



Warsaw 2023

Production of major industrial products in March 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 March 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 March 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 March 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 March 2023, manufactured production of 149 items and sold production of 87 items was higher than in March 2022. Decrease was noted on manufactured production for 307 items and on sold production for 217 items. Data on production of bricks made of clay, structural-floor clay hollow bricks and centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete 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 March 2023 in comparison to March 2022**, in the divisions covering energy raw materials production decreased e.g. of lignite (by 31.1%), hard coal (by 22.6%). In the division *Food products* production decreased e.g. of edible rock salt (by 50.2%), barley groats and meal (by 44.8%), buckwheat groats and meal (by 40.0%), pasta (by 38.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' trousers, overalls and shorts, not knitted (by 52.2%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 44.8%), men's or boys' shirts, not knitted (by 43.9%), men's or boys' overcoats and similar articles, knitted or crocheted (by 35.4%), footwear with uppers of textile materials (by 35.2%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased e.g. of wooden flooring materials (by 46.4%), assembled parquet panels of wood for mosaic floors (by 45.8%), flat pallets and pallet collars of wood (by 36.4%), other paper and paperboard for graphic purposes (by 31.4%), assembled parquet panels of wood other than for mosaic floors (by 26.6%), windows of wood (by 26.5%). In the division *Chemical products* production decreased e.g. of disinfectant liquids and gels (by 50.9%), propylene (by 47.3%), 6-hexanelactam (by 44.0%), oleum (by 38.8%), acetic acid (by 37.5%). In the division *Rubber and plastic products* production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 34.3%), rigid tubes, pipes and hoses of polymers of propylene (by 21.7%), sheets, foil and strip, of non-cellular polymers of ethylene, not reinforced, of a thickness not exceeding 0.125 mm (by 21.6%), plastic sacks and bags (by 20.4%). In the division *Other non-metallic mineral products* production decreased e.g. of structural-wall clay hollow bricks (by 49.6%), building blocks of light concrete (by 46.4%), products of heat insulation of mineral wools (by 44.5%), building bituminous felt (by 36.8%). In the division *Basic metals* production decreased e.g. of copper plates, sheets and strip (by 34.8%), copper and copper alloy bars, rods and profiles (by 31.7%), cold-rolled steel sheet width 600 mm or wider (by 26.2%). In the division *Fabricated metal products* production decreased e.g. of nails (by 49.7%), hand tools of a kind used in agriculture, horticulture or forestry (by 44.6%), radiators for central heating of iron or steel (by 31.6%), hand saws; blades for saws of all kinds (by 30.6%). In the division *Electrical equipment* production decreased e.g. of automatic drying machines (by 44.7%), vacuum cleaners (by 40.2%), primary cells and batteries (by 39.8%), electric ovens for building-in (by 30.2%), gas-electric cookers (by 27.9%). In the division *Machinery and equipment* production decreased e.g. of concrete mixers (by 62.1%), kitchen and bathroom mixing valves (by 49.8%), vacuum pumps (by 43.4%), ploughs (by 42.6%), machinery for construction, road and drainage work (by 38.7%), ball bearings (by 35.9%). In the division *Furniture* production

decreased e.g. of kitchen furniture of wood (by 27.6%), wooden bedroom furniture (by 20.5%), seats convertible into beds (by 18.6%).

In March 2023 in comparison to March 2022, production increase was recorded for, among others: goods vehicles, with compression-ignition internal combustion piston engine (by 263.2%), lorries and road tractors for semi-trailers (by 238.8%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 213.5%), woven fabrics of synthetic staple fibre (by 185.4%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 174.4%), dried grapes (by 156.7%), disinfectants put up in forms or packings for retail sale or as preparations or articles (by 138.3%), filament lamps for a voltage < 100 V, for general use (by 136.2%), rubberised textile fabrics, except tyre cord fabric (by 127.0%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 123.6%), passenger cars (by 112.8%), barbed wire and barbed wire entanglements made from steel or steel wire (by 111.9%), road tractors for semi-trailers (by 109.8%), roasted decaffeinated coffee (by 107.3%), filament lamps (by 104.5%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 102.0%), vegetable pickles (by 83.9%), electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 73.9%), disinfectant wipes (by 73.0%), soap with disinfectant properties (by 67.4%), air-cooled transformers (by 65.6%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 64.4%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 61.3%), rendered pork fat suitable for consumption (by 60.3%).

In March 2023 in comparison to March 2022, unchanged remained the production of machining centres, unit construction machines and multi-station transfer machines for working metal.

Compared to February 2023, in March 2023 manufactured production increased for 344 products. In the divisions covering energy raw materials production increased e.g. of hard coal (by 14.6%), natural gas (by 10.9%), petroleum oils and oils obtained from bituminous minerals (by 10.2%). In the divisions *Food products* and *Beverages* production increased e.g. of dried grapes (by 96.6%), buckwheat groats and meal (by 91.3%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 81.2%), rendered pork fat suitable for consumption (by 58.4%), non-alcoholic beer (by 54.2%). In the divisions *Wearing apparel* and *Leather and related products* production increased e.g. of footwear with uppers of textile materials (by 42.6%), men's or boys' suits and ensembles, not knitted (by 38.8%), women's or girls' suits and ensembles, not knitted (by 36.8%), panty hose and tights (by 36.4%), women's or girls' overcoats and similar articles, not knitted (by 32.7%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased e.g. of wadding; other articles of wadding (by 37.7%), assembled parquet panels of wood for mosaic floors (by 30.5%), fluting paper (by 25.1%), particle and similar boards of wood and ligneous materials (by 23.2%). In the division *Chemical products* production increased e.g. of disinfectant wipes (by 73.3%), phosphatic fertilizers (by 62.1%), soap in the form of flakes, wafers, granules or powders (by 56.6%), expansible polystyrene (by 55.9%), toluene (by 50.0%). In the division *Rubber and plastic products* production increased e.g. of rubberised textile fabrics, except tyre cord fabric (by 92.1%), plates, sheet, film, foil of cellular polymers of styrene (by 30.5%), plastic doors (by 21.8%), tyres for agricultural machinery (by 21.4%). In the division *Other non-metallic mineral products* production increased of clinker (by 64.0%), cement (by 55.0%), ready-mixed concrete (by 50.1%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 38.6%), ceramic tiles and flags (by 34.9%). In the division *Basic metals* production increased e.g. of wire of steel (by 64.1%), flat cold-rolled steel products width less than 600 mm (by 22.3%), unwrought unalloyed refined copper (by 16.0%). In the division *Fabricated metal products* production increased e.g. of iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 54.1%), chain (except articulated link chain) and parts thereof (by 36.0%), iron or steel reservoirs and similar containers for solids, of a capacity > 300 litres (by 35.2%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased e.g. of lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 75.4%), electricity

meters (by 40.4%), outside aerials for radio or television reception excluding for satellite broadcast (by 38.8%), food grinders, mixers and juice extractors (by 26.4%), dish washing machines (by 23.3%). In the division *Machinery and equipment* production increased e.g. of pick-up straw and fodder balers (by 77.1%), refrigerated show-cases and counters (by 39.3%), machine tools for machining metals (by 33.6%), loaders for general use in agriculture (by 24.6%), agricultural tractors (by 23.9%). In the divisions *Motor vehicles* and *Other transport equipment* production increased e.g. of fire-fighting vehicles (by 66.7%), passenger cars (by 48.8%), containers for freight transport (by 35.5%), goods vehicles, with compression-ignition internal combustion piston engine (by 33.0%), internal combustion engines for vehicles (by 27.6%). In the division *Furniture* production increased e.g. of wooden furniture for the dining-room and living-room (by 23.1%), wooden bedroom furniture (by 18.9%), seats with wooden frames (by 13.8%). Compared to the previous month, in March 2023 production decreased for 112 products, among others for: vacuum pumps (by 81.2%), woven fabrics of cotton, not of yarns of different colours, weighing ≤ 200 g/m², for technical or industrial uses (by 62.5%), woven fabrics of man-made filament yarns obtained from high tenacity yarn, strip or the like (by 62.5%), bronze (by 60.8%), antibiotics (by 59.8%), protective head caps (by 55.2%), non-woven glass fibre webs, felts, mattresses and boards (by 52.8%), ceramic ridge tiles (by 51.8%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 50.9%), bed linen (by 46.3%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 g/m², for household linen or home furnishing textiles (by 43.7%), frozen salt water fish (by 43.2%), millet groats (by 42.8%), sanitary fixtures of porcelain (by 38.5%). Production of mechanical non-invasive ventilation apparatus remained at the same level as in the previous month.

Summarizing the manufactured production in the period January–March 2023, in comparison with the corresponding period of the previous year decrease of production was recorded for 295 items. In the divisions covering energy raw materials production decreased e.g. of lignite (by 21.8%), hard coal (by 16.5%). In the divisions *Food products* and *Beverages* production decreased e.g. of millet groats (by 40.5%), barley groats and meal (by 40.0%), buckwheat groats and meal (by 31.6%), fruit wines (by 29.1%), pasta (by 23.6%), vodka (by 16.3%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' trousers, overalls and shorts, not knitted (by 40.7%), footwear with uppers of textile materials (by 36.3%), men's or boys' shirts, not knitted (by 30.9%), men's or boys' overcoats and similar articles, knitted or crocheted (by 29.9%), waterproof footwear, with uppers in rubber or plastics (by 25.4%). 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 46.9%), wooden flooring materials (by 42.0%), flat pallets and pallet collars of wood (by 33.8%), other paper and paperboard for graphic purposes (by 30.2%), assembled parquet panels of wood other than for mosaic floors (by 26.3%), windows of wood (by 26.0%). In the division *Rubber and plastic products* production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 31.6%), tyres for tractors (by 27.4%), plastic sacks and bags (by 18.7%), rigid tubes, pipes and hoses of polymers of propylene (by 18.2%). In the division *Other non-metallic mineral products* production decreased e.g. of structural-wall clay hollow bricks (by 64.3%), ceramic ridge tiles (by 42.9%), products of heat insulation of mineral wools (by 41.3%), building blocks of light concrete (by 31.0%). In the division *Basic metals* production decreased e.g. of copper plates, sheets and strip (by 34.1%), wire of steel (by 17.5%), flat cold-rolled steel products width less than 600 mm (by 17.2%), flat bars, rods and profiles of aluminium (by 17.2%). In the division *Fabricated metal products* production decreased e.g. of nails (by 33.5%), hand tools of a kind used in agriculture, horticulture or forestry (by 31.2%), radiators for central heating of iron or steel (by 30.5%), hand saws; blades for saws of all kinds (by 27.3%), steel doors (by 20.8%), aluminium windows (by 17.6%). In the division *Electrical equipment* production decreased e.g. of food grinders, mixers and juice extractors (by 88.0%), vacuum cleaners (by 36.6%), automatic

drying machines (by 36.4%), primary cells and batteries (by 33.2%), electric ovens for building-in (by 28.5%). In the division *Machinery and equipment* production decreased e.g. of concrete mixers (by 56.1%), producer gas, water gas, acetylene gas generators and the like; distilling or rectifying plant (by 34.4%), kitchen and bathroom mixing valves (by 32.9%), refrigerated show-cases and counters (by 31.5%), ball bearings (by 28.9%), ploughs (by 24.1%). In the division *Furniture* production decreased e.g. of kitchen furniture of wood (by 28.4%), wooden bedroom furniture (by 19.1%), seats convertible into beds (by 13.2%).

In the period January–March 2023 compared with the corresponding period of the previous year, production increased for 161 items. In the division *Food products* production increased e.g. of dried grapes (by 153.9%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 101.6%), roasted decaffeinated coffee (by 72.2%), canned poultry meat (by 54.1%), other prepared dishes and meals (by 52.4%). In the divisions *Wearing apparel* and *Leather and related products* production increased e.g. of men's or boys' overcoats and other similar articles, not knitted (by 31.3%), women's or girls' overcoats and similar articles, not knitted (by 30.3%), women's or girls' suits and ensembles, not knitted (by 28.4%), footwear (by 12.9%), hosiery (by 12.3%). In the division *Paper and paper products* production increased of hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 45.0%), fluting paper (by 13.5%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased e.g. of polyurethane adhesives (by 44.8%), asphalt (by 31.5%), other polyamides filament tow and staple fibres (by 31.2%), soap in bars etc. (by 30.1%), heavy fuel oils (by 29.3%). In the division *Rubber and plastic products* production increased of rubberised textile fabrics, except tyre cord fabric (by 40.1%), plastic doors (by 9.4%), tableware and kitchenware of plastic (by 8.6%). In the divisions *Basic metals* and *Fabricated metal products* production increased e.g. of barbed wire and barbed wire entanglements made from steel or steel wire (by 110.5%), bronze (by 48.0%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 32.7%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 32.5%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased e.g. of inside aerials for radio or television reception (by 64.0%), air-cooled transformers (by 59.6%), electric conductors, for a voltage ≤ 1 000 V, fitted with connectors (by 51.6%), filament lamps for a voltage < 100 V, for general use (by 33.3%), electricity meters (by 32.0%). In the division *Machinery and equipment* production increased e.g. of reciprocating displacement compressors (by 51.3%), compressors for refrigeration equipment (by 33.5%), machine tools for machining metals (by 20.3%). In the divisions *Motor vehicles* and *Other transport equipment* production increased e.g. of goods vehicles, with compression-ignition internal combustion piston engine (by 109.8%), passenger cars (by 42.7%), vehicle compression-ignition engines (by 37.9%), rail goods wagons (by 34.6%), road tractors for semi-trailers (by 21.3%).

Production of fresh or chilled pig meat 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 March 2023 in comparison to March 2022**, in the divisions covering energy raw materials production decreased of hard coal (by 26.2%). In the divisions *Food products* production decreased e.g. of millet groats (by 55.3%), barley groats and meal (by 46.5%), canned pig meat (by 45.7%), pasta (by 37.4%), buckwheat groats and meal (by 34.5%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' blouses and shirts, not knitted (by 72.5%), women's or girls' trousers, overalls and shorts, not knitted (by 67.2%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 59.2%), footwear with uppers of textile materials (by 50.0%), men's or boys'

overcoats and similar articles, knitted or crocheted (by 49.0%), women's or girls' jackets, not knitted (by 35.1%). 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 40.8%), other paper and paperboard for graphic purposes (by 39.9%), flat pallets and pallet collars of wood (by 33.7%), particle and similar boards of wood and ligneous materials (by 29.7%), windows of wood (by 28.7%). In the division *Chemical products* production decreased e.g. of disinfectants put up in forms or packings for retail sale or as preparations or articles (by 51.2%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 43.4%), chemical fibres (by 37.9%), potassic fertilizers (by 36.3%), paints and varnishes other than colodium containing in solution more than 50% of solvent by weight (by 33.6%), phosphatic fertilizers (by 32.3%). In the division *Rubber and plastic products* production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 29.5%), rigid tubes, pipes and hoses of polymers of propylene (by 28.9%), sheets, foil and strip, of non-cellular polymers of ethylene, not reinforced, of a thickness not exceeding 0.125 mm (by 24.8%), plastic sacks and bags (by 20.3%). In the division *Other non-metallic mineral products* production decreased e.g. of ceramic ridge tiles (by 69.8%), building bituminous felt (by 58.7%), building blocks of light concrete (by 52.4%), ceramic roof tiles (by 47.9%), factory made mortars (by 40.0%), products of heat insulation of mineral wools (by 39.9%), structural-wall clay hollow bricks (by 39.0%), structural-wall tiles of calcium-silicate (by 35.6%). In the division *Basic metals* production decreased e.g. of copper and copper alloy bars, rods and profiles (by 29.6%), hot-rolled steel rods and bars (by 27.8%), wire of steel (by 26.2%), cold-rolled steel sheet width 600 mm or wider (by 25.2%), flat cold-rolled steel products width less than 600 mm (by 20.6%). In the division *Fabricated metal products* production decreased e.g. of nails (by 45.1%), hand tools of a kind used in agriculture, horticulture or forestry (by 34.7%), hand saws; blades for saws of all kinds (by 28.3%), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 24.9%), steel doors (by 22.8%), aluminium windows (by 22.6%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased e.g. of single-phase current motors (by 62.2%), automatic drying machines (by 44.6%), domestic gas cookers with an oven (by 30.0%), vacuum cleaners (by 27.7%), electric conductors, for a voltage $\leq 1\ 000$ V, not fitted with connectors (by 27.6%), dish washing machines (by 27.4%), television receivers (by 25.2%). In the division *Machinery and equipment* production decreased e.g. of ploughs (by 42.8%), rotary displacement compressors (by 39.8%), kitchen and bathroom mixing valves (by 31.2%), machinery for construction, road and drainage work (by 29.2%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased e.g. of city/touring bicycles (by 39.8%), rail goods wagons (by 31.2%), containers for freight transport (by 25.5%). In the division *Furniture* production decreased e.g. of wooden bedroom furniture (by 26.5%), kitchen furniture of wood (by 20.7%), seats convertible into beds (by 19.6%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: woven fabrics of synthetic staple fibre (by 189.0%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 122.7%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 98.6%), reciprocating displacement compressors (by 94.7%), passenger cars (by 91.6%), electric conductors, for a voltage $\leq 1\ 000$ V, fitted with connectors (by 83.8%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 83.4%), electricity meters (by 69.2%), women's or girls' overcoats and similar articles, knitted or crocheted (by 66.9%), electric motors and generators, excluding traction motors (by 56.4%), vehicle compression-ignition engines (by 50.4%), frozen salt water fish fillets (by 46.5%), internal combustion engines for vehicles (by 46.3%), air-cooled transformers (by 42.9%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 42.4%), machine tools for machining metals (by 42.1%), basic pharmaceutical products (by 41.7%), cash registers (by 41.6%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 37.9%), panty hose

and tights (by 34.0%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by 31.5%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 28.3%).

Compared to February 2023, in March 2023 sold production increased for 255 products. In the divisions *Food products* and *Beverages* production increased e.g. of non-alcoholic beer (by 98.4%), crispbread (by 59.1%), vodka (by 57.1%), wheat groats and meal (by 41.4%), fruit wines (by 41.4%), sweetened or flavoured waters (by 39.1%). In the divisions *Wearing apparel* and *Leather and related products* production increased e.g. of men's or boys' suits and ensembles, not knitted (by 38.2%), leather of bovine animals (by 26.7%), footwear with uppers of textile materials (by 22.8%). In the divisions *Wood and products of wood* and *Paper and paper products* production increased e.g. of assembled parquet panels of wood for mosaic floors (by 44.9%), veneers (by 44.5%), sacks and bags of paper (by 18.5%), windows of wood (by 14.8%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased of phosphatic fertilizers (by 146.2%), potassic fertilizers (by 89.9%), motor oils (by 44.8%), coke (by 32.1%), rectified spirit (ethyl alcohol) (by 30.9%), liquefied propane and butane (by 25.8%). In the division *Rubber and plastic products* production increased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 35.7%), plastic doors (by 21.6%), plastic windows (by 18.4%),. In the division *Other non-metallic mineral products* production increased e.g. of cement (by 63.6%), ready-mixed concrete (by 49.8%), non-refractory clay building bricks (by 41.5%), building bituminous felt (by 29.4%), ceramic roof tiles (by 25.7%). In the division *Basic metals* production increased e.g. of wire of steel (by 13.4%), steel rods and flat bars (by 11.4%), copper wire (by 11.3%). In the division *Fabricated metal products* production increased e.g. of aluminium doors (by 16.4%), food cans of tinsplate (by 8.8%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased e.g. of dish washing machines (by 19.3%), optical fibre cables (by 17.9%), electricity meters (by 12.9%), single-phase current motors (by 10.1%). In the division *Machinery and equipment* production increased e.g. of machine tools for machining metals (by 39.9%), refrigerated show-cases and counters (by 23.4%), field sowers (by 22.3%), cash registers (by 21.3%). In the divisions *Motor vehicles* and *Other transport equipment* production increased e.g. of city/touring bicycles (by 50.2%), containers for freight transport (by 32.9%), passenger cars (by 30.0%), sea-going boats for pleasure or sports (by 26.9%).

Compared with the previous month, production decrease was recorded for 48 products, among others for: first-aid boxes and kits (by 100.0%), rail goods wagons (by 43.8%), vegetable pickles (by 42.3%), millet groats (by 37.6%), canned pig meat (by 22.4%), sulphuric acid (by 19.5%), vacuum cleaners (by 18.1%), canned poultry meat (by 17.9%), toilet waters (by 17.2%), automatic drying machines (by 15.5%), electric conductors, for a voltage > 1 000 V (by 14.3%), hydraulic pumps (by 14.2%), rendered pork fat suitable for consumption (by 13.4%), distilled ethyl alcohol (by 12.3%).

Production of panty hose and tights and wooden flooring materials remained at the same level as in the previous month.

In January – March 2023 compared with the corresponding period of the previous year, sold production decrease was recorded for 203 products. In the divisions covering energy raw materials production decreased e.g. of hard coal (by 18.2%). In the divisions *Food products* and *Beverages* production decreased e.g. of barley groats and meal (by 38.6%), millet groats (by 34.7%), buckwheat groats and meal (by 24.8%), fruit wines (by 23.4%), pasta (by 21.4%), canned pig meat (by 20.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' trousers, overalls and shorts, not knitted (by 56.1%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 44.1%), women's or girls' blouses and shirts, not knitted (by 43.3%), men's or boys' overcoats and similar articles, knitted or crocheted (by 39.7%). 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 44.4%), wooden flooring materials (by 40.0%), other paper and paperboard for graphic purposes (by 37.4%), flat pallets and pallet collars of wood (by 33.0%), windows of wood (by 26.7%), doors of wood (by 19.5%). In the division *Chemical products* production decreased e.g. of potassic fertilizers (by 50.2%), phosphatic fertilizers (by 48.3%), denatured ethyl alcohol and other denatured spirits; of any strength (by 41.2%), nitrogenous fertilizers (by 40.1%), disinfectants put up in forms or packings for retail sale or as preparations or articles (by 34.1%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 34.1%). In the division *Rubber and plastic products* production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 29.8%), rigid tubes, pipes and hoses of polymers of propylene (by 21.2%), tableware and kitchenware of plastic (by 20.2%), rigid tubes, pipes and hoses of polymers of ethylene (by 13.6%), plastic windows (by 11.4%). In the division *Other non-metallic mineral products* production decreased e.g. of ceramic ridge tiles (by 65.0%), non-refractory clay building bricks (by 45.6%), ceramic roof tiles (by 45.2%), building blocks of light concrete (by 45.0%), building bituminous felt (by 42.2%). In the division *Basic metals* production decreased of hot-rolled steel rods and bars (by 23.0%), copper and copper alloy bars, rods and profiles (by 19.0%), wire of steel (by 17.6%), flat cold-rolled steel products width less than 600 mm (by 17.0%). In the division *Fabricated metal products* production decreased e.g. of nails (by 30.9%), hand tools of a kind used in agriculture, horticulture or forestry (by 28.7%), hand saws; blades for saws of all kinds (by 26.0%), steel doors (by 19.0%), aluminium windows (by 18.9%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased e.g. of single-phase current motors (by 53.4%), automatic drying machines (by 36.0%), domestic gas cookers with an oven (by 29.5%), electric ovens for building-in (by 26.7%), television receivers (by 24.6%), vacuum cleaners (by 24.5%), dish washing machines (by 24.4%), electric cookers including gas-electric cookers (by 22.0%), gas meters (by 19.8%). In the division *Machinery and equipment* production decreased e.g. of rotary displacement compressors (by 32.0%), refrigerated show-cases and counters (by 30.4%), ploughs (by 23.6%), loaders for general use in agriculture (by 18.5%), field sowers (by 18.1%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased e.g. of bicycles (by 35.3%), containers for freight transport (by 20.9%). In the division *Furniture* production decreased e.g. of wooden bedroom furniture (by 18.5%), kitchen furniture of wood (by 17.6%), seats convertible into beds (by 13.1%), seats with wooden frames (by 11.0%).

In the period January – March 2023, compared to the same period of the previous year, an increase in production was recorded for 101 products. In the division *Food products* production increased e.g. of dried fruit (excluding grapes), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 150.8%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 52.0%), crude rape and colza oil and their fractions, for human consumption (by 50.6%), canned poultry meat (by 45.9%), other prepared dishes and meals (by 43.7%), vegetable pickles (by 33.5%). In the division *Wearing apparel* production increased e.g. of women's or girls' overcoats and similar articles, knitted or crocheted (by 36.3%), panty hose and tights (by 31.5%), men's or boys' jackets and blazers, not knitted (by 10.9%). In the division *Paper and paper products* production increased of hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 41.2%), napkins and napkin liners for babies (by 8.0%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased e.g. of polyurethane adhesives (by 42.2%), soap in the form of paste or liquid soap (by 23.5%), liquefied propane and butane (by 12.7%), soap (by 11.3%), asphalt (by 9.3%), motor oils (by 8.2%). In the division *Fabricated metal products* production increased e.g. of iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 36.2%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 33.4%), food cans of tinfoil (by 25.9%). In the divisions

Computer, electronic and optical products and *Electrical equipment* production increased e.g. of electric conductors, for a voltage $\leq 1\ 000\ V$, fitted with connectors (by 56.8%), air-cooled transformers (by 53.1%), electricity meters (by 38.6%), electric motors and generators, excluding traction motors (by 26.8%), electric conductors, for a voltage $> 1\ 000\ V$ (by 16.0%), lead-acid accumulators for motor vehicles (by 15.5%). In the division *Machinery and equipment* production increased e.g. of reciprocating displacement compressors (by 80.1%), fire extinguishers (by 19.1%), machine tools for machining metals (by 15.9%). In the divisions *Motor vehicles* and *Other transport equipment* production increased e.g. of vehicle compression-ignition engines (by 40.9%), passenger cars (by 38.8%), rail goods wagons (by 34.4%), sea-going boats for pleasure or sports (by 16.6%), public transport vehicles (by 14.0%).

In January – March 2023 production of cigarettes 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.