## Production of major industrial products in August 2022



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Statistics Poland

## Content-related works

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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 324 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.

Table 1 presents the data on manufactured production of products in August 2022 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 August 2022 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.

Table 5 presents the data on manufactured production of products related to the prevention of spreading / combating COVID-19 by the months, 2022.

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 August 2022, 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 2022.
The publication presents data on manufactured production for 324 products and assortment groups and on sold production for 233 products and assortment groups. In August 2022, manufactured production of 119 items and sold production of 85 items was higher than in August 2021. Decrease was noted on manufactured production for 203 items and on sold production for 147 items. Data on production of structural-floor clay hollow bricks 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 August 2022 in comparison to August 2021, in the divisions covering energy raw materials production decreased of hard coal (by 10.1\%). In the division Food products production decreased of rendered pork fat suitable for consumption (by 41.8\%), frozen salt water fish (by $21.6 \%$ ), soups and broths and preparations therefor (by $21.3 \%$ ), fruit and vegetable juice (by 15.8\%), barley groats and meal (by 14.2\%). In the divisions Wearing apparel and Leather and related products production decreased of women's or girls' overcoats and similar articles (by $36.5 \%$ ), footwear with uppers of textile materials (by $33.3 \%$ ), men's or boys' jackets and blazers (by $32.8 \%$ ), panty hose and tights (by $28.2 \%$ ), men's or boys' suits and ensembles (by $22.5 \%$ ). In the division Wood and products of wood production decreased of particle and similar boards of wood and ligneous materials (by $35.8 \%$ ), assembled parquet panels of wood other than for mosaic floors (by 34.2\%), doors of wood (by 30.3\%), veneers (by 29.4\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $50.2 \%$ ), pesticides (by $39.7 \%$ ), paints and varnishes, based on polyesters, weight of the solvent not more than $50 \%$ (by $38.4 \%$ ), light fuel oils (by $35.8 \%$ ). In the division Rubber and plastic products production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 46.9\%), tyres for agricultural machinery (by 38.1\%), tyres for tractors (by $35.7 \%$ ), rigid tubes, pipes and hoses of polymers of propylene (by $24.0 \%$ ). In the division Other non-metallic mineral products production decreased of gypsum plasters (by 35.7\%), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by 33.9\%), calcium-silicate brick (by 26.6\%), building bituminous felt (by 26.1\%). In the division Basic metals production decreased of wire of aluminium (by 70.5\%), bronze (by 63.9\%), sheets and strips of non-alloy steel coated with zinc (by 40.0\%), cold-rolled steel sheet width 600 mm or wider (by $36.8 \%$ ). In the division Fabricated metal products production decreased of radiators for central heating of iron or steel (by 41.8\%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 37.3\%), aluminium windows (by 20.5\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of domestic gas cookers with an oven (by 66.6\%), LED light bulbs (by 66.3\%), vacuum cleaners (by 51.1\%), radio receivers of a kind used in motor vehicles (by 43.8\%), electric cookers including gas-electric cookers (by 43.8\%). In the division Machinery and equipment production decreased of concrete mixers (by 69.2\%), scarifiers and cultivators (by 36.0\%), ploughs (by 35.8\%), loaders for general use in agriculture (by 31.5\%). In the division Furniture production decreased of wooden furniture for the dining-room and living-room (by 19.6\%), seats with wooden frames (by 14.5\%), kitchen furniture of wood (by 10.8\%).
Compared with the corresponding month of the previous year, in August 2022, in the division Food products production increased of prepared meals and dishes based on meat (by 41.3\%),
canned poultry meat (by $38.9 \%$ ), milk and cream powder (by $26.9 \%$ ), edible evaporated salt (by $25.9 \%$ ), kefir, sour milk and sour cream (by $24.7 \%$ ). In the division Wearing apparel production increased of women's or girls' suits and ensembles (by 117.9\%), men's or boys' overcoats and similar articles (by 35.4\%), women's or girls' blouses and shirts (by 26.4\%). In the division Paper and paper products production increased of sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by $34.4 \%$ ), toilet paper (by $15.7 \%$ ). In the division Chemical products production increased of polyurethane adhesives (by 81.9\%), paints and varnishes, based on polyesters, weight of the solvent more than $50 \%$ (by $42.7 \%$ ), toilet waters (by $30.6 \%$ ), sodium hydroxide, solid (by $30.1 \%$ ), synthetic calcium sulphate (by $24.6 \%$ ). In the division Other non-metallic mineral products production increased of ceramic roof tiles (by $18.5 \%$ ), ceramic ridge tiles (by $11.8 \%$ ), boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by 11.1\%). In the division Basic metals production increased of hotrolled steel rods and bars (by $70.3 \%$ ), copper plates, sheets and strip (by $33.5 \%$ ), welded tubes (by $10.2 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production increased of multi-phase current motors, excluding traction motors (by $50.0 \%$ ), household refrigerators and freezers (by $25.8 \%$ ), telephone sets, excluding cellular phones (by $25.3 \%$ ), water meters (by $24.0 \%$ ), air-cooled transformers (by $21.8 \%$ ). In the division Machinery and equipment production increased of machining centres, unit construction machines and multi-station transfer machines for working metal (by 85.7\%), lathes for working metal (by $33.3 \%$ ), agricultural tractors (by $16.5 \%$ ), pick-up straw and fodder balers (by $14.1 \%$ ). In the divisions Motor vehicles and Other transport equipment production increased of lorries and road tractors for semi-trailers (by 203.4\%), vehicle compression-ignition engines (by 77.5\%), sea-going boats for pleasure or sports (by 54.2\%), passenger cars (by 41.2\%).

Compared to July 2022, in August 2022 manufactured production decreased for 173 products. In the divisions Food products and Beverages production decreased of non-alcoholic beer (by 44.9\%), canned beef and veal meat (by $32.3 \%$ ), frozen fruit and nuts (by $26.2 \%$ ), unsweetened, non-flavoured mineral and aerated waters (by $25.6 \%$ ), soups and broths and preparations therefor (by 24.0\%), prepared meals and dishes based on vegetables (by 19.2\%), kefir, sour milk and sour cream (by 18.0\%). In the divisions Wearing apparel and Leather and related products production decreased of men's or boys' overcoats and similar articles (by 49.6\%), women's or girls' overcoats and similar articles (by 30.8\%), women's or girls' dresses and skirts (by 19.3\%), footwear with uppers of textile materials (by 17.0\%). In the division Wood and products of wood production decreased of veneers (by $37.7 \%$ ), assembled parquet panels of wood other than for mosaic floors (by 17.6\%), assembled parquet panels of wood for mosaic floors (by 10.8\%). In the division Chemical products production decreased of pesticides (by 46.5\%), nitric acid (by 33.3\%), anhydrous ammonia (by 32.5\%), chemical fibres (by 25.9\%). In the division Rubber and plastic products production decreased of tyres for agricultural machinery (by 51.1\%), tyres for tractors (by $45.9 \%$ ), tubes, pipes and hoses of vulcanised rubber other than hard rubber (by $31.2 \%$ ), tyres for passenger cars (by 22.9\%), plastic floor, wall, ceiling coverings (by 13.9\%). In the division Other non-metallic mineral products production decreased of gypsum plasters (by 29.9\%), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by 28.3\%), ceramic ridge tiles (by 21.5\%), calcium-silicate brick (by 14.7\%), ceramic tiles and flags (by $14.3 \%$ ). In the division Basic metals production decreased of wire of aluminium (by 66.4\%), copper plates, sheets and strip (by 32.3\%), sheets and strips of non-alloy steel coated with zinc (by 14.7\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of single-phase current motors (by $43.9 \%$ ), food grinders, mixers and juice extractors (by $40.6 \%$ ), water meters (by $33.8 \%$ ), domestic gas cookers with an oven (by $33.5 \%$ ), computers (by $22.3 \%$ ). In the division Machinery and equipment production decreased of concrete mixers (by $57.3 \%$ ), ball bearings (by $41.6 \%$ ), oil or petrol-filters for internal combustion engines (by $41.2 \%$ ). In the divisions Motor vehicles and Other transport equipment production decreased of passenger cars (by $36.3 \%$ ), public transport vehicles (by $33.3 \%$ ), bicycles
(by 25.6\%), sea-going boats for pleasure or sports (by 23.2\%), vehicle compression-ignition engines (by 22.8\%).
Compared with the previous month, production increase was recorded for 145 products, among others for: butadiene-1,3 (by 149.0\%), unsplit bovine leather for shoes (by 147.8\%), bricks made of clay (by 102.3\%), footwear with leather uppers (by $95.5 \%$ ), automatic drying machines for households (by 95.1\%), panty hose and tights (by 88.8\%), acetic acid (by 80.7\%), household refrigerators and freezers (by 78.0\%), LED light bulbs (by 75.5\%), tomato juice (by 73.6\%), men's or boys' trousers, overalls and shorts (by 70.5\%), ploughs (by 70.4\%), fruit wines (by 66.7\%), margarine and spreads (by $66.2 \%$ ), automatic washing and washing-drying machines for households (by $63.9 \%$ ), filament lamps (by $57.2 \%$ ), polymers of styrene (by $56.6 \%$ ), canned fish (by $55.8 \%$ ), windows of wood (by $54.9 \%$ ), telephone sets, excluding cellular phones (by $48.6 \%$ ), refined unwrought lead (by 48.5\%), television receivers (by 45.5\%), air-cooled transformers (by $43.6 \%$ ), sugar confectionery containing cocoa (by $42.7 \%$ ), multiple glazed units (by $36.0 \%$ ), seamless tubes (by $35.1 \%$ ), expansible polystyrene (by $33.3 \%$ ), kitchen and bathroom mixing valves (by 33.2\%), phenol (by 33.1\%), sodium hydroxide, solid (by 32.6\%).
In comparison with previous month, production of rye bread, leather of bovine animals, polyvinyl chloride not mixed with any other substances and lathes for removing metal remained at the same level.

Summarazing the production in the period January-August 2022, with the corresponding period of the previous year, production increase was recorded for 167 products, among others for: women's or girls' suits and ensembles (by 127.5\%), butadiene-1,3 (by 98.1\%), ethylene (by $82.4 \%$ ), polyethylene (by $80.8 \%$ ), men's or boys' overcoats and similar articles (by $79.8 \%$ ), polyvinyl chloride not mixed with any other substances (by $73.4 \%$ ), propylene (by $58.9 \%$ ), barley groats and meal (by 54.4\%), buckwheat groats and meal (by 52.9\%), prepared meals and dishes based on meat (by 47.6\%), table candles (by 43.9\%), canned poultry meat (by 41.2\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 39.9\%), agricultural tractors (by $38.3 \%$ ), yarn of carded wool (by 38.0\%), sea-going boats for pleasure or sports (by $37.0 \%$ ), special fabrics including pile fabrics and terry towelling (by $36.3 \%$ ), ceramic ridge tiles (by $33.3 \%$ ), telephone sets, excluding cellular phones (by 31.4\%), edible rock salt (by $30.4 \%$ ), men's or boys' shirts (by 29.3\%), polypropylene (by 27.9\%), bicycles (by 27.5\%), synthetic calcium sulphate (by 27.5\%), sodium hydroxide in aqueous solution (by 27.2\%), copper plates, sheets and strip (by $26.4 \%$ ), apple juice (by $26.0 \%$ ), air-cooled transformers (by $23.2 \%$ ), wheat groats and meal (by 23.1\%), machinery for construction, road and drainage work (by 22.5\%).
In January-August 2022 compared with the corresponding period of the previous year, production decrease was recorded for 156 products, among others: brass (by $82.9 \%$ ), filament lamps (by 69.8\%), food grinders, mixers and juice extractors (by 60.0\%), LED light bulbs (by $59.3 \%$ ), cash registers (by $59.3 \%$ ), domestic gas cookers with an oven (by $58.4 \%$ ), bronze (by $56.0 \%$ ), acetic acid (by $55.4 \%$ ), radio receivers of a kind used in motor vehicles (by 43.0\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $42.5 \%$ ), gas-electric cookers (by $38.1 \%$ ), unsplit bovine leather for shoes (by $33.3 \%$ ), toluene (by $32.5 \%$ ), rugs (by $32.2 \%$ ), footwear with leather uppers (by $32.1 \%$ ), electricity meters (by $30.1 \%$ ), concrete mixers (by $30.0 \%$ ), lead-acid accumulators for motor vehicles (by 27.5\%), vacuum cleaners (by 27.4\%), phosphatic fertilizers (by 26.2\%), women's or girls' overcoats and similar articles (by 24.2\%), electric hobs for building-in (by 21.5\%), hosiery (by 21.1\%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 20.9\%), potassic fertilizers (by 20.8\%), cans other than for preserving food and drink of iron or steel, of a capacity $<50$ l (by 20.3\%), radiators for central heating of iron or steel (by 19.4\%), electric ovens for building-in (by $19.3 \%$ ), woven fabrics of cotton weighing more than $200 \mathrm{~g} / \mathrm{m}^{2}$ (by $19.0 \%$ ), sodium hydroxide, solid (by 18.8\%).

## SOLD PRODUCTION

Indicators of the dynamics of sold industrial products were different in various sectors. In August 2022 in comparison to August 2021, in the divisions Food products and Beverages production decreased of frozen salt water fish (by $38.2 \%$ ), tomato juice (by 22.9\%), rendered, edible animals fats (by $16.0 \%$ ), vodka (by $15.5 \%$ ), fruit and vegetable juice (by $13.3 \%$ ), frozen fruit and nuts (by $10.7 \%$ ). In the divisions Wearing apparel and Leather and related products production decreased of women's or girls' blouses and shirts (by 39.6\%), footwear with uppers of textile materials (by $37.3 \%$ ), panty hose and tights (by 35.9\%), leather of bovine animals (by 31.4\%), women's or girls' trousers, overalls and shorts (by $30.7 \%$ ), men's or boys' jackets and blazers (by 24.4\%). In the division Wood and products of wood production decreased of veneers (by 47.3\%), doors of wood (by $24.5 \%$ ), assembled parquet panels of wood other than for mosaic floors (by 22.4\%), coniferous sawnwood (by 21.0\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of motor oils (by 41.7\%), nitrogenous fertilizers (by $39.8 \%$ ), paints and varnishes, based on polyesters, weight of the solvent not more than $50 \%$ (by $33.5 \%$ ), coke (by $29.8 \%$ ), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by $22.4 \%$ ), pesticides (by $17.6 \%$ ), liquefied propane and butane (by 17.4\%). In the division Rubber and plastic products production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 30.7\%), plastic floor, wall, ceiling coverings (by 29.3\%), rigid tubes, pipes and hoses of polymers of propylene (by 14.9\%), plastic sacks and bags (by $14.1 \%$ ). In the division Other non-metallic mineral products production decreased of bricks made of clay (by $64.0 \%$ ), structural-wall clay hollow bricks (by 49.1\%), ceramic ridge tiles (by $28.5 \%$ ), ceramic tiles and flags (by $25.2 \%$ ), building blocks of light concrete (by $24.9 \%$ ), autoclaved cellular concrete (by 19.2\%), ceramic sanitary fixtures (by 19.1\%). In the division Basic metals production decreased of flat bars, rods and profiles of aluminium (by $25.0 \%$ ), copper and copper alloy bars, rods and profiles (by 20.1\%), sheets and strips of nonalloy steel coated with zinc (by $17.7 \%$ ), wire of steel (by 13.9\%). In the division Fabricated metal products production decreased of cans other than for preserving food and drink of iron or steel, of a capacity $<50 \mathrm{l}$ (by $30.0 \%$ ), steel doors (by $22.0 \%$ ), aluminium windows (by $16.0 \%$ ). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of domestic gas cookers with an oven (by $53.8 \%$ ), gas meters (by $53.1 \%$ ), electric cookers including gas-electric cookers (by 41.1\%), electric ovens for building-in (by 39.2\%), leadacid accumulators for motor vehicles (by 28.0\%), insulated wires and conductors (by 23.7\%), vacuum cleaners (by 19.5\%), television receivers (by 10.0\%). In the division Machinery and equipment production decreased of loaders for general use in agriculture (by 45.7\%), cash registers (by $39.8 \%$ ), field sowers (by $36.5 \%$ ), scarifiers and cultivators (by $33.1 \%$ ), ploughs (by $28.6 \%$ ), pick-up straw and fodder balers (by $14.1 \%$ ), machine tools for machining metals (by $12.5 \%$ ). In the division Furniture production decreased of wooden furniture for the diningroom and living-room (by 20.3\%).
Compared with the corresponding month of the previous year in the divisions Food products and Beverages production increased of vegetable pickles (by $60.7 \%$ ), prepared meals and dishes based on meat (by 27.8\%), vinegar (by 27.5\%), kefir, sour milk and sour cream (by 25.0\%), chocolate and chocolate confectionery (by $25.0 \%$ ), unsweetened, non-flavoured mineral and aerated waters (by $24.9 \%$ ), wheat groats and meal (by 21.9\%), canned poultry meat (by 20.4\%), liquid buttermilk (by 17.1\%). In the division Wearing apparel production increased of men's or boys' trousers, overalls and shorts (by 43.2\%), men's or boys' shirts (by $5.6 \%$ ), women's or girls' jackets (by $4.8 \%$ ). In the division Paper and paper products production increased of sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 38.1\%), napkins and napkin liners for babies (by 28.9\%). In the division Chemical products production increased of polyurethane adhesives (by 71.3\%), chemical fibres (by 49.7\%), synthetic calcium sulphate (by 28.1\%), toilet waters (by 27.1\%), hair care products (by 17.3\%), glues and adhesives based on
synthetic resins (by 12.6\%). In division Other non-metallic mineral products production increased of boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by $28.7 \%$ ), porcelain or china tableware and kitchenware (by $23.8 \%$ ), ceramic roof tiles (by $7.9 \%$ ). In the division Basic metals production increased of hot-rolled steel rods and bars (by $59.6 \%$ ), steel rods and flat bars (by 16.7\%), refined unwrought lead (by 12.8\%). In the division Fabricated metal products production increased of food cans of tinplate (by 25.1\%). In the divisions Computer, electronic and optical products and Electrical equipment production increased of household refrigerators and freezers (by 38.7\%), multi-phase current motors, excluding traction motors (by $32.8 \%$ ), air-cooled transformers (by $18.5 \%$ ), dish washing machines for households (by 16.4\%). In the divisions Motor vehicles and Other transport equipment production increased of vehicle compression-ignition engines (by 172.9\%), passenger cars (by 64.7\%), sea-going boats for pleasure or sports (by 62.0\%), rail goods wagons (by 16.8\%).

Compared to July, in August $\mathbf{2 0 2 2}$ sold production increased for 132 products. In the divisions Food products and Beverages production increased of soups and broths and preparations therefor (by 93.5\%), sugar confectionery containing cocoa (by 87.1\%), margarine and spreads (by $52.3 \%$ ), fruit wines (by $51.5 \%$ ), wheat groats and meal (by $33.5 \%$ ), frozen vegetables (by $32.1 \%$ ), chocolate and chocolate confectionery (by 28.6\%), vegetable pickles (by $25.7 \%$ ), canned poultry meat (by 21.8\%), frozen fruit and nuts (by 21.0\%). In the divisions Wearing apparel and Leather and related products production increased of leather of bovine animals (by 108.8\%), men's or boys' trousers, overalls and shorts (by $68.3 \%$ ), footwear (by $45.2 \%$ ), panty hose and tights (by $32.7 \%$ ), women's or girls' jackets (by $14.8 \%$ ), women's or girls' trousers, overalls and shorts (by 13.5\%). In the divisions Wood and products of wood and Paper and paper products production increased of windows of wood (by 48.2\%), particle and similar boards of wood and ligneous materials (by 11.0\%), sacks and bags of paper (by $9.9 \%$ ). In the division Chemical products production increased of sulphuric acid (by $30.1 \%$ ), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by $21.3 \%$ ), synthetic calcium sulphate (by $15.4 \%$ ), potassic fertilizers (by $14.1 \%$ ), chemical fibres (by $14.1 \%$ ), phosphatic fertilizers (by $10.7 \%$ ), toilet waters (by $10.7 \%$ ). In the division Other non-metallic mineral products production increased of multiple glazed units (by 36.2\%), porcelain or china tableware and kitchenware (by 34.4\%), lime (by 27.5\%), ceramic roof tiles (by $22.3 \%$ ), building bituminous felt (by $16.8 \%$ ), ceramic ridge tiles (by $12.7 \%$ ), calcium-silicate brick (by $12.6 \%$ ). In the division Basic metals production increased of refined unwrought lead (by $55.2 \%$ ), hot-rolled steel rods and bars (by $35.8 \%$ ), steel rods and flat bars (by $26.1 \%$ ), hot rolled steel products (by $23.2 \%$ ), wire of steel (by $17.5 \%$ ), steel tubes (by 13.1\%). In the divisions Computer, electronic and optical products and Electrical equipment production increased of automatic drying machines for households (by 120.2\%), vacuum cleaners (by $66.0 \%$ ), air-cooled transformers (by $25.3 \%$ ), television receivers (by 24.3\%), household refrigerators and freezers (by 21.0\%), lead-acid accumulators for motor vehicles (by $18.8 \%$ ). In the division Machinery and equipment production increased of ploughs (by $96.0 \%$ ), kitchen and bathroom mixing valves (by $24.4 \%$ ), machinery for construction, road and drainage work (by 20.6\%), field sowers (by 15.9\%). In the division Other transport equipment production increased of rail goods wagons (by $26.5 \%$ ), bicycles (by $8.9 \%$ ). In the division Furniture production increased of seats convertible into beds (by $21.6 \%$ ).
Compared with the previous month, production decrease was recorded for 99 products, among others for: pick-up straw and fodder balers (by 67.6\%), passenger cars (by 45.4\%), single-phase current motors (by $44.1 \%$ ), public transport vehicles (by $36.9 \%$ ), pesticides (by $36.2 \%$ ), woven fabrics of synthetic or artificial filament yarns (by 35.3\%), veneers (by $34.5 \%$ ), non-alcoholic beer (by $30.8 \%$ ), nitrogenous fertilizers (by $30.3 \%$ ), edible evaporated salt (by $27.7 \%$ ), water meters (by $26.9 \%$ ), cash registers (by $26.9 \%$ ), machine tools for machining metals (by $25.8 \%$ ), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by $25.6 \%$ ), aluminium doors (by 20.8\%), women's or girls' dresses and skirts (by 20.7\%).
Production of butter remained at the same level as in the previous month.

In January - August compared with the corresponding period of the previous year, production decrease was recorded for 126 products, among others for: cash registers (by $60.9 \%$ ), domestic gas cookers with an oven (by $57.9 \%$ ), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $39.4 \%$ ), electric cookers including gas-electric cookers (by $33.4 \%$ ), leather of bovine animals (by $31.5 \%$ ), gas meters (by $31.1 \%$ ), lead-acid accumulators for motor vehicles (by 29.7\%), electricity meters (by 27.1\%), frozen salt water fish (by 25.3\%), nonconiferous sawnwood (by 25.3\%), vacuum cleaners (by 24.3\%), nitrogenous fertilizers (by 23.4\%), potassic fertilizers (by 22.9\%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 22.8\%), loaders for general use in agriculture (by 22.5\%), phosphatic fertilizers (by 22.2\%), liquefied propane and butane (by 21.6\%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 21.2\%), hosiery (by 19.9\%), paints and varnishes other than colodium containing in solution more than $50 \%$ of solvent by weight (by 18.6\%), electric ovens for building-in (by 17.7\%), footwear (by 17.6\%), structural-wall clay hollow bricks (by 17.1\%), automatic drying machines for households (by $16.5 \%$ ), pesticides (by $15.8 \%$ ), woven fabrics of synthetic or artificial filament yarns (by $15.4 \%$ ), sheets and strips of non-alloy steel coated with zinc (by 14.7\%), assembled parquet panels of wood other than for mosaic floors (by $14.3 \%$ ), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by $13.9 \%$ ).
In January - August compared with the corresponding period of the previous year, production increase was recorded for 105 products, among others for: sodium hydroxide in aqueous solution (by 43.6\%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by $39.8 \%$ ), barley groats and meal (by $37.2 \%$ ), prepared meals and dishes based on meat (by $36.3 \%$ ), special fabrics including pile fabrics and terry towelling (by $35.6 \%$ ), canned poultry meat (by $33.0 \%$ ), sea-going boats for pleasure or sports (by $31.4 \%$ ), single-phase current motors (by 31.4\%), synthetic calcium sulphate (by 30.3\%), buckwheat groats and meal (by 28.7\%), napkins and napkin liners for babies (by $27.2 \%$ ), vehicle compression-ignition engines (by $26.8 \%$ ), rail goods wagons (by $24.9 \%$ ), food cans of tinplate (by $23.9 \%$ ), women's or girls' jackets (by 23.9\%), table candles (by 21.8\%), air-cooled transformers (by 21.3\%), men's or boys' shirts (by 19.7\%), polyurethane adhesives (by 18.8\%), wheat groats and meal (by 18.1\%), apple juice (by $17.9 \%$ ), men's or boys' jackets and blazers (by 17.4\%), edible evaporated salt (by 17.3\%), toilet paper (by $16.1 \%$ ), basic pharmaceutical products (by 16.0\%), toilet waters (by $15.9 \%$ ), chocolate (by 14.5\%), men's or boys' trousers, overalls and shorts (by 13.8\%), multi-phase current motors, excluding traction motors (by 13.6\%), diesel oils (by 13.5\%).
Production of hot-rolled steel rods and bars 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 mc2022.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.

