



Warsaw 2022

# Production of major industrial products in December 2022





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Statistics Poland

Warsaw 2022

**Content-related works**

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ISSN 2720-6718

**Publications available on website**

<http://www.stat.gov.pl>

**When publishing Statistics Poland data — please indicate the source**



## Preface

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

The aim of the publication is to present changes in the production of industrial products based on data expressed in physical units of measure in particular months of the last two years. Selection of presented industrial products reflects the needs of a wide range of users, including among others, government administration, producers' associations and individual producers and scientific research institutions. The December edition of the publication was extended with separate information about manufacturing of products covered by the reporting after the outbreak of war in Ukraine.

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

# Contents

Page

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 December, 2022	
Table 2. Manufactured production of major products by months, 2021 and 2022	
Table 3. Sold production of major products in December, 2022	
Table 4. Sold production of major products by months, 2021 and 2022	
Table 5. Manufactured production of products related to the prevention of spreading / combating COVID-19 by months, 2022	
Table 6. Manufactured production of selected products by months, 2022 (articles useful in crisis situations, not included in tables 2 and 5)	

## Symbols

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

## Main abbreviations

Symbol	Description
Cu	copper
dam <sup>3</sup>	cubic decametre
GWh	gigawatt-hour
hm <sup>3</sup>	cubic hectometre
km	kilometer
MVA	megavolt-ampere
MW	megawatt
PLN	Polish zloty
thousand hectolitre 10%	thousand hectolitre of converted volume of product with 10% component content



## Introduction

The survey of the production of industrial products in physical units of measure complements the survey of sold production of industry, and allows for monthly assessment of trends of domestic production. The publication contains data on manufactured production in Poland for 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 November 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 November 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.

Table 6 presents data on manufactured production of products useful in crisis situations, which were monitored monthly after the outbreak of war in Ukraine.

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 December 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 December 2022, manufactured production of 84 items and sold production of 62 items was higher than in December 2021. Decrease was noted on manufactured production for 235 items and on sold production for 169 items. Data on production of slaughter products of pigs, woven fabrics of cotton weighing 200 g/m<sup>2</sup> or less and welded tubes 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 December 2022 in comparison to December 2021**, in the divisions covering energy raw materials production decreased of lignite (by 19.1%), hard coal (by 8.0%), petroleum oils and oils obtained from bituminous minerals (by 8.0%). In the divisions *Food products* and *Beverages* production decreased of vegetable pickles (by 71.0%), rendered pork fat suitable for consumption (by 36.1%), sugar confectionery containing cocoa (by 29.0%), barley groats and meal (by 25.4%), fruit wines (by 24.7%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' trousers, overalls and shorts (by 46.6%), women's or girls' overcoats and similar articles (by 39.2%), women's or girls' blouses and shirts (by 24.4%), footwear with leather uppers (by 22.7%), footwear with uppers of textile materials (by 21.0%). In the division *Wood and products of wood* production decreased e.g. of assembled parquet panels of wood for mosaic floors (by 58.8%), flat pallets and pallet collars of wood (by 35.0%), wooden flooring materials (by 34.2%), fibreboard of wood or ligneous materials (by 30.4%). In the division *Chemical products* production decreased e.g. of acetic acid (by 70.3%), paints and varnishes, based on polyesters, weight of the solvent not more than 50% (by 54.6%), pesticides (by 44.7%), 6-hexanelactam (by 37.8%), synthetic rubber (by 37.3%). In the division *Rubber and plastic products* production decreased e.g. of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 38.9%), plastic floor, wall, ceiling coverings (by 37.1%), rigid tubes, pipes and hoses of polymers of propylene (by 25.6%). In the division *Other non-metallic mineral products* production decreased e.g. of products of heat insulation of mineral wools (by 47.0%), ceramic ridge tiles (by 43.2%), building bituminous felt (by 42.5%), ceramic tiles and flags (by 36.5%), gypsum plasters (by 35.2%). In the division *Basic metals* production decreased e.g. of cold-rolled steel sheet width 600 mm or wider (by 73.5%), sheets and strips of non-alloy steel coated with zinc (by 67.1%), copper and copper alloy bars, rods and profiles (by 56.3%). In the division *Fabricated metal products* production decreased of radiators for central heating of iron or steel (by 63.1%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 24.9%), aluminium windows (by 16.4%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased e.g. of food grinders, mixers and juice extractors (by 89.9%), automatic drying machines for households (by 55.9%), domestic gas cookers with an oven (by 51.1%), gas meters (by 48.1%), vacuum cleaners (by 47.9%). In the division *Machinery and equipment* production decreased e.g. of machining centres, unit construction machines and multi-station transfer machines for working metal (by 94.9%), concrete mixers (by 58.9%), scarifiers and cultivators (by 55.7%), loaders for general use in agriculture (by 55.2%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased e.g. of bicycles (by 39.6%), public transport vehicles (by 11.0%), passenger cars

(by 5.4%). In the division *Furniture* production decreased of seats with wooden frames (by 21.6%), kitchen furniture of wood (by 15.4%), wooden bedroom furniture (by 14.2%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: non-woven glass fibre webs, felts, mattresses and boards (by 73.2%), multiple glazed units (by 57.4%), men's or boys' suits and ensembles (by 53.4%), telephone sets, excluding cellular phones (by 53.3%), air-cooled transformers (by 49.7%), table candles (by 46.6%), heavy fuel oils (by 46.4%), canned poultry meat (by 44.3%), structural-floor clay hollow bricks (by 43.9%), apple juice (by 40.9%), men's or boys' overcoats and similar articles (by 39.3%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 36.5%), women's or girls' jackets (by 33.2%), edible rock salt (by 28.3%), prepared meals and dishes based on meat (by 24.5%), lorries and road tractors for semi-trailers (by 24.4%), corrugated paperboard (by 24.2%), leather of bovine animals (by 22.2%), machinery for construction, road and drainage work (by 21.9%), sea-going boats for pleasure or sports (by 21.3%), polyvinyl chloride not mixed with any other substances (by 21.2%), asphalt (by 20.3%), prepared meals and dishes based on vegetables (by 18.3%), native sulphur (by 17.9%), men's or boys' trousers, overalls and shorts (by 16.3%), multi-phase current motors, excluding traction motors (by 16.1%).

In comparison with December of the previous year, production of aluminium doors was at the same level.

**Compared to November 2022, in December 2022** manufactured production decreased for 235 products. In the divisions coverings energy raw materials production decreased of hard coal (by 2.8%). In the division *Food products* production decreased of frozen vegetables (by 39.0%), soups and broths and preparations therefor (by 38.9%), apple juice (by 35.8%), vegetable pickles (by 26.4%), yoghurt (by 26.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of men's or boys' overcoats and similar articles (by 37.4%), women's or girls' trousers, overalls and shorts (by 28.5%), panty hose and tights (by 21.4%), leather of bovine animals (by 15.4%), footwear with leather uppers (by 12.4%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of assembled parquet panels of wood for mosaic floors (by 41.8%), wooden flooring materials (by 25.4%), sacks and bags of paper (by 25.3%), coniferous sawnwood (by 17.3%), windows of wood (by 16.3%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of asphalt (by 69.4%), acetic acid (by 54.2%), polyurethane adhesives (by 51.2%), phenol (by 45.7%), paints and varnishes, based on polyesters, weight of the solvent not more than 50% (by 45.1%). In the division *Rubber and plastic products* production decreased of tyres for tractors (by 75.4%), tyres for agricultural machinery (by 54.0%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 36.5%), plates, sheet, film, foil of cellular polymers of styrene (by 30.5%), plastic doors, windows and their frames (by 29.8%). In the division *Other non-metallic mineral products* production decreased of building bituminous felt (by 49.9%), double glazed units (by 44.9%), gypsum plasters (by 36.0%), ceramic ridge tiles (by 34.0%), flagstones and similar articles of concrete (by 33.7%). In the division *Basic metals* production decreased of sheets and strips of non-alloy steel coated with zinc (by 56.9%), copper and copper alloy bars, rods and profiles (by 48.3%), wire of aluminium (by 42.9%), brass (by 38.3%), wire of steel (by 37.5%). In the division *Fabricated metal products* production decreased of radiators for central heating of iron or steel (by 49.9%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 32.1%), conductors not electrically insulated (by 26.4%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of television receivers (by 50.1%), LED light bulbs (by 44.3%), automatic drying machines for households (by 36.7%), vacuum cleaners (by 28.5%), radio receivers of a kind used in motor vehicles (by 24.6%). In the division *Machinery and equipment* production decreased of machining centres, unit construction machines and multi-station transfer machines for working metal (by 97.1%), ploughs (by 37.1%), oil or petrol-filters for internal combustion engines

(by 26.1%), agricultural tractors (by 25.8%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of internal combustion engines for vehicles (by 38.8%), passenger cars (by 33.1%), bicycles (by 29.6%), containers for freight transport (by 18.8%). In the division *Furniture* production decreased of seats convertible into beds (by 19.5%), seats with wooden frames (by 13.3%), kitchen furniture of wood (by 8.2%).

Compared with the previous month, production increase was recorded for 83 products, among others for: railway or tramway steel rails (by 102.2%), sodium hydroxide, solid (by 61.5%), milk and cream powder (by 52.1%), structural-floor clay hollow bricks (by 46.2%), men's or boys' suits and ensembles (by 38.2%), heavy fuel oils (by 34.9%), printed children's picture, drawing or colouring books (by 32.0%), canned poultry meat (by 29.6%), nitric acid (by 28.7%), non-alcoholic beer (by 24.4%), telephone sets, excluding cellular phones (by 24.4%), tomato juice (by 20.7%), public transport vehicles (by 20.4%), frozen salt water fish fillets (by 19.8%), butter (by 19.1%), men's or boys' shirts (by 18.2%), edible evaporated salt (by 16.3%), corrugated paperboard (by 15.9%), nitrogenous fertilizers (by 15.2%), gas-electric cookers (by 15.0%), toluene (by 14.7%), liquefied propane and butane (by 14.4%), anhydrous ammonia (by 14.3%), rail goods wagons (by 14.2%), vodka (by 13.9%), rendered pork fat suitable for consumption (by 13.8%), bottles of colourless glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 13.5%).

Production of natural gas and woven fabrics of cotton weighing more than 200 g/m<sup>2</sup> remained at the same level as in the previous month.

**In January - December 2022** compared with the corresponding period of the previous year, production decrease was recorded for 189 products. In the divisions *Food products* and *Beverages* production decreased e.g. of rendered pork fat suitable for consumption (by 15.7%), frozen salt water fish (by 14.9%), sugar confectionery containing cocoa (by 14.2%), fruit wines (by 10.3%), rye flour (by 9.9%). In the divisions *Wearing apparel* and *Leather and related products* production decreased e.g. of women's or girls' overcoats and similar articles (by 26.3%), unsplit bovine leather for shoes (by 25.6%), footwear with leather uppers (by 25.4%). In the division *Wood and products of wood* production decreased e.g. of assembled parquet panels of wood for mosaic floors (by 22.7%), doors of wood (by 18.6%), particle and similar boards of wood and ligneous materials (by 18.5%), veneers (by 12.9%), wooden flooring materials (by 12.9%). In the division *Chemical products* production decreased e.g. of acetic acid (by 49.0%), phosphatic fertilizers (by 27.4%), sodium hydroxide, solid (by 27.1%), 6-hexanelactam (by 21.8%), potassic fertilizers (by 21.3%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 20.7%). In the division *Rubber and plastic products* production decreased e.g. of tyres for tractors (by 31.9%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 19.0%), rigid tubes, pipes and hoses of polymers of propylene (by 10.5%), tyres (by 2.6%). In the division *Other non-metallic mineral products* production decreased e.g. of bricks made of clay (by 23.0%), lime (by 13.6%), ceramic tiles and flags (by 10.3%). In the division *Basic metals* production decreased e.g. of cold-rolled steel sheet width 600 mm or wider (by 25.4%), railway or tramway steel rails (by 19.5%), seamless tubes (by 17.3%), sheets and strips of non-alloy steel coated with zinc (by 17.2%), wire of aluminium (by 15.8%). In the division *Fabricated metal products* production decreased e.g. of radiators for central heating of iron or steel (by 29.6%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 22.1%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased e.g. of food grinders, mixers and juice extractors (by 67.8%), domestic gas cookers with an oven (by 58.7%), vacuum cleaners (by 35.6%), gas-electric cookers (by 35.6%). In the division *Machinery and equipment* production decreased e.g. of cash registers (by 54.0%), concrete mixers (by 35.5%), loaders for general use in agriculture (by 29.7%), kitchen and bathroom mixing valves (by 22.0%). In the division *Furniture* production decreased of kitchen furniture of wood (by 13.3%), wooden furniture for the dining-room and living-room (by 11.1%), seats with wooden frames (by 7.5%).

In January - December 2022 compared with the corresponding period of the previous year, production increase was recorded for 131 products. In the divisions covering energy raw materials production increased of lignite (by 5.0%). In the division *Food products* production increased of prepared meals and dishes based on meat (by 44.1%), edible rock salt (by 40.8%), canned poultry meat (by 33.0%), barley groats and meal (by 32.6%), buckwheat groats and meal (by 27.2%). In the division *Wearing apparel* production increased of men's or boys' overcoats and similar articles (by 77.4%), men's or boys' suits and ensembles (by 24.3%), men's or boys' shirts (by 15.0%), men's or boys' trousers, overalls and shorts (by 11.0%). In the division *Paper and paper products* production increased of sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 37.9%), toilet paper (by 17.3%), napkins and napkin liners for babies (by 13.8%). In the division *Chemical products* production increased of butadiene-1,3 (by 49.5%), polyethylene (by 32.1%), ethylene (by 31.7%), polyurethane adhesives (by 30.6%), polyvinyl chloride not mixed with any other substances (by 25.1%). In the division *Other non-metallic mineral products* production increased of non-woven glass fibre webs, felts, mattresses and boards (by 47.6%), ceramic roof tiles (by 12.4%), ceramic ridge tiles (by 11.5%), structural-floor clay hollow bricks (by 10.0%), boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by 9.0%). In the divisions *Basic metals* and *Fabricated metal products* production increased of food cans of tinfoil (by 15.8%), copper plates, sheets and strip (by 14.9%), conductors not electrically insulated (by 13.3%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of telephone sets, excluding cellular phones (by 39.9%), air-cooled transformers (by 38.2%), multi-phase current motors, excluding traction motors (by 22.5%), insulated power cables (by 13.4%). In the division *Machinery and equipment* production increased of machinery for construction, road and drainage work (by 37.3%), agricultural tractors (by 33.0%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 8.5%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of sea-going boats for pleasure or sports (by 33.1%), vehicle compression-ignition engines (by 31.3%), lorries and road tractors for semi-trailers (by 29.0%), bicycles (by 14.7%).

### SOLD PRODUCTION

Indicators of the dynamics of sold industrial products were different in various sectors. **In December 2022 in comparison to December 2021**, in the division *Food products* production decreased of rendered pork fat suitable for consumption (by 39.5%), sugar (by 26.7%), rendered, edible animal fats (by 23.6%), tomato juice (by 23.3%), pasta (by 22.4%), canned fish (by 19.8%), rye flour (by 19.5%), prepared pet foods (by 15.8%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of women's or girls' trousers, overalls and shorts (by 47.4%), women's or girls' blouses and shirts (by 23.4%), leather of bovine animals (by 13.4%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of assembled parquet panels of wood for mosaic floors (by 60.2%), other paper and paperboard for graphic purposes (by 34.7%), wooden flooring materials (by 29.8%), doors of wood (by 28.8%), veneers (by 27.7%), non-coniferous sawnwood (by 26.0%), fibreboard of wood or ligneous materials (by 23.6%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of nitrogenous fertilizers (by 37.7%), potassic fertilizers (by 37.7%), coke (by 30.3%), glues (by 27.5%), phosphatic fertilizers (by 26.1%), chemical fibres (by 24.1%), toilet waters (by 21.2%). In the division *Rubber and plastic products* production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 36.1%), plastic floor, wall, ceiling coverings (by 35.3%), plates, sheet, film, foil of cellular polymers of styrene (by 20.1%), plastic windows (by 18.8%), plastic sacks and bags (by 18.6%). In the division *Other non-metallic mineral products* production decreased of bricks made of clay (by 75.8%), lime (by 44.9%), ceramic ridge tiles (by 41.0%), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by 39.4%), products of heat insulation of mineral wools (by 33.9%),

ceramic tiles and flags (by 33.7%), factory made mortars (by 30.1%). In the division *Basic metals* production decreased of wire of steel (by 55.9%), copper and copper alloy bars, rods and profiles (by 49.0%), flat bars, rods and profiles of aluminium (by 35.2%), sheets and strips of non-alloy steel coated with zinc (by 27.6%), steel rods and flat bars (by 21.9%). In the division *Fabricated metal products* production decreased of steel doors (by 19.6%), aluminium windows (by 19.2%), food cans of tinfoil (by 14.2%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of domestic gas cookers with an oven (by 59.2%), electric cookers including gas-electric cookers (by 51.4%), single-phase current motors (by 48.7%), electric ovens for building-in (by 43.3%), vacuum cleaners (by 32.1%), dish washing machines for households (by 28.7%), television receivers (by 19.3%), automatic washing and washing-drying machines for households (by 18.3%). In the division *Machinery and equipment* production decreased of scarifiers and cultivators (by 55.2%), ploughs (by 42.7%), kitchen and bathroom mixing valves (by 39.7%), pick-up straw and fodder balers (by 37.5%), field sowers (by 27.4%). In the division *Other transport equipment* production decreased of city/touring bicycles (by 51.9%), rail goods wagons (by 20.3%). In the division *Furniture* production decreased of seats with wooden frames (by 18.4%), wooden bedroom furniture (by 10.5%), kitchen furniture of wood (by 9.6%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: vegetable pickles (by 91.1%), air-cooled transformers (by 55.2%), apple juice (by 50.7%), women's or girls' jackets (by 41.4%), canned poultry meat (by 39.2%), napkins and napkin liners for babies (by 30.6%), sea-going boats for pleasure or sports (by 26.6%), buckwheat groats and meal (by 22.3%), synthetic calcium sulphate (by 19.3%), polyurethane adhesives (by 17.8%), machinery for construction, road and drainage work (by 17.6%), electricity meters (by 16.0%), sulphuric acid (by 13.4%), passenger cars (by 13.4%), table candles (by 12.9%), rigid tubes, pipes and hoses of polymers of ethylene (by 12.0%), household refrigerators and freezers (by 11.1%), toilet paper (by 10.7%), chocolate (by 10.3%).

**Compared to November 2022, in December 2022** sold production decreased for 136 products. In the division *Food products* production decreased of soups and broths and preparations therefor (by 41.2%), pasta (by 28.6%), margarine and spreads (by 24.5%), frozen fruit and nuts (by 22.0%), frozen vegetables (by 20.9%), yoghurt (by 16.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of women's or girls' trousers, overalls and shorts (by 39.5%), footwear (by 30.2%), panty hose and tights (by 9.4%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of assembled parquet panels of wood for mosaic floors (by 41.8%), fibreboard of wood or ligneous materials (by 23.5%), other paper and paperboard for graphic purposes (by 21.6%), sacks and bags of paper (by 17.8%), coniferous sawnwood (by 14.7%), particle and similar boards of wood and ligneous materials (by 14.5%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of asphalt (by 65.2%), polyurethane adhesives (by 44.3%), toilet waters (by 37.2%), potassic fertilizers (by 25.5%), glues (by 25.2%), paints, varnishes and similar coatings (by 23.1%), plastics (by 21.2%). In the division *Rubber and plastic products* production decreased of plates, sheet, film, foil of cellular polymers of styrene (by 36.3%), rigid tubes, pipes and hoses of polymers of vinyl chloride (by 28.3%), plastic windows (by 27.2%), rubber products (by 25.7%), plastic doors (by 23.6%). In the division *Other non-metallic mineral products* production decreased of bricks made of clay (by 39.1%), float glass and surface ground glass (by 36.6%), cement (by 35.4%), factory made mortars (by 33.9%). In the division *Basic metals* production decreased of wire of steel (by 50.2%), copper and copper alloy bars, rods and profiles (by 42.5%), sheets and strips of non-alloy steel coated with zinc (by 38.7%), flat bars, rods and profiles of aluminium (by 30.8%). In the division *Fabricated metal products* production decreased of aluminium windows (by 20.5%), aluminium doors (by 16.0%), steel doors (by 8.7%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of television receivers (by 42.2%), single-phase current motors

(by 28.6%), vacuum cleaners (by 24.1%), automatic drying machines for households (by 24.0%), electricity meters (by 22.7%), multi-phase current motors, excluding traction motors (by 21.3%), electric cookers including gas-electric cookers (by 21.1%). In the division *Machinery and equipment* production decreased of ploughs (by 41.1%), kitchen and bathroom mixing valves (by 30.5%), machine tools for machining metals (by 13.1%), scarifiers and cultivators (by 10.5%), loaders for general use in agriculture (by 9.6%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of city/touring bicycles (by 34.8%), rail goods wagons (by 19.4%), vehicle compression-ignition engines (by 16.0%), passenger cars (by 14.0%), containers for freight transport (by 12.8%). In the division *Furniture* production decreased of seats convertible into beds (by 13.9%), seats with wooden frames (by 13.4%), wooden bedroom furniture (by 9.6%).

Compared with the previous month, production increase was recorded for 92 products, among others for: buckwheat groats and meal (by 111.6%), edible evaporated salt (by 73.3%), fruit wines (by 58.9%), machinery for construction, road and drainage work (by 53.1%), men's or boys' shirts (by 47.8%), sulphuric acid (by 37.0%), men's or boys' trousers, overalls and shorts (by 28.9%), milk and cream powder (by 27.7%), gas meters (by 26.0%), sweetened or flavoured waters (by 25.7%), frozen salt water fish fillets (by 25.6%), public transport vehicles (by 22.0%), non-alcoholic beer (by 19.8%), women's or girls' blouses and shirts (by 18.2%), veneers (by 18.2%), phosphatic fertilizers (by 15.8%), rigid tubes, pipes and hoses of polymers of ethylene (by 15.6%), men's or boys' suits and ensembles (by 13.6%), tomato juice (by 13.3%), cash registers (by 10.7%), vodka (by 9.9%), synthetic calcium sulphate (by 9.9%), field sowers (by 9.8%), prepared meals and dishes based on vegetables (by 9.4%), beer (by 8.5%), motor gasoline (by 8.1%).

**In January - December 2022** compared with the corresponding period of the previous year, production decrease was recorded for hard coal (by 9.9%) in the divisions covering energy raw materials. In the divisions *Food products* and *Beverages* production decreased of frozen salt water fish (by 21.8%), sugar confectionery containing cocoa (by 21.3%), rendered pork fat suitable for consumption (by 20.0%), vegetable pickles (by 13.5%), fresh or chilled pig meat (by 11.0%), fruit wines (by 10.5%), frozen fruit and nuts (by 8.5%), rye flour (by 8.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of leather of bovine animals (by 28.1%), women's or girls' trousers, overalls and shorts (by 19.6%), panty hose and tights (by 14.8%), footwear with uppers of textile materials (by 6.7%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of non-coniferous sawnwood (by 23.6%), assembled parquet panels of wood for mosaic floors (by 19.2%), veneers (by 18.9%), doors of wood (by 18.5%), assembled parquet panels of wood other than for mosaic floors (by 17.0%), fibreboard of wood or ligneous materials (by 10.9%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of nitrogenous fertilizers (by 31.5%), phosphatic fertilizers (by 26.1%), potassic fertilizers (by 25.7%), paints and varnishes other than colodium containing in solution more than 50% of solvent by weight (by 22.0%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 20.0%), pesticides (by 19.1%), liquefied propane and butane (by 13.7%), coke (by 13.4%). In the division *Rubber and plastic products* production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 17.0%), rigid tubes, pipes and hoses of polymers of propylene (by 6.6%), plastic floor, wall, ceiling coverings (by 5.6%), plastic sacks and bags (by 4.8%), plastic doors (by 4.8%). In the division *Other non-metallic mineral products* production decreased of structural-floor clay hollow bricks (by 25.1%), bricks made of clay (by 22.9%), structural-wall clay hollow bricks (by 21.6%), ceramic ridge tiles (by 16.5%), lime (by 16.5%), ceramic tiles and flags (by 16.2%), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by 13.9%), calcium-silicate brick (by 13.0%), float glass and surface ground glass (by 12.8%). In the division *Basic metals* production decreased of flat bars, rods and profiles of aluminium (by 15.0%), copper and copper alloy bars, rods and profiles (by 14.1%), sheets and strips of non-alloy steel coated with zinc (by 12.8%), flat cold-rolled steel products

width less than 600 mm (by 11.4%), wire of steel (by 10.5%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of domestic gas cookers with an oven (by 59.0%), electric cookers including gas-electric cookers (by 38.7%), vacuum cleaners (by 34.7%), gas meters (by 33.1%), electric ovens for building-in (by 23.8%), lead-acid accumulators for motor vehicles (by 23.4%), automatic drying machines for households (by 21.3%), electricity meters (by 15.3%). In the division *Machinery and equipment* production decreased of cash registers (by 51.4%), loaders for general use in agriculture (by 29.6%), scarifiers and cultivators (by 20.1%), field sowers (by 20.0%), pick-up straw and fodder balers (by 18.7%), ploughs (by 16.8%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of city/touring bicycles (by 12.2%), containers for freight transport (by 10.4%), rail goods wagons (by 1.9%). In the division *Furniture* production decreased of kitchen furniture of wood (by 12.3%), wooden furniture for the dining-room and living-room (by 10.0%), seats with wooden frames (by 8.3%).

In January - December compared with the corresponding period of the previous year, production increase was recorded for: in the division *Food products* production increased of prepared meals and dishes based on meat (by 34.5%), canned poultry meat (by 29.0%), barley groats and meal (by 22.9%), buckwheat groats and meal (by 21.9%), edible evaporated salt (by 18.8%), apple juice (by 13.3%), wheat bread (by 12.5%), chocolate (by 12.0%), wheat groats and meal (by 10.9%), soups and broths and preparations therefor (by 10.8%). In the division *Wearing apparel* production increased of women's or girls' jackets (by 21.4%), men's or boys' jackets and blazers (by 16.4%), men's or boys' shirts (by 12.0%), men's or boys' trousers, overalls and shorts (by 11.8%), men's or boys' suits and ensembles (by 11.8%). In the division *Paper and paper products* production increased of sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 37.7%), napkins and napkin liners for babies (by 30.0%), toilet paper (by 14.6%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production increased of polyurethane adhesives (by 31.9%), synthetic calcium sulphate (by 22.8%), sodium hydroxide in aqueous solution (by 20.5%), toilet waters (by 13.0%), diesel oils (by 9.6%). In the division *Other non-metallic mineral products* production increased of multiple glazed units (by 8.7%), boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by 8.4%). In the division *Fabricated metal products* production increased of food cans of tinfoil (by 14.2%), aluminium doors (by 5.7%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production increased of air-cooled transformers (by 36.7%), multi-phase current motors, excluding traction motors (by 18.8%). In the division *Machinery and equipment* production increased of machinery for construction, road and drainage work (by 10.8%). In the divisions *Motor vehicles* and *Other transport equipment* production increased of vehicle compression-ignition engines (by 35.5%), sea-going boats for pleasure or sports (by 26.7%), public transport vehicles (by 3.5%). In the division *Furniture* production increased of seats convertible into beds (by 5.7%), wooden bedroom furniture (by 3.6%).

Production of chemical fibres and machine tools for machining metals 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](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.