

# Production of major industrial products in October 2023 

## Content-related works

Statistics Poland, Enterprises Department

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

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

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

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

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

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

## Main abbreviations

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

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

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

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

Table 1 presents the data on manufactured production of products in October 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 October 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 October 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 October 2023, manufactured production of 212 items and sold production of 155 items was higher than in October 2022. Decrease was noted on manufactured production for 241 items and on sold production for 145 items. Data on production of slaughter products of pigs, wheat bread; door of wood and barbed wire and barbed wire entanglements made from steel or steel wire is not published as it was not possible to obtain production data from some economic entities.

## MANUFACTURED PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. In October 2023 in comparison to October 2022, in the divisions covering energy raw materials production decreased of e.g. lignite (by $25.7 \%$ ), petroleum oils and oils obtained from bituminous minerals (by 6.3\%). In the division Food products production decreased of e.g. edible rock salt (by 61.9\%), muesli type preparations based on unroasted cereal flakes (by 58.7\%), canned beef and veal meat (by 58.0\%), frozen fruit and nuts (by 35.6\%), canned pig meat (by $25.2 \%$ ). 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 53.7\%), footwear with uppers of textile materials (by 49.1\%), women's or girls' trousers, overalls and shorts, not knitted (by 44.7\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 38.7\%), panty hose and tights (by 35.3\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. soda or sulphate wood pulp (by 40.8\%), uncoated, unbleached kraftliner (by 40.0\%), assembled parquet panels of wood for mosaic floors (by 36.2\%), testliner-recycled paper for cover layer of corrugated cardboard (by 30.0\%), sacks and bags of paper (by 19.9\%). In the division Chemical products production decreased of e.g. phenol (by 55.8\%), sodium hydroxide in aqueous solution (by 47.0\%), polypropylene (by 27.7\%), acetic acid (by 26.0\%). In the division Other non-metallic mineral products production decreased of e.g. ceramic roof tiles (by 61.2\%), structural-floor clay hollow bricks (by 59.3\%), boards, sheets and similar articles of plaster, faced or reinforced only with paper (by 35.3\%), boards, sheets and similar articles of plaster, other than faced or reinforced only with paper (by $34.0 \%$ ), structural-wall clay hollow bricks (by $26.3 \%$ ). In the division Basic metals production decreased of e.g. bronze (by $30.8 \%$ ), hot-rolled steel rods and bars (by $26.7 \%$ ), refined unwrought lead (by $25.9 \%$ ), railway or tramway steel rails (by $22.8 \%$ ). In the division Fabricated metal products production decreased of e.g. iron or steel containers for compressed or liquefied gas (by 31.8\%), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by 16.7\%), radiators for central heating of iron or steel (by 14.2\%), hand saws; blades for saws of all kinds (by $11.4 \%$ ). 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 42.4\%), electric hobs for building-in (by 31.7\%), optical fibre cables (by 30.2\%), multi-phase current motors, excluding traction motors (by 29.4\%). In the division Machinery and equipment production decreased of e.g. machinery for construction, road and drainage work (by 59.4\%), ploughs (by 49.6\%), field sowers (by 44.5\%), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by 37.7\%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 25.7\%). In the divisions Motor vehicles and Other transport equipment production
decreased of e.g. sea-going boats for pleasure or sports (by 50.2\%), bicycles (by 34.2\%), passenger cars (by 16.1\%), containers for freight transport (by 10.7\%). In the division Furniture production decreased of e.g. seats with wooden frames (by 7.6\%), seats convertible into beds (by 6.0\%).
In October 2023 in comparison to October 2022, production increase was recorded for, among others: woven fabrics of cotton, not of yarns of different colours, weighing > $200 \mathrm{~g} / \mathrm{m}^{2}$, for clothing (by 220.5\%), rugs (by 194.8\%), brass (by 194.3\%), concrete mixers (by 182.8\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 178.2\%), wire of aluminium (by 172.7\%), woven fabrics of artificial staple fibre (by 135.7\%), women's or girls' overcoats and similar articles, not knitted (by 119.6\%), lead-acid accumulators working with nonliquid electrolyte, other than of a kind used for starting piston engine (by 116.5\%), tyres for tractors (by 109.8\%), plastic floor, wall, ceiling coverings (by 88.6\%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 88.3\%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 86.9\%), rusks, toasted bread and similar toasted products (by $80.4 \%$ ), milk and cream powder (by $76.7 \%$ ), electric motors and generators, excluding traction motors (by $73.4 \%$ ), groundnuts and nuts, shelled and sunflower seeds, peeled (by $73.2 \%$ ), nitric acid (by $72.4 \%$ ), vacuum cleaners (by $69.7 \%$ ), anhydrous ammonia (by $68.7 \%$ ), sodium hydroxide, solid (by 65.5\%), articles of bedding of feathers or down (by 61.2\%), domestic gas cookers with an oven (by 58.6\%), telephone sets, excluding cellular phones (by 54.2\%). In October 2023 in comparison to October 2022, unchanged remained the production of woven fabrics of carded wool or carded fine animal hair.

Compared to September, in October 2023 manufactured production increased for 288 products. In the divisions covering energy raw materials production increased of e.g. petroleum oils and oils obtained from bituminous minerals (by 96.9\%), natural gas (by 18.1\%), hard coal (by 15.2\%). In the division Food products production increased of e.g. rusks, toasted bread and similar toasted products (by $90.8 \%$ ), milk and cream powder (by $88.8 \%$ ), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by $75.1 \%$ ), soups and broths and preparations therefor (by 59.9\%), apple juice (by 52.3\%), other prepared dishes and meals (by 44.2\%), edible evaporated salt (by 43.2\%), vegetable pickles (by 40.8\%). In the divisions Wearing apparel and Leather and related products production increased of e.g. waterproof footwear, with uppers in rubber or plastics (by 41.6\%), women's or girls' overcoats and similar articles, not knitted (by 36.3\%), footwear with rubber, plastic or leather outer soles and leather uppers, and with a protective metal toe-cap (by $24.3 \%$ ), unsplit bovine leather for shoes (by 23.0\%), women's or girls' dresses and skirts, not knitted (by 19.6\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 16.2\%), footwear with leather uppers (by 14.4\%). In the divisions Wood and products of wood and Paper and paper products production increased of e.g. fluting paper (by 18.3\%), assembled parquet panels of wood for mosaic floors (by 16.6\%), other paper and paperboard for graphic purposes (by 15.2\%), folding cartons, boxes and cases of non-corrugated paper or paperboard (by 8.7\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by $8.7 \%$ ), toilet paper (by 7.7\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production increased of e.g. soap in the form of flakes, wafers, granules or powders (by 59.2\%), potassic fertilizers (by 55.6\%), soap in bars etc. (by 44.1\%), polyester tow and staple (by 38.9\%), phosphatic fertilizers (by 37.8\%), expansible polystyrene (by 21.0\%), sulphuric acid (by 20.1\%). In the division Rubber and plastic products production increased of e.g. rubberised textile fabrics, except tyre cord fabric (by 17.5\%), plastic floor, wall, ceiling coverings (by 13.1\%), tyres for tractors (by 11.8\%), tyres for lorries and buses (by 10.9\%), tyres for passenger cars (by 10.3\%). In the division Other non-metallic mineral products production increased of e.g. structural-floor clay hollow bricks (by 69.2\%), ceramic ridge tiles (by 57.9\%), drinking glasses of glass gathered mechanically (by $50.0 \%$ ), structural-wall tiles of calcium-silicate (by 13.1\%), float glass and surface ground glass (by 10.7\%). In the division Basic metals production increased of e.g. hot rolled steel
products (by 68.5\%), flat cold-rolled steel products width less than 600 mm (by $53.8 \%$ ), sheets and strips of non-alloy steel coated with zinc (by 48.9\%), hot-rolled steel rods and bars (by $45.7 \%$ ), wire of steel (by 36.5\%), crude steel (by 9.2\%). In the division Fabricated metal products production increased of e.g. nails (by 15.9\%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 litres (by 13.3\%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 13.2\%), conductors not electrically insulated (by 13.2\%), aluminium windows (by 11.4\%), radiators for central heating of iron or steel (by $11.3 \%$ ), iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 11.3\%). In the divisions Computer, electronic and optical products and Electrical equipment production increased of e.g. outside aerials for radio or television reception excluding for satellite broadcast (by 67.1\%), primary cells and batteries (by 32.7\%), television receivers (by 27.4\%), automatic drying machines (by 23.8\%), optical fibre cables (by 20.7\%), leadacid accumulators of a kind used for starting piston engines in motor vehicles, working with liquid electrolyte (by 20.5\%), vacuum cleaners (by 17.3\%), refrigerators and freezers, including combined refrigerators-freezers (by 13.1\%), telephone sets, excluding cellular phones (by 12.9\%). In the division Machinery and equipment production increased of e.g. machine tools for machining metals (by 65.8\%), pick-up straw and fodder balers (by 31.2\%), vacuum pumps (by 23.8\%), concrete mixers (by 17.6\%), refrigerated show-cases and counters (by 11.5\%), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by 9.0\%). In the divisions Motor vehicles and Other transport equipment production increased of e.g. goods vehicles, with spark-ignition internal combustion piston engine; other goods vehicles (by $114.3 \%$ ), rail goods wagons (by $50.0 \%$ ), city/touring bicycles (by 41.1\%), internal combustion engines for vehicles (by 33.8\%), vehicle compressionignition engines (by 33.5\%), public transport vehicles (by 25.9\%), bicycles (by 22.9\%), lorries and road tractors for semi-trailers (by 16.8\%), goods vehicles, with compression-ignition internal combustion piston engine (by 16.0\%).
Compared with the previous month, production decrease was recorded in October 2023 for 164 products, among others for: propylene (by 78.1\%), disinfectant wipes (by $75.1 \%$ ), other polyamides filament tow and staple fibres (by 63.2\%), outside aerials for radio or television reception via satellite (by 62.6\%), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by 58.1\%), phenol (by 52.8\%), printed children's picture, drawing or colouring books (by 51.3\%), woven fabrics of synthetic staple fibre (by 51.0\%), millet groats (by 43.8\%), uncoated, unbleached kraftliner (by 43.0\%), tents (including caravan awnings, temporary canopies and similar articles) (by 42.8\%), woven fabrics of carded wool or carded fine animal hair (by 41.2\%), sodium hydroxide in aqueous solution (by 39.5\%), tomato juice (by 38.9\%), non-woven glass fibre webs, felts, mattresses and boards (by 37.8\%), footwear (including waterproof footwear), incorporating a protective metal toecap, with outer soles and uppers of rubber or of plastics (by 37.2\%), wadding; other articles of wadding (by 36.8\%), bronze (by 35.7\%), panty hose and tights (by 35.3\%), frozen fruit and nuts (by 31.2\%), frozen salt water fish (by 30.0\%), protective face shields (by 29.2\%), electricity meters (by 28.9\%), soda or sulphate wood pulp (by 28.8\%), aluminium reservoirs, tanks and similar containers for any material (other than compressed or liquefied gas), of a capacity > 300 litres (by 28.6\%).
Production of textile hosepiping and similar textile tubing remained at the same level as in the previous month.

Summarizing the manufactured production in the period January-October 2023, compared with the corresponding period of the previous year, production increase was recorded for 142 products, among others for: protective clothing (overalls, aprons) (by 121.5\%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 104.0\%), protective head caps (by 75.5\%), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $67.0 \%$ ), rusks, toasted bread and similar toasted products (by 61.5\%), rail goods wagons (by 59.8\%), animal or vegetable fats and oils and their fractions, hydrogenated, esterified, but not further
prepared (by 59.0\%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 55.6\%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 54.3\%), woven fabrics of cotton, not of yarns of different colours, weighing $>200 \mathrm{~g} / \mathrm{m}^{2}$, for clothing (by 53.4\%), women's or girls' overcoats and similar articles, not knitted (by 52.0\%), reciprocating displacement compressors (by 51.3\%), road tractors for semi-trailers (by $50.6 \%$ ), soap with disinfectant properties (by $46.9 \%$ ), goods vehicles, with compressionignition internal combustion piston engine (by 43.8\%), lorries and road tractors for semi-trailers (by 42.9\%), fire-fighting vehicles (by 41.6\%), air-cooled transformers (by 41.2\%), woven fabrics of man-made filament yarns obtained from high tenacity yarn, strip or the like (by 40.7\%), textile floor coverings (by 40.0\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 37.8\%), cooked or uncooked pasta stuffed with meat, fish, cheese or other substances in any proportion (by 35.3\%), compressors for refrigeration equipment (by 34.8\%), rugs (by 32.7\%), frozen salt water fish (by 31.9\%), electric motors and generators, excluding traction motors (by 31.7\%), textile fabrics, impregnated, coated or covered n.e.c. (by 31.6\%), leadacid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by $30.2 \%$ ), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 29.2\%), paints and varnishes, based on polyesters, weight of the solvent more than $50 \%$ (by 29.2\%).
In January-October compared with the corresponding period of the previous year, production decrease was recorded for 315 products, among others for: toluene (by 93.6\%), food grinders, mixers and juice extractors (by 75.0\%), vacuum pumps (by 74.6\%), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by 68.7\%), ceramic ridge tiles (by 67.6\%), structural-floor clay hollow bricks (by 65.6\%), filament lamps (by 61.3\%), outside aerials for radio or television reception via satellite (by 61.1\%), non-woven glass fibre webs, felts, mattresses and boards (by 59.5\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 58.8\%), rubber gloves (by 56.3\%), assembled parquet panels of wood for mosaic floors (by 54.4\%), woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses (by 52.2\%), bed linen (by 51.2\%), refined sunflower-seed oil and its fractions, for human consumption; non-confectioned (by $50.2 \%$ ), bicycles (by 48.1\%), women's or girls' trousers, overalls and shorts, not knitted (by 44.0\%), LED light bulbs (by 41.0\%), buckwheat groats and meal (by 40.7\%), footwear with uppers of textile materials (by 40.6\%), phosphatic fertilizers (by 40.6\%), waterproof footwear, with uppers in rubber or plastics (by $40.1 \%$ ), woven fabrics of cotton, not of yarns of different colours, weighing $>200 \mathrm{~g} / \mathrm{m}^{2}$, for household linen or home furnishing textiles (by 40.0\%), disinfectant wipes (by 39.8\%), needles, catheters, cannulae and the like used in medical sciences (excluding tubular metal needles and needles for sutures) (by 39.5\%).

## SOLD PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. In October 2023 in comparison to October 2022, in the divisions covering energy raw materials production increased of hard coal (by 17.5\%). In the divisions Food products and Beverages production increased of e.g. refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 76.6\%), millet groats (by 68.1\%), dried fruit (excluding grapes); mixtures of dried nuts and/or dried fruits (by 55.8\%), other prepared dishes and meals (by 48.6\%), non-alcoholic beer (by 47.3\%), soups and broths and preparations therefor (by 44.4\%). In the divisions Wearing apparel and Leather and related products production increased of e.g. leather of bovine animals (by 22.4\%), women's or girls' dresses and skirts, not knitted (by 16.7\%), men's or boys' trousers, overalls and shorts, not knitted (by 15.4\%). 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 189.7\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 30.7\%),
corrugated paperboard (by 18.9\%), coniferous sawnwood (by 15.6\%), flat pallets and pallet collars of wood (by 13.7\%), particle and similar boards of wood and ligneous materials (by 12.8\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production increased of e.g. nitrogenous fertilizers (by $59.2 \%$ ), paints and varnishes, based on polyesters, weight of the solvent not more than $50 \%$ (by $35.0 \%$ ), disinfectants put up in forms or packings for retail sale or as preparations or articles (by 31.5\%), sulphuric acid (by $26.5 \%$ ), lubricating petroleum oils and heavy preparations n.e.c. (by $23.6 \%$ ), diesel oils (by $22.9 \%$ ). In the division Rubber and plastic products production increased of e.g. plastic floor, wall, ceiling coverings (by $99.0 \%$ ), rigid tubes, pipes and hoses of polymers of propylene (by $22.6 \%$ ), rigid tubes, pipes and hoses of polymers of ethylene (by 19.9\%), tableware and kitchenware of plastic (by 13.8\%). In the division Other non-metallic mineral products production increased of e.g. calcium-silicate brick (by 18.1\%), structural-wall clay hollow bricks (by 11.0\%), products of heat insulation of mineral wools (by 10.5\%), flagstones and similar articles of concrete (by $8.6 \%$ ), float glass and surface ground glass (by 8.5\%). In the division Basic metals production increased of e.g. flat bars, rods and profiles of aluminium (by 33.4\%), sheets and strips of non-alloy steel coated with zinc (by $26.7 \%$ ), wire of steel (by $16.3 \%$ ). In the division Fabricated metal products production increased of e.g. iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 47.0\%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by $36.4 \%$ ), hand tools of a kind used in agriculture, horticulture or forestry (by $26.1 \%$ ), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by $23.0 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production increased of e.g. vacuum cleaners (by 113.6\%), electric motors and generators, excluding traction motors (by 78.0\%), air-cooled transformers (by $19.5 \%$ ), automatic drying machines (by $9.2 \%$ ), water meters (by $9.1 \%$ ), dish washing machines (by 8.3\%). In the division Machinery and equipment production increased of e.g. reciprocating displacement compressors (by 34.0\%), hydraulic pumps (by 7.2\%). In the divisions Motor vehicles and Other transport equipment production increased of e.g. rail goods wagons (by 91.3\%), vehicle compression-ignition engines (by $31.4 \%$ ). In the division Furniture production increased of kitchen furniture of wood (by 10.1\%).
Compared with the corresponding month of the previous year, production decrease was recorded for, among others: bricks made of clay (by $82.6 \%$ ), woven fabrics of synthetic or artificial filament yarns (by 73.9\%), women's or girls' trousers, overalls and shorts, not knitted (by 70.5\%), syringes, with or without needles (by $67.1 \%$ ), men's or boys' overcoats and similar articles, knitted or crocheted (by 63.8\%), ploughs (by $63.2 \%$ ), pick-up straw and fodder balers (by $62.1 \%$ ), women's or girls' overcoats and similar articles, knitted or crocheted (by 51.3\%), machinery for construction, road and drainage work (by 49.2\%), footwear with uppers of textile materials (by 47.7\%), ceramic roof tiles (by 42.0\%), optical fibre cables (by 39.5\%), nickelcadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron and other electric accumulators (by $39.3 \%$ ), field sowers (by $38.7 \%$ ), ceramic ridge tiles (by $38.4 \%$ ), sodium hydroxide in aqueous solution (by $38.3 \%$ ), porcelain or china tableware and kitchenware (by $37.5 \%$ ), assembled parquet panels of wood for mosaic floors (by $37.2 \%$ ), refined unwrought lead (by $36.4 \%$ ), soil machinery for agriculture and forestry (by $35.7 \%$ ), multi-phase current motors, excluding traction motors (by $35.0 \%$ ), twine, cordage, rope and cables, of jute or other textile bast fibres (by 34.5\%), iron or steel containers for compressed or liquefied gas (by 33.8\%), rectified spirit (ethyl alcohol) (by 33.6\%), sea-going boats for pleasure or sports (by $33.3 \%$ ), motor oils (by $30.7 \%$ ), bicycles (by 29.6\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 28.6\%), medicaments, containing penicillins or other antibiotics (by 27.7\%), women's or girls' blouses and shirts, not knitted (by 27.5\%).
In comparison with the corresponding month of the previous year, production of frozen fruit and nuts, men's or boys' shirts, not knitted and liquefied propane and butane was at the same level.

Compared to September 2023, in October 2023 sold production increased for 194 products. In the divisions Food products and Beverages production increased of e.g. sugar confectionery containing cocoa (by 29.6\%), vodka (by 28.5\%), frozen salt water fish fillets (by 27.0\%). In the divisions Wearing apparel and Leather and related products production increased of e.g. men's or boys' overcoats and similar articles, knitted or crocheted (by 32.4\%), leather of bovine animals (by 27.0\%), women's or girls' dresses and skirts, not knitted (by 24.7\%). In the divisions Wood and products of wood and Paper and paper products production increased of e.g. assembled parquet panels of wood for mosaic floors (by 35.3\%), flat pallets and pallet collars of wood (by 22.5\%), corrugated paperboard (by 7.8\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production increased of e.g. sulphuric acid (by 55.7\%), asphalt (by $21.1 \%$ ), polyurethane adhesives (by 19.3\%). In the division Rubber and plastic products production increased of e.g. tableware and kitchenware of plastic (by 30.0\%), plastic floor, wall, ceiling coverings (by 13.9\%), plastic sacks and bags (by 10.5\%). In the division Other non-metallic mineral products production increased of e.g. structural-floor clay hollow bricks (by 53.1\%), bricks made of clay (by $44.3 \%$ ), lime (by $13.7 \%$ ). In the division Basic metals production increased of e.g. wire of steel (by 23.0\%), steel rods and flat bars (by 19.3\%), sheets and strips of non-alloy steel coated with zinc (by 13.2\%). In the division Fabricated metal products production increased of e.g. hand tools of a kind used in agriculture, horticulture or forestry (by 18.7\%), Iron or steel reservoirs, tanks and similar containers for liquids, of a capacity > 300 litres (by 12.6\%), nails (by 10.5\%). In the divisions Computer, electronic and optical products and Electrical equipment production increased of e.g. gas meters (by $75.3 \%$ ), automatic drying machines (by 37.0\%), vacuum cleaners (by $35.9 \%$ ). In the division Machinery and equipment production increased of e.g. machine tools for machining metals (by $72.2 \%$ ), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by 36.1\%), rotary displacement compressors (by 23.0\%), refrigerated show-cases and counters (by 21.6\%). In the divisions Motor vehicles and Other transport equipment production increased of e.g. rail goods wagons (by 50.0\%), vehicle compression-ignition engines (by 42.6\%), city/touring bicycles (by 26.8\%).
Compared with the previous month, production decrease was recorded for 111 products, among others for: millet groats (by 46.3\%), cash registers (by 43.9\%), sodium hydroxide in aqueous solution (by 36.0\%), women's or girls' jackets, not knitted (by 32.6\%), tomato juice (by 27.5\%), refined unwrought lead (by 23.7\%), machinery for construction, road and drainage work (by 23.5\%), ploughs (by 22.3\%), syringes, with or without needles (by 22.0\%), field sowers (by 21.8\%), sweetened or flavoured waters (by 20.1\%), copper and copper alloy bars, rods and profiles (by 20.1\%), footwear with uppers of textile materials (by 19.8\%), non-alcoholic beer (by 18.0\%), liquid buttermilk (by 17.0\%), unsweetened, non-flavoured mineral and aerated waters (by $16.9 \%$ ), soil machinery for agriculture and forestry (by 16.9\%), water meters (by 15.5\%), multi-phase current motors, excluding traction motors (by 15.0\%).
Production of articulated link chain of iron or steel remained at the same level as in the previous month.

In January-October 2023 compared with the corresponding period of the previous year, production increase was recorded for 89 products, among others for: rail goods wagons (by 67.7\%), reciprocating displacement compressors (by 51.1\%), rusks, toasted bread and similar toasted products (by 47.0\%), tableware and kitchenware of plastic (by 42.2\%), air-cooled transformers (by 39.9\%), crude rape and colza oil and their fractions, for human consumption (by 38.8\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 37.6\%), vehicle compression-ignition engines (by 29.2\%), panty hose and tights (by 24.4\%), woven fabrics of synthetic staple fibre (by 24.0\%), prepared meals and dishes based on meat (by 22.1\%), cash registers (by 20.1\%), electricity meters (by 14.4\%), passenger cars (by 13.7\%), plastic floor, wall, ceiling coverings (by 13.7\%), polyurethane adhesives (by 12.6\%).

In January-October 2023 compared with the corresponding period of the previous year, production decrease was recorded for 213 products, among others for: bricks made of clay (by 92.9\%), assembled parquet panels of wood for mosaic floors (by 55.0\%), ceramic ridge tiles (by 54.7\%), single-phase current motors (by 44.9\%), footwear with uppers of textile materials (by 39.5\%), phosphatic fertilizers (by 35.6\%), autoclaved cellular concrete (by 35.6\%), city/touring bicycles (by 35.2\%), building blocks of light concrete (by 34.7\%), chemical fibres (by 34.4\%), rotary displacement compressors (by 34.4\%), products of heat insulation of mineral wools (by 33.9\%), porcelain or china tableware and kitchenware (by $32.7 \%$ ), other paper and paperboard for graphic purposes (by 30.8\%), non-refractory clay building bricks (by 30.5\%), buckwheat groats and meal (by 29.8\%), potassic fertilizers (by 29.5\%), domestic gas cookers with an oven (by 28.7\%), pick-up straw and fodder balers (by 28.5\%).

## 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.

