a protective metal toecap, with outer soles and uppers of rubber or of plastics.

Compared to August 2023, in September 2023 manufactured production increased for 290 products. In the divisions covering energy raw materials production increased of e.g. hard coal (by 8.8%), lignite (by 2.7%). In the division *Food products* production increased of e.g. dried grapes (by 76.1%), frozen vegetables (by 57.6%), tomato juice (by 52.9%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 47.6%), roasted decaffeinated coffee (by 36.7%). In the divisions *Wearing apparel* and *Leather and related products* production increased of e.g. women's or girls' suits and ensembles, not knitted (by 95.2%), footwear with rubber, plastic or leather outer soles and leather uppers, and with a protective metal toe-cap (by 85.0%), men's or boys' overcoats and other similar articles, not knitted (by 82.7%), leather of bovine animals (by 42.7%), men's or boys' jackets and blazers, not knitted (by 34.3%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased of e.g. non-coniferous sawnwood (by 54.1%), wadding; other articles of wadding (by 49.1%), assembled parquet panels of wood for mosaic floors (by 32.8%), wooden flooring materials (by 21.4%). In the division *Chemical products* production increased of e.g. acetic acid (by 36.3%), chemical fibres (by 31.7%), synthetic rubber (by 30.5%), 6-hexanelactam (by 21.6%), disinfectant liquids and gels (by 21.2%). In the division *Rubber and plastic products* production increased of e.g. tyres for agricultural machinery (by 64.0%), tubes, pipes and hoses of vulcanised rubber other than hard rubber (by 39.3%), tyres for passenger cars (by 22.5%), tyres for lorries and buses (by 21.8%), rigid tubes, pipes and hoses of polymers of propylene (by 17.3%), sheets, foil and strip, of non-cellular polymers of ethylene, not reinforced, of a thickness not exceeding 0.125 mm (by 17.3%). In the division *Other non-metallic mineral products* production increased of e.g. ceramic sanitary fixtures (by 36.7%), calcium-silicate brick (by 29.5%), products of heat insulation of mineral wools (by 18.5%), non-woven glass fibre webs, felts, mattresses and boards (by 15.2%). In the division *Basic metals* production increased of e.g. wire of aluminium (by 75.9%), copper plates, sheets and strip (by 26.8%), pig iron (by 25.0%), wire of steel (by 24.8%), steel rods and flat bars (by 21.4%), crude steel (by 18.3%). In the division *Fabricated metal products* production

increased of e.g. chain (except articulated link chain) and parts thereof (by 80.0%), steel doors (by 24.6%), nails (by 23.3%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 19.6%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of e.g. single-phase current motors (by 81.3%), computers (by 69.2%), electric ovens for building-in (by 50.3%), domestic gas cookers with an oven (by 45.2%), gas meters (by 43.3%), water meters (by 42.4%). In the division *Machinery and equipment* production increased of e.g. ball bearings (by 76.8%), agricultural tractors (by 75.2%), ball and roller bearings (by 73.1%), oil or petrol-filters for internal combustion engines (by 61.8%), cash registers (by 36.6%), single stage turbo-compressors (by 36.3%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. sea-going boats for pleasure or sports (by 84.1%), road tractors for semi-trailers (by 80.5%), passenger cars (by 43.5%), bicycles (by 35.4%). In the division *Furniture* production increased of e.g. seats with wooden frames (by 17.1%), wooden bedroom furniture (by 15.9%), seats convertible into beds (by 8.6%).

Compared with the previous month, production decrease was recorded in September 2023 for 161 products, among others for: structural-floor clay hollow bricks (by 67.1%), toluene (by 60.0%), rugs (by 58.6%), frozen fruit and nuts (by 52.5%), brass (by 47.6%), petroleum oils and oils obtained from bituminous minerals (by 45.4%), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by 43.6%), men's or boys' overcoats and similar articles, knitted or crocheted (by 43.2%), woven fabrics of cotton weighing more than 200 g/m² (by 40.9%), rail goods wagons (by 40.2%), rusks, toasted bread and similar toasted products (by 40.0%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 40.0%), inside aerials for radio or television reception (by 39.9%), non-alcoholic beer (by 37.6%), bricks made of clay (by 37.4%), rubberised textile fabrics, except tyre cord fabric (by 34.3%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 30.1%), butadiene-1,3 (by 28.1%), vinegar (by 27.8%), vegetable pickles (by 27.7%), articles of bedding of feathers or down (by 27.7%), muesli type preparations based on unroasted cereal flakes (by 27.6%), machine tools for machining metals (by 26.8%).

Summarizing the manufactured production in the period January–September 2023, in comparison with the corresponding period of the previous year increase of production was recorded for 132 items. In the divisions *Food products* and *Beverages* production increased of e.g. rusks, toasted bread and similar toasted products (by 63.6%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 33.3%), rendered pork fat suitable for consumption (by 16.7%), vodka (by 16.4%), prepared meals and dishes based on meat (by 12.1%). In the division *Wearing apparel* production increased of e.g. women's or girls' overcoats and similar articles, not knitted (by 44.2%), women's or girls' overcoats and similar articles, knitted or crocheted (by 12.4%), women's or girls' jackets, not knitted (by 11.0%). 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 29.6%), heavy fuel oils (by 28.7%), denatured ethyl alcohol with a vol. strength of 60% and more (by 25.5%), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by 17.2%), motor gasoline (by 16.5%), polyurethane adhesives (by 14.2%), asphalt (by 13.3%). 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 60.6%), bronze (by 22.2%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 18.5%), flat bars, rods and profiles of aluminium (by 8.2%), wire of aluminium (by 8.1%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of e.g. electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 72.5%), electric motors and generators, excluding traction motors (by 27.6%), electricity meters (by 27.2%), radio receivers of a kind used in motor

vehicles (by 23.7%), lead-acid accumulators for motor vehicles (by 19.5%). In the division *Machinery and equipment* production increased of e.g. reciprocating displacement compressors (by 58.6%), compressors for refrigeration equipment (by 37.3%), lathes for working metal (by 13.2%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. rail goods wagons (by 64.3%), road tractors for semi-trailers (by 51.6%), goods vehicles, with compression-ignition internal combustion piston engine (by 50.1%), lorries and road tractors for semi-trailers (by 48.5%), fire-fighting vehicles (by 38.6%), vehicle compression-ignition engines (by 26.4%), passenger cars (by 23.8%).

In January - September compared with the corresponding period of the previous year, production decrease was recorded for 319 products. In the divisions covering energy raw materials production decreased of e.g. lignite (by 29.0%), hard coal (by 11.9%). In the division *Food products* production decreased of e.g. refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 73.4%), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by 52.2%), buckwheat groats and meal (by 44.8%), barley groats and meal (by 35.4%). 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 59.9%), women's or girls' trousers, overalls and shorts, not knitted (by 44.0%), waterproof footwear, with uppers in rubber or plastics (by 43.8%), footwear with uppers of textile materials (by 39.6%). 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 56.0%), wooden flooring materials (by 37.1%), other paper and paperboard for graphic purposes (by 33.7%), flat pallets and pallet collars of wood (by 29.0%). In the division *Chemical products* production decreased of e.g. toluene (by 92.2%), phosphatic fertilizers (by 49.5%), potassic fertilizers (by 45.7%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 40.5%), 6-hexanelactam (by 37.2%). In the division *Rubber and plastic products* production decreased of e.g. tyres for tractors (by 36.5%), tyres for agricultural machinery (by 25.3%), tyres for lorries and buses (by 19.0%), plastic sacks and bags (by 16.2%), plastic windows (by 13.4%). In the division *Other non-metallic mineral products* production decreased of e.g. bricks made of clay (by 97.3%), structural-floor clay hollow bricks (by 66.5%), ceramic ridge tiles (by 65.9%), non-woven glass fibre webs, felts, mattresses and boards (by 56.9%). In the division *Basic metals* production decreased of e.g. brass (by 44.3%), copper plates, sheets and strip (by 41.7%), cold-rolled steel sheet width 600 mm or wider (by 22.0%), flat cold-rolled steel products width less than 600 mm (by 21.6%), seamless tubes (by 21.2%). In the division *Fabricated metal products* production decreased of e.g. nails (by 35.5%), hand tools of a kind used in agriculture, horticulture or forestry (by 31.4%), radiators for central heating of iron or steel (by 28.0%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 20.6%), steel doors (by 18.7%). In the division *Electrical equipment* production decreased of e.g. food grinders, mixers and juice extractors (by 76.8%), filament lamps (by 59.0%), primary cells and batteries (by 39.9%). In the division *Machinery and equipment* production decreased of e.g. vacuum pumps (by 72.5%), concrete mixers (by 45.3%), rotary displacement compressors (by 28.9%), kitchen and bathroom mixing valves (by 28.2%), loaders for general use in agriculture (by 27.6%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 22.8%). In the division *Furniture* production decreased of e.g. kitchen furniture of wood (by 18.0%), seats with wooden frames (by 15.4%).

Production of chain (except articulated link chain) and parts thereof 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 September 2023 in comparison to September 2022**, in the divisions *Food products* and *Beverages* production decreased of e.g. fruit wines (by 53.7%), chocolate buttons (by 41.3%),

millet groats (by 39.3%), soups and broths and preparations therefor (by 36.7%), vegetable pickles (by 33.6%), frozen salt water fish fillets (by 32.8%), vinegar (by 31.7%), vodka (by 27.4%). 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 75.7%), women's or girls' trousers, overalls and shorts, not knitted (by 62.0%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 54.5%), footwear with uppers of textile materials (by 39.3%), waterproof footwear, with uppers in rubber or plastics (by 30.7%). 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 62.1%), fluting paper (by 31.2%), wooden flooring materials (by 30.7%), other paper and paperboard for graphic purposes (by 30.0%), non-coniferous sawnwood (by 25.1%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of e.g. sulphuric acid (by 43.7%), chemical fibres (by 38.2%), motor oils (by 36.5%), rectified spirit (ethyl alcohol) (by 24.9%), synthetic calcium sulphate (by 24.3%), toilet waters (by 21.4%). In the division *Other non-metallic mineral products* production decreased of e.g. bricks made of clay (by 91.9%), ceramic roof tiles (by 42.5%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 34.3%), ceramic ridge tiles (by 32.6%), boards, sheets and similar articles of plaster, other than faced or reinforced only with paper (by 26.2%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 25.3%). In the division *Basic metals* production decreased of e.g. hot-rolled steel rods and bars (by 34.2%), hot rolled steel products (by 23.4%), steel rods and flat bars (by 22.0%), cold-rolled steel sheet width 600 mm or wider (by 17.5%). In the division *Fabricated metal products* production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 32.1%), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 29.3%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 25.5%), nails (by 22.3%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of e.g. gas meters (by 57.2%), nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron and other electric accumulators (by 39.7%), optical fibre cables (by 38.2%), multi-phase current motors, excluding traction motors (by 32.3%), electricity meters (by 23.8%), domestic gas cookers with an oven (by 21.2%). In the division *Machinery and equipment* production decreased of e.g. pick-up straw and fodder balers (by 65.3%), machinery for construction, road and drainage work (by 52.1%), ploughs (by 39.7%), loaders for general use in agriculture (by 31.0%), rotary displacement compressors (by 20.8%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. city/touring bicycles (by 64.3%), public transport vehicles (by 37.4%), sea-going boats for pleasure or sports (by 25.6%), vehicle compression-ignition engines (by 21.7%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 197.3%), electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 111.1%), rail goods wagons (by 90.6%), women's or girls' blouses and shirts, not knitted (by 73.8%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 70.3%), nitrogenous fertilizers (by 63.2%), plastic floor, wall, ceiling coverings (by 49.2%), vacuum cleaners (by 49.1%), women's or girls' jackets, not knitted (by 48.6%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by 39.5%), flat bars, rods and profiles of aluminium (by 36.8%), air-cooled transformers (by 33.7%), lubricating petroleum oils and heavy preparations n.e.c. (by 33.2%), hand saws; blades for saws of all kinds (by 31.7%), men's or boys' trousers, overalls and shorts, not knitted (by 30.6%), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by 28.8%), passenger cars (by 28.7%), wadding, gauze, etc., with pharmaceutical substances, p.r.s., n.e.c. (by 27.5%), rigid tubes, pipes and hoses of polymers of propylene (by 27.5%), refined rape and

colza oil and their fractions, for human consumption; non-confectioned (by 23.3%), reciprocating displacement compressors (by 20.1%), liquid buttermilk (by 19.0%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 17.2%), sheets and strips of non-alloy steel coated with zinc (by 17.2%), prepared meals and dishes based on vegetables (by 17.1%), prepared meals and dishes based on meat (by 17.0%), sugar (by 16.3%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 15.8%).

Compared to August 2023, in September 2023 sold production increased for 183 products. In the divisions *Food products* and *Beverages* production increased of e.g. buckwheat groats and meal (by 41.7%), pasta (by 18.4%), canned poultry meat (by 13.5%). In the divisions *Wearing apparel* and *Leather and related products* production increased of e.g. women's or girls' blouses and shirts, not knitted (by 60.1%), men's or boys' trousers, overalls and shorts, not knitted (by 54.8%), waterproof footwear, with uppers in rubber or plastics (by 11.0%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased of e.g. sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 196.0%), doors of wood (by 14.0%), assembled parquet panels of wood for mosaic floors (by 13.7%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased of e.g. toilet waters (by 11.5%), soap in the form of paste or liquid soap (by 10.9%), diesel oils (by 10.4%). In the division *Rubber and plastic products* production increased of e.g. rigid tubes, pipes and hoses of polymers of propylene (by 10.4%), plastic doors (by 9.0%), plastic windows (by 7.5%). In the division *Other non-metallic mineral products* production increased of e.g. structural-floor clay hollow bricks (by 73.0%), ceramic sanitary fixtures (by 17.2%), structural-wall clay hollow bricks (by 16.5%). In the division *Basic metals* production increased of e.g. refined unwrought lead (by 38.6%), wire of steel (by 18.0%), copper wire (by 13.9%). In the division *Fabricated metal products* production increased of e.g. steel doors (by 29.5%), nails (by 27.4%), hand saws; blades for saws of all kinds (by 22.8%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of e.g. electric ovens for building-in (by 43.0%), water meters (by 42.3%), gas meters (by 40.7%), vacuum cleaners (by 39.8%). In the division *Machinery and equipment* production increased of e.g. machinery for construction, road and drainage work (by 13.9%), ploughs (by 13.4%), hydraulic pumps (by 11.9%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. passenger cars (by 41.1%), containers for freight transport (by 32.4%), sea-going boats for pleasure or sports (by 23.8%). In the division *Furniture* production increased of e.g. seats with wooden frames (by 9.5%), kitchen furniture of wood (by 7.2%).

Compared with the previous month, production decrease was recorded for 118 products, among others for: millet groats (by 64.5%), footwear with uppers of textile materials (by 40.2%), rail goods wagons (by 40.2%), pick-up straw and fodder balers (by 36.2%), electricity meters (by 35.8%), vegetable pickles (by 32.5%), machine tools for machining metals (by 27.7%), fruit wines (by 25.5%), glues and adhesives based on synthetic resins (by 22.3%), potassic fertilizers (by 21.8%), milk and cream powder (by 21.5%), chocolate buttons (by 21.3%), loaders for general use in agriculture (by 21.0%), field sowers (by 20.0%), beer (by 19.9%).

Production of sacks and bags of paper remained at the same level as in the previous month.

In January – September 2023 compared with the corresponding period of the previous year, sold production decrease was recorded for 218 products. In the divisions covering energy raw materials production decreased of hard coal (by 18.3%). In the divisions *Food products* and *Beverages* production decreased of e.g. buckwheat groats and meal (by 33.3%), barley groats and meal (by 27.8%), chocolate buttons (by 26.2%), fruit wines (by 26.1%), canned pig meat (by 22.9%), millet groats (by 21.1%), edible evaporated salt (by 20.9%). 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 61.2%), women's or girls' trousers, overalls and shorts, not knitted (by 56.2%), jerseys, pullovers, cardigans, waistcoats and similar articles,

knitted or crocheted (by 40.2%), footwear with uppers of textile materials (by 38.7%), waterproof footwear, with uppers in rubber or plastics (by 38.1%). 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 56.5%), wooden flooring materials (by 37.7%), other paper and paperboard for graphic purposes (by 32.8%), flat pallets and pallet collars of wood (by 30.1%), windows of wood (by 20.9%), sacks and bags of paper (by 20.0%). In the division *Chemical products* production decreased of e.g. phosphatic fertilizers (by 38.5%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 38.1%), chemical fibres (by 36.2%), potassic fertilizers (by 33.4%), rectified spirit (ethyl alcohol) (by 26.4%). In the division *Rubber and plastic products* production decreased of e.g. plastic windows (by 13.0%), tyres (by 12.9%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 12.3%), tableware and kitchenware of plastic (by 12.3%), plastic boxes, cases, crates (by 11.1%). In the division *Other non-metallic mineral products* production decreased of e.g. bricks made of clay (by 93.3%), ceramic ridge tiles (by 56.3%), structural-floor clay hollow bricks (by 48.5%), ceramic roof tiles (by 47.2%), products of heat insulation of mineral wools (by 37.4%). In the division *Basic metals* production decreased of e.g. hot-rolled steel rods and bars (by 20.3%), refined unwrought lead (by 18.6%), cold-rolled steel sheet width 600 mm or wider (by 18.1%), flat cold-rolled steel products width less than 600 mm (by 17.3%), wire of steel (by 17.1%). In the division *Fabricated metal products* production decreased of e.g. nails (by 31.5%), hand tools of a kind used in agriculture, horticulture or forestry (by 24.9%), steel doors (by 14.2%), aluminium windows (by 13.5%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of e.g. single-phase current motors (by 48.2%), automatic drying machines (by 32.1%), domestic gas cookers with an oven (by 29.9%), gas meters (by 24.4%), dish washing machines (by 22.5%), electric ovens for building-in (by 19.7%), television receivers (by 18.0%). In the division *Machinery and equipment* production decreased of e.g. rotary displacement compressors (by 36.8%), pick-up straw and fodder balers (by 26.5%), machinery for construction, road and drainage work (by 26.1%), refrigerated show-cases and counters (by 25.8%), ploughs (by 24.7%), loaders for general use in agriculture (by 23.2%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of e.g. city/touring bicycles (by 35.3%), containers for freight transport (by 18.7%). In the division *Furniture* production decreased of e.g. seats with wooden frames (by 19.0%), kitchen furniture of wood (by 16.6%), wooden bedroom furniture (by 10.6%).

In January – September 2023 compared with the corresponding period of the previous year, production increase was recorded for 82 products. In the divisions *Food products* and *Beverages* production increased of e.g. rusks, toasted bread and similar toasted products (by 49.3%), crude rape and colza oil and their fractions, for human consumption (by 23.4%), prepared meals and dishes based on meat (by 23.0%), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 15.5%), vodka (by 15.1%), rye bread (by 10.5%), tomato juice (by 10.3%). In the divisions *Wearing apparel* and *Leather and related products* production increased of e.g. women's or girls' overcoats and similar articles, knitted or crocheted (by 61.7%), leather of bovine animals (by 6.2%). In the division *Paper and paper products* production increased of e.g. sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 21.9%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 17.3%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased of e.g. polyurethane adhesives (by 12.9%), asphalt (by 11.0%), hair care products (by 8.4%), soap (by 7.5%). In the division *Basic metals* production increased of e.g. sheets and strips of non-alloy steel coated with zinc (by 14.2%), flat bars, rods and profiles of aluminium (by 10.0%). In the division *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 63.2%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 18.9%). In the divisions *Computer, electronic and optical products* and

Electrical equipment production increased of e.g. electric conductors, for a voltage $\leq 1\ 000$ V, fitted with connectors (by 73.6%), air-cooled transformers (by 42.6%), electric motors and generators, excluding traction motors (by 26.3%), electricity meters (by 18.5%), lead-acid accumulators for motor vehicles (by 9.9%). In the division *Machinery and equipment* production increased of e.g. reciprocating displacement compressors (by 53.5%), cash registers (by 21.7%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of e.g. rail goods wagons (by 65.2%), vehicle compression-ignition engines (by 28.9%), passenger cars (by 16.3%).

Production of men's or boys' trousers, overalls and shorts, not knitted and iron or steel reservoirs and similar containers for solids, of a capacity > 300 litres 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.