

Production of major industrial products
in July 2023


# Production of major industrial products in July 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
Preface .....  3
Symbols .....  5
Main abbreviations .....  6
Introduction .....  7
Executive summary ..... 8
Methodological notes ..... 15
List of tables (tables available for download in XLSX format)
Table 1. Manufactured production of major industrial products in July, 2023
Table 2. Manufactured production of major products by months, 2022 and 2023
Table 3. Sold production of major products in July, 2023
Table 4. Sold production of major products by months, 2022 and 2023

## 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 July 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 July 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 July 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 July 2023, manufactured production of 144 items and sold production of 102 items was higher than in July 2022. Decrease was noted on manufactured production for 296 items and on sold production for 200 items. Data on production of frozen salt water fish; frozen salt water fish fillets; animal or vegetable fats and oils and their fractions, hydrogenated, esterified, but not further prepared; wheat bread; vodka; woven fabrics of synthetic filament yarns and artificial filament yarn; sacks and bags, of a kind used for the packing of goods; articles of bedding filled other than with feathers or down (including quilts and eiderdowns, cushions, pouffes, pillows); women's or girls' overcoats and other similar articles, not knitted; rectified spirit and seamless tubes and pipes 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 July 2023 in comparison to July 2022, in the divisions covering energy raw materials production decreased of e.g. petroleum oils and oils obtained from bituminous minerals (by 33.1\%), lignite (by 31.8\%), natural gas (by 17.5\%), hard coal (by 10.2\%). In the division Food products production decreased of e.g. muesli type preparations based on unroasted cereal flakes (by 52.6\%), buckwheat groats and meal (by 42.6\%), vegetable pickles (by 38.5\%), millet groats (by $35.3 \%$ ), canned beef and veal meat (by 33.5\%), tea in immediate packings of a content $\leq 3 \mathrm{~kg}$ (by 32.1\%), canned poultry meat (by 27.3\%), wheat groats and meal (by 25.2\%). In the divisions Wearing apparel and Leather and related products production decreased of e.g. footwear with uppers of textile materials (by 45.9\%), men's or boys' overcoats and other similar articles, not knitted (by 39.7\%), waterproof footwear, with uppers in rubber or plastics (by 38.4\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 36.4\%), women's or girls' trousers, overalls and shorts, not knitted (by 32.2\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 62.9\%), wadding; other articles of wadding (by 37.1\%), flat pallets and pallet collars of wood (by 33.6\%), other paper and paperboard for graphic purposes (by 32.5\%), wooden flooring materials (by 31.0\%), nonconiferous sawnwood (by 24.5\%). In the division Chemical products production decreased of e.g. phosphatic fertilizers (by 74.3\%), potassic fertilizers (by 70.7\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $55.8 \%$ ), pesticides and agrochemicals used in agriculture and forestry (by 54.3\%), nitric acid (by 53.9\%), 6-hexanelactam (by $52.7 \%$ ), sulphuric acid (by $50.3 \%$ ), anhydrous ammonia (by $47.8 \%$ ). In the division Rubber and plastic products production decreased of e.g. rubberised textile fabrics, except tyre cord fabric (by 29.9\%), tyres (by 22.9\%), plastic sacks and bags (by 17.5\%), plastic doors (by 16.3\%). In the division Other non-metallic mineral products production decreased of e.g. bricks made of clay (by $94.7 \%$ ), ceramic ridge tiles (by 88.7\%), structural-floor clay hollow bricks (by $70.8 \%$ ), ceramic roof tiles (by 53.9\%), building blocks of light concrete (by 41.3\%), drinking glasses of glass gathered mechanically (by 33.7\%) , bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 32.5\%). In the division Basic metals production decreased of e.g. copper plates, sheets and strip (by 58.2\%), pig iron (by $26.2 \%$ ), crude steel (by $24.5 \%$ ), copper and copper alloy bars, rods and profiles (by $22.7 \%$ ). In the division Fabricated metal products production decreased of e.g. nails (by 30.5\%), radiators for central heating of iron or
steel (by 30.0\%), aluminium windows (by 21.5\%), chain (except articulated link chain) and parts thereof (by 21.5\%), steel doors (by 13.5\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. filament lamps (by 92.7\%), outside aerials for radio or television reception via satellite (by 78.0\%), inside aerials for radio or television reception (by 77.1\%), food grinders, mixers and juice extractors (by $74.2 \%$ ), outside aerials for radio or television reception excluding for satellite broadcast (by 58.1\%), primary cells and batteries (by 39.8\%), computers (by 37.7\%), gas meters (by 35.8\%). In the division Machinery and equipment production decreased of e.g. pick-up straw and fodder balers (by 63.9\%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 49.2\%), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by 45.9\%), machine tools for machining metals (by 39.5\%), rotary displacement compressors (by 38.9\%). In the division Furniture production decreased of e.g. seats with wooden frames (by 19.5\%), seats convertible into beds (by $15.4 \%$ ), kitchen furniture of wood (by $15.4 \%$ ).
In July 2023 in comparison to July 2022, production increase was recorded for, among others: barbed wire and barbed wire entanglements made from steel or steel wire (by $161.7 \%$ ), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 134.0\%), woven fabrics of cotton, not of yarns of different colours, weighing > 200 $\mathrm{g} / \mathrm{m}^{2}$, for clothing (by 109.4\%), disinfectant wipes (by 90.3\%), butadiene-1,3 (by 87.0\%), goods vehicles, with compression-ignition internal combustion piston engine (by 60.7\%), women's or girls' overcoats and similar articles, knitted or crocheted (by $56.6 \%$ ), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 55.1\%), lorries and road tractors for semi-trailers (by 53.6\%), yarn of carded wool (by 53.3\%), lubricating petroleum oils and heavy preparations n.e.c. (by 42.2\%), building bituminous felt (by 41.5\%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by $41.5 \%$ ), crude rape and colza oil and their fractions, for human consumption (by 41.3\%), road tractors for semi-trailers (by 39.3\%), polymers of styrene (by 39.1\%), compressors for refrigeration equipment (by 37.7\%), fire-fighting vehicles (by 37.7\%), protective clothing (overalls, aprons) (by 37.0\%), reciprocating displacement compressors (by 36.1\%), paints and varnishes, based on polyesters, weight of the solvent more than $50 \%$ (by 35.6\%), air-cooled transformers (by 32.5\%), lead-acid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by 32.3\%). In July 2023 in comparison to July 2022, unchanged remained the production of refined unwrought lead, excluding lead powders or flakes and mechanical ventilation apparatus, noninvasive.

Compared to June 2023, in July 2023 manufactured production decreased for 301 products. In the divisions coverings energy raw materials production decreased of e.g. natural gas (by 10.9\%), hard coal (by 6.9\%). In the divisions Food products and Beverages production decreased of e.g. tomato juice (by 58.1\%), refined rape and colza oil and their fractions, for human consumption; confectioned (by 54.9\%), buckwheat groats and meal (by 52.7\%), margarine and spreads (by 46.5\%), millet groats (by 46.1\%), fruit wines (by 43.3\%). In the divisions Wearing apparel and Leather and related products production decreased of e.g. unsplit bovine leather for shoes (by 64.9\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 57.4\%), men's or boys' trousers, overalls and shorts, not knitted (by 44.6\%), panty hose and tights (by 38.7\%), women's or girls' dresses and skirts, not knitted (by 33.3\%), footwear with leather uppers (by 32.3\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. wadding; other articles of wadding (by 35.2\%), windows of wood (by 29.1\%), assembled parquet panels of wood other than for mosaic floors (by 22.8\%), fibreboard of wood or ligneous materials (by 22.0\%), wooden flooring materials (by 21.1\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of e.g. toluene (by 42.9\%), synthetic rubber (by 31.7\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $22.7 \%$ ), motor oils (by 19.3\%),
glues and adhesives based on synthetic resins (by 19.1\%), toilet waters (by 19.0\%). In the division Rubber and plastic products production decreased of e.g. rubberised textile fabrics, except tyre cord fabric (by 64.9\%), tyres (by 18.8\%), tableware and kitchenware of plastic (by 17.8\%), plastic doors (by $10.8 \%$ ), tubes, pipes and hoses of vulcanised rubber other than hard rubber (by 8.2\%). In the division Other non-metallic mineral products production decreased of e.g. structural-floor clay hollow bricks (by 48.8\%), bricks made of clay (by 39.8\%), non-woven glass fibre webs, felts, mattresses and boards (by 32.6\%), ceramic roof tiles (by 23.9\%), multiple glazed units (by 21.5\%). In the division Basic metals production decreased of e.g. refined unwrought lead (by 12.0\%), flat cold-rolled steel products width less than 600 mm (by 10.6\%), copper plates, sheets and strip (by 6.6\%), copper and copper alloy bars, rods and profiles (by $6.2 \%$ ). In the division Fabricated metal products production decreased of e.g. chain (except articulated link chain) and parts thereof (by $44.8 \%$ ), hand tools of a kind used in agriculture, horticulture or forestry (by 37.7\%), radiators for central heating of iron or steel (by $20.1 \%$ ), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by $12.8 \%$ ), steel doors (by 12.3\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. inside aerials for radio or television reception (by 39.6\%), refrigerators and freezers, including combined refrigerators-freezers (by $31.6 \%$ ), insulated wires and conductors (by $27.2 \%$ ), domestic gas cookers with an oven (by $26.7 \%$ ), gas meters (by $25.3 \%$ ). In the division Machinery and equipment production decreased of e.g. ploughs (by 49.1\%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 42.6\%), single stage turbo-compressors (by 31.6\%), kitchen and bathroom mixing valves (by 27.6\%), pickup straw and fodder balers (by 23.1\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. public transport vehicles (by $30.2 \%$ ), bicycles (by 29.1\%), rail goods wagons (by $26.0 \%$ ), internal combustion engines for vehicles (by $16.0 \%$ ), containers for freight transport (by 12.6\%). In the division Furniture production decreased of e.g. seats with wooden frames (by $31.5 \%$ ), seats convertible into beds (by $31.5 \%$ ), wooden bedroom furniture (by 21.1\%).
Compared with the previous month, production increase was recorded in July 2023 for 142 products, among others for: sodium hydroxide, solid (by 93.5\%), rubber gloves (by 91.2\%), roasted decaffeinated coffee (by 64.1\%), rock salt not suitable for consumption (by $60.4 \%$ ), sodium hydroxide in aqueous solution (by $59.6 \%$ ), groundnuts and nuts, shelled and sunflower seeds, peeled (by $57.5 \%$ ), frozen fruit and nuts (by $56.2 \%$ ), disinfectant wipes (by $52.8 \%$ ), phosphatic fertilizers (by $52.4 \%$ ), outside aerials for radio or television reception via satellite (by $50.0 \%$ ), food cans of tinplate (by 49.8\%), face masks used in medicine (by 48.0\%), frozen vegetables (by 44.6\%), potassic fertilizers (by 44.5\%), denatured ethyl alcohol with a vol. strength of $60 \%$ and more (by $43.9 \%$ ), light fuel oils (by 43.8\%), barbed wire and barbed wire entanglements made from steel or steel wire (by 43.2\%), liquefied propane and butane (by $40.7 \%$ ), soda or sulphate wood pulp (by $40.2 \%$ ), woven fabrics of synthetic staple fibre (by $40.0 \%$ ), edible rock salt (by 39.6\%), ethylene (by 39.5\%), other polyamides filament tow and staple fibres (by 37.9\%), hot-rolled steel rods and bars (by $36.4 \%$ ), 6 -hexanelactam (by $34.3 \%$ ), woven fabrics of cotton weighing more than $200 \mathrm{~g} / \mathrm{m}^{2}$ (by $33.3 \%$ ).
In July 2023 in comparison to June 2023, unchanged remained the production of woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses (excluding gauze, medical gauze).
Summarizing the manufactured production in the period January-July 2023, in comparison with the corresponding period of the previous year decrease of production was recorded for 322 items, among others for: face masks used in medicine (by $97.2 \%$ ), bricks made of clay (by $96.8 \%$ ), other protective face masks (by $93.9 \%$ ), toluene (by $91.2 \%$ ), food grinders, mixers and juice extractors (by $80.7 \%$ ), refined sunflower-seed oil and its fractions, for human consumption; confectioned (by $76.2 \%$ ), structural-floor clay hollow bricks (by $74.5 \%$ ), vacuum pumps (by 65.2\%), outside aerials for radio or television reception via satellite (by $65.0 \%$ ), ceramic ridge
tiles (by 62.2\%), refined sunflower-seed oil and its fractions, for human consumption; nonconfectioned (by 60.1\%), non-woven glass fibre webs, felts, mattresses and boards (by 56.7\%), filament lamps of a power $\leq 200 \mathrm{~W}$ and for a voltage $>100 \mathrm{~V}$ (by 55.3\%), assembled parquet panels of wood for mosaic floors (by 55.0\%), bed linen (by 54.7\%), filament lamps (by 52.3\%), phosphatic fertilizers (by 51.5\%), buckwheat groats and meal (by 50.5\%), city/touring bicycles (by 49.2\%), rubber gloves (by 48.8\%), concrete mixers (by 48.5\%), potassic fertilizers (by 48.1\%), woven fabrics of cotton, not of yarns of different colours, weighing $\leq 200 \mathrm{~g} / \mathrm{m}^{2}$, for technical or industrial uses (by 47.8\%), bicycles (by 47.8\%), 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 46.7\%), sugar (by $46.4 \%$ ), 6-hexanelactam (by 45.3\%), waterproof footwear, with uppers in rubber or plastics (by 44.7\%), non-refractory clay building bricks (by 44.2\%), women's or girls' trousers, overalls and shorts, not knitted (by 43.5\%), disinfectant wipes (by 43.2\%).
In January - July compared with the corresponding period of the previous year, production increase was recorded for 124 products, among others for: protective head caps (by 99.9\%), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $74.4 \%$ ), goods vehicles, with compression-ignition internal combustion piston engine (by $65.7 \%$ ), rail goods wagons (by 64.0\%), lorries and road tractors for semi-trailers (by 61.5\%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 61.3\%), reciprocating displacement compressors (by 58.3\%), groundnuts and nuts, shelled and sunflower seeds, peeled (by 56.3\%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 52.4\%), lead-acid accumulators working with non-liquid electrolyte, other than of a kind used for starting piston engine (by 49.7\%), textile floor coverings (by 46.8\%), antibiotics (by 44.5\%), air-cooled transformers (by 44.1\%), road tractors for semi-trailers (by 43.3\%), bronze (by 42.4\%), woven fabrics of cotton, not of yarns of different colours, weighing $>200 \mathrm{~g} / \mathrm{m}^{2}$, for clothing (by 42.2\%), women's or girls' overcoats and similar articles, knitted or crocheted (by $37.8 \%$ ), lead-acid accumulators working with liquid electrolyte, other than of a kind used for starting piston engine (by $35.6 \%$ ), vehicle compression-ignition engines (by 34.7\%), electricity meters (by 34.4\%), textile fabrics, impregnated, coated or covered n.e.c. (by 33.7\%), compressors for refrigeration equipment (by $32.0 \%$ ), radio receivers of a kind used in motor vehicles (by 28.1\%), rubberised textile fabrics, except tyre cord fabric (by 28.1\%), paints and varnishes, based on polyesters, weight of the solvent more than $50 \%$ (by $26.7 \%$ ), heavy fuel oils (by 25.9\%), fire-fighting vehicles (by 25.4\%), roasted decaffeinated coffee (by 24.7\%).

## SOLD PRODUCTION

Indicators of the dynamics of manufacturing industrial products were different in various sectors. In July 2023 in comparison to July 2022, in the divisions covering energy raw materials production decreased of hard coal (by 22.4\%). In the division Food products production decreased of e.g. millet groats (by 69.9\%), vegetable pickles (by 43.8\%), buckwheat groats and meal (by 43.1\%), homogenised composite food preparations for infant food or dietetic purposes (by 32.2\%), edible evaporated salt (by 28.0\%), barley groats and meal (by 20.2\%), canned poultry meat (by 20.1\%). In the divisions Wearing apparel and Leather and related products production decreased of e.g. women's or girls' trousers, overalls and shorts, not knitted (by 68.0\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 56.5\%), footwear with uppers of textile materials (by 44.3\%), women's or girls' dresses and skirts, not knitted (by 43.7\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 40.4\%), waterproof footwear, with uppers in rubber or plastics (by 35.3\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. assembled parquet panels of wood for mosaic floors (by 59.9\%), non-coniferous sawnwood (by 40.3\%), flat pallets and pallet collars of wood (by $37.0 \%$ ), wooden flooring materials (by $30.8 \%$ ), other paper and paperboard for graphic purposes (by 30.4\%), assembled parquet panels of wood other than
for mosaic floors (by 20.0\%). In the division Chemical products production decreased of e.g. disinfectants put up in forms or packings for retail sale or as preparations or articles (by 64.5\%), sodium hydroxide in aqueous solution (by 51.5\%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50\% (by 46.8\%), chemical fibres (by 41.4\%), nitrogenous fertilizers (by 35.0\%), organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s. (by $24.0 \%$ ). In the division Rubber and plastic products production decreased of e.g. tyres (by 18.6\%). In the division Other non-metallic mineral products production decreased of e.g. bricks made of clay (by 88.6\%), ceramic roof tiles (by 52.1\%), ceramic ridge tiles (by 51.0\%), products of heat insulation of mineral wools (by 38.7\%), porcelain or china tableware and kitchenware (by 38.2\%), building blocks of light concrete (by 25.7\%), structural-floor clay hollow bricks (by 20.9\%), double glazed units (by 19.6\%). In the division Basic metals production decreased of e.g. refined unwrought lead (by 44.0\%). In the division Fabricated metal products production decreased of e.g. hand saws; blades for saws of all kinds (by 41.1\%), welded grill, netting and fencing manufactured from wire of a diameter of < 3 mm (by 26.5\%), nails (by 26.0\%), hand tools of a kind used in agriculture, horticulture or forestry (by $23.2 \%$ ). In the division Electrical equipment production decreased of e.g. singlephase current motors (by 54.1\%), nickel-cadmium, nickel metal hydride, lithium-ion, lithium polymer, nickel-iron and other electric accumulators (by 35.8\%), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $30.6 \%$ ), domestic gas cookers with an oven (by $30.4 \%$ ), dish washing machines (by $30.0 \%$ ), automatic washing and washing-drying machines (by $22.2 \%$ ). In the division Machinery and equipment production decreased of e.g. pick-up straw and fodder balers (by 53.6\%), rotary displacement compressors (by 39.8\%), machine tools for machining metals (by 34.0\%), centrifugal pumps for liquids, excluding: pumps used in fluid power equipment, fuel, coolant, lubricant and concrete pumps (by 31.2\%), fire extinguishers (by 29.8\%), scarifiers and cultivators (by 27.7\%), refrigerated show-cases and counters (by 22.7\%), kitchen and bathroom mixing valves (by 20.1\%), field sowers (by 19.6\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. passenger cars (by 23.9\%). In the division Furniture production decreased of e.g. kitchen furniture of wood (by 17.6\%).
Compared with the corresponding month of the previous year, production increase was recorded for, among others: iron or steel reservoirs, tanks and similar containers lined or heatinsulated, for liquids, of a capacity > 300 litres (by 130.9\%), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by $86.0 \%$ ), crude rape and colza oil and their fractions, for human consumption (by 77.5\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 71.9\%), rail goods wagons (by 62.1\%), special fabrics including pile fabrics and terry towelling (by 55.1\%), leather of bovine animals (by 48.6\%), automatic drying machines (by 47.4\%), refined rape and colza oil and their fractions, for human consumption; non-confectioned (by 46.7\%), table candles (by 43.8\%), sheets and strips of non-alloy steel coated with zinc (by 35.4\%), reciprocating displacement compressors (by 33.6\%), vehicle compression-ignition engines (by 32.6\%), air-cooled transformers (by 31.7\%), flat bars, rods and profiles of aluminium (by $29.4 \%$ ), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by $28.0 \%$ ), motor oils (by 26.9\%), woven fabrics of synthetic staple fibre (by 24.6\%), orthopaedic appliances, splints and other fracture appliances (by 24.0\%), plastic floor, wall, ceiling coverings (by 23.4\%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 23.2\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 23.1\%), medicaments and other pharmaceutical preparations (by 23.0\%), prepared meals and dishes based on vegetables (by 22.9\%), medicaments, containing alkaloids or derivatives thereof, but not hormones or antibiotics (by 22.6\%), sulphuric acid (by 21.0\%).
Compared to June 2023, in July 2023 sold production decreased for 205 products. In the division Food products production decreased of e.g. millet groats (by 79.2\%), prepared meals and dishes based on fish, crustaceans and molluscs (by 60.2\%), tomato juice (by 49.4\%), buckwheat groats
and meal (by 42.2\%), vegetable pickles (by 39.7\%), margarine and spreads (by $25.8 \%$ ), soups and broths and preparations therefor (by 25.4\%), fruit wines (by $25.2 \%$ ). In the divisions Wearing apparel and Leather and related products production decreased of e.g. leather of bovine animals (by 59.7\%), women's or girls' trousers, overalls and shorts, not knitted (by 51.3\%), women's or girls' overcoats and similar articles, knitted or crocheted (by 49.6\%), panty hose and tights (by 45.7\%), men's or boys' trousers, overalls and shorts, not knitted (by 41.8\%), footwear with uppers of textile materials (by 34.4\%). In the divisions Wood and products of wood and Paper and paper products production decreased of e.g. windows of wood (by 32.5\%), fibreboard of wood or ligneous materials (by 23.4\%), other plywood, veneered panels and similar laminated wood, of coniferous wood (by 14.9\%), veneers (by 13.5\%), other paper and paperboard for graphic purposes (by 13.3\%), particle and similar boards of wood and ligneous materials (by 12.0\%). In the divisions Coke, briquette and refined petroleum products and Chemical products production decreased of e.g. motor oils (by 43.4\%), chemical fibres (by $24.7 \%$ ), glues and adhesives based on synthetic resins (by 21.8\%), asphalt (by 18.1\%), distilled ethyl alcohol (by $14.5 \%$ ). In the division Rubber and plastic products production decreased of e.g. tyres (by 18.9\%), plastic doors (by 10.5\%). In the division Other non-metallic mineral products production decreased of e.g. bricks made of clay (by $38.7 \%$ ), bottles of colourless glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 27.7\%), porcelain or china tableware and kitchenware (by 24.2\%), multiple glazed units (by 21.3\%), double glazed units (by 15.6\%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by $13.5 \%$ ), ceramic roof tiles (by $13.4 \%$ ), float glass and surface ground glass (by $11.9 \%$ ). In the division Basic metals production decreased of e.g. refined unwrought lead (by 33.6\%), coldrolled steel sheet width 600 mm or wider (by 11.7\%), flat cold-rolled steel products width less than 600 mm (by 10.4\%). In the division Fabricated metal products production decreased of e.g. hand tools of a kind used in agriculture, horticulture or forestry (by 61.6\%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 48.7\%), hand saws; blades for saws of all kinds (by 17.1\%), iron or steel reservoirs and similar containers for solids, of a capacity > 300 litres (by 15.2\%), welded grill, netting and fencing manufactured from wire of a diameter of $<3 \mathrm{~mm}$ (by 15.2\%). In the divisions Computer, electronic and optical products and Electrical equipment production decreased of e.g. electric motors and generators, excluding traction motors (by 35.0\%), domestic gas cookers with an oven (by 31.2\%), refrigerators and freezers, including combined refrigerators-freezers (by 29.5\%), insulated wires and conductors (by 26.8\%), dish washing machines (by 21.3\%), gas meters (by 17.1\%), automatic washing and washing-drying machines (by 13.5\%), vacuum cleaners (by 11.2\%). In the division Machinery and equipment production decreased of e.g. cash registers (by 38.1\%), ploughs (by 33.3\%), pick-up straw and fodder balers (by 33.1\%), machine tools for machining metals (by 28.3\%), kitchen and bathroom mixing valves (by 25.7\%), field sowers (by 23.7\%), reciprocating displacement compressors (by 23.5\%), scarifiers and cultivators (by 18.8\%), articulated link chain of iron or steel (by 15.2\%). In the divisions Motor vehicles and Other transport equipment production decreased of e.g. public transport vehicles (by 29.8\%), vehicle compression-ignition engines (by 24.3\%), city/touring bicycles (by 17.5\%). In the division Furniture production decreased of e.g. seats with wooden frames (by 22.1\%), wooden furniture for the dining-room and living-room (by 19.5\%), seats convertible into beds (by 19.3\%).
Compared with the previous month, production increase was recorded for 97 products, among others for: chocolate buttons (by 282.6\%), potassic fertilizers (by 140.9\%), phosphatic fertilizers (by 125.5\%), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by 103.6\%), first-aid boxes and kits (by 100.0\%), men's or boys' overcoats and similar articles, knitted or crocheted (by 85.5\%), automatic drying machines (by 49.6\%), sulphuric acid (by 48.9\%), pesticides and agrochemicals used in agriculture and forestry (by 48.6\%), sodium hydroxide in aqueous solution (by 46.7\%), liquefied propane and butane (by 43.0\%), nonalcoholic beer (by 41.3\%), vinegar (by 38.3\%), hot-rolled steel rods and bars (by 32.9\%),
structural-floor clay hollow bricks (by 30.8\%), twine, cordage, rope and cables, of jute or other textile bast fibres (by 30.7\%), frozen fruit and nuts (by 28.5\%), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 27.9\%), optical fibre cables (by $24.3 \%$ ), building bituminous felt (by $24.2 \%$ ), loaders for general use in agriculture (by 24.0\%), rusks, toasted bread and similar toasted products (by $23.1 \%$ ), hair care products (by $22.5 \%$ ), food cans of tinplate (by 20.3\%), crude rape and colza oil and their fractions, for human consumption (by 19.4\%), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by 19.4\%), denatured ethyl alcohol and other denatured spirits; of any strength (by $15.2 \%$ ).

In January - July 2023 compared with the corresponding period of the previous year, production decrease was recorded for 218 products, among others for: bricks made of clay (by $93.5 \%$ ), ceramic ridge tiles (by $59.6 \%$ ), women's or girls' trousers, overalls and shorts, not knitted (by $57.3 \%$ ), assembled parquet panels of wood for mosaic floors (by $54.4 \%$ ), single-phase current motors (by $51.7 \%$ ), structural-floor clay hollow bricks (by $51.3 \%$ ), jerseys, pullovers, cardigans, waistcoats and similar articles, knitted or crocheted (by $51.2 \%$ ), woven fabrics of synthetic or artificial filament yarns (by $50.5 \%$ ), men's or boys' overcoats and similar articles, knitted or crocheted (by $50.0 \%$ ), phosphatic fertilizers (by 47.4\%), ceramic roof tiles (by 45.9\%), footwear with uppers of textile materials (by 45.4\%), disinfectants put up in forms or packings for retail sale or as preparations or articles (by $44.8 \%$ ), autoclaved cellular concrete (by $44.1 \%$ ), potassic fertilizers (by 43.4\%), building blocks of light concrete (by 43.1\%), waterproof footwear, with uppers in rubber or plastics (by 41.4\%), rotary displacement compressors (by 40.6\%), products of heat insulation of mineral wools (by 40.5\%), structural-wall clay hollow bricks (by 40.0\%), wooden flooring materials (by $39.5 \%$ ), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than $50 \%$ (by $38.9 \%$ ), buckwheat groats and meal (by $36.8 \%$ ), nitrogenous fertilizers (by $34.7 \%$ ), chemical fibres (by $34.2 \%$ ), other paper and paperboard for graphic purposes (by 33.4\%), barley groats and meal (by 33.3\%), nails (by 33.3\%), flat pallets and pallet collars of wood (by 32.0\%).
In January - July compared with the corresponding period of the previous year, production increase was recorded for 84 products, among others for: women's or girls' overcoats and similar articles, knitted or crocheted (by $90.2 \%$ ), electric conductors, for a voltage $\leq 1000 \mathrm{~V}$, fitted with connectors (by $76.0 \%$ ), rail goods wagons (by $63.5 \%$ ), iron or steel reservoirs, tanks and similar containers lined or heat-insulated, for liquids, of a capacity > 300 litres (by $62.9 \%$ ), reciprocating displacement compressors (by 59.1\%), basic pharmaceutical products (by 51.7\%), air-cooled transformers (by 40.9\%), orthopaedic appliances, splints and other fracture appliances (by $40.0 \%$ ), woven fabrics of synthetic staple fibre (by $39.6 \%$ ), vehicle compression-ignition engines (by 39.4\%), electricity meters (by 30.6\%), crude rape and colza oil and their fractions, for human consumption (by 28.6\%), adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale (by $27.9 \%$ ), electric motors and generators, excluding traction motors (by 26.9\%), panty hose and tights (by 25.5\%), prepared meals and dishes based on meat (by $24.2 \%$ ), fruit, vegetable and fruit and vegetable mousses, unhomogenized (by 23.4\%), iron or steel reservoirs, tanks and similar containers for gases, of a capacity > 300 litres (by 23.3\%), medicaments, containing penicillins or other antibiotics (by $23.2 \%$ ), citrus fruit jams, marmalades, jellies, purees or pastes, being cooked preparations (by 21.8\%), cash registers (by 20.6\%), polyurethane adhesives (by 20.0\%), prepared or preserved nuts (other than groundnuts); and other seeds and mixtures (by 19.3\%), hand towels of paper pulp, paper, cellulose wadding or webs of cellulose fibres (by 19.0\%), asphalt (by 17.9\%), passenger cars (by 16.1\%).

## 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.

