





Production of major industrial products in November 2022

Statistics Poland

Warsaw 2022

Opracowanie merytoryczne

Główny Urząd Statystyczny, Departament Przedsiębiorstw

pod kierunkiem

Katarzyna Walkowska

Zespół autorski

Elżbieta Fidrych, Adam Górecki, Monika Hodzyńska, Katarzyna Korfanty-Rusiniak, Anna Kruk, Agnieszka Marczak, Anna Pazik, Krzysztof Szewczuk, Jerzy Tumiałowicz

ISSN 2720-6718

Publikacja dostępna na stronie internetowej

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

Przy publikowaniu danych GUS prosimy o podanie źródła



Preface

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

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

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

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

Director
of Enterprises Department

/-/ Katarzyna Walkowska

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 November, 2022	
Table 2. Manufactured production of major products by months, 2021 and 2022	
Table 3. Sold production of major products in November, 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	

Symbols

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

Main abbreviations

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

Introduction

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

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 November 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 November 2022, manufactured production of 93 items and sold production of 62 items was higher than in November 2021. Decrease was noted on manufactured production for 224 items and on sold production for 167 items. Data on production of slaughter products of pigs, vodka and woven fabrics of cotton weighing 200 g/m² or less 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 November 2022 in comparison to November 2021**, in the divisions covering energy raw materials production decreased of petroleum oils and oils obtained from bituminous minerals (by 5.9%), hard coal (by 2.1%). In the divisions *Food products* and *Beverages* production decreased of frozen fruit and nuts (by 23.3%), sugar confectionery containing cocoa (by 22.2%), buckwheat groats and meal (by 19.7%), frozen salt water fish fillets (by 17.7%), fruit wines (by 15.2%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of women's or girls' trousers, overalls and shorts (by 31.6%), unsplit bovine leather for shoes (by 30.3%), women's or girls' overcoats and similar articles (by 25.8%), women's or girls' suits and ensembles (by 23.3%). In the division *Wood and products of wood* production decreased of assembled parquet panels of wood for mosaic floors (by 39.4%), flat pallets and pallet collars of wood (by 33.4%), assembled parquet panels of wood other than for mosaic floors (by 25.6%), wooden flooring materials (by 25.4%), particle and similar boards of wood and ligneous materials (by 23.3%). In the division *Chemical products* production decreased of sodium hydroxide, solid (by 38.8%), 6-hexanelactam (by 37.9%), phosphatic fertilizers (by 34.6%), nitrogenous fertilizers (by 29.3%), paints and varnishes, based on polyesters, weight of the solvent not more than 50% (by 27.3%). In the division *Rubber and plastic products* production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 28.0%), rigid tubes, pipes and hoses of polymers of propylene (by 24.2%), plastic floor, wall, ceiling coverings (by 17.6%), plastic sacks and bags (by 16.8%). In the division *Other non-metallic mineral products* production decreased of bricks made of clay (by 41.4%), products of heat insulation of mineral wools (by 39.5%), factory made mortars (by 36.9%), non-woven glass fibre webs, felts, mattresses and boards (by 34.5%), structural-wall tiles of calcium-silicate (by 32.6%). In the division *Basic metals* production decreased of railway or tramway steel rails (by 96.3%), bronze (by 76.5%), cold-rolled steel sheet width 600 mm or wider (by 60.5%), brass (by 60.3%). In the division *Fabricated metal products* production decreased of radiators for central heating of iron or steel (by 47.1%), steel doors (by 16.0%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 11.2%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of food grinders, mixers and juice extractors (by 77.2%), domestic gas cookers with an oven (by 57.9%), LED light bulbs (by 57.5%), automatic drying machines for households (by 46.1%). In the division *Machinery and equipment* production decreased of concrete mixers (by 65.2%), loaders for general use in agriculture (by 62.2%), scarifiers and cultivators (by 52.9%), kitchen and bathroom mixing valves (by 38.9%), cash registers (by 27.5%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of public transport vehicles (by 33.7%), rail goods wagons (by 32.6%), bicycles

(by 15.4%). In the division *Furniture* production decreased of kitchen furniture of wood (by 21.1%), seats with wooden frames (by 19.2%), wooden bedroom furniture (by 16.7%).

Compared with the corresponding month of the previous year, in November 2022, production increase was recorded for, among others: telephone sets, excluding cellular phones (by 140.7%), machinery for construction, road and drainage work (by 96.6%), hair care products (by 84.8%), special fabrics including pile fabrics and terry towelling (by 74.2%), edible rock salt (by 73.3%), men's or boys' overcoats and similar articles (by 64.1%), table candles (by 63.2%), air-cooled transformers (by 57.9%), rugs (by 54.9%), textile floor coverings (by 41.9%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 41.9%), prepared meals and dishes based on meat (by 41.5%), barley groats and meal (by 37.8%), vehicle compression-ignition engines (by 35.0%), lorries and road tractors for semi-trailers (by 30.0%), conductors not electrically insulated (by 28.0%), multi-phase current motors, excluding traction motors (by 28.0%), heavy fuel oils (by 26.4%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 25.9%), evaporated salt not suitable for consumption (by 24.9%), sea-going boats for pleasure or sports (by 24.4%), agricultural tractors (by 20.1%), fresh or chilled beef and veal (by 19.8%), panty hose and tights (by 18.6%), prepared pet foods (by 18.4%), leather of bovine animals (by 18.2%), plastic doors (by 18.1%).

In comparison with November of the previous year, production of margarine and spreads and non-alcoholic beer was at the same level.

Compared to October 2022, in November 2022 manufactured production decreased for 180 products. In the divisions coverings energy raw materials production decreased of petroleum oils and oils obtained from bituminous minerals (by 4.2%), lignite (by 3.0%). In the division *Food products* production decreased of canned beef and veal meat (by 49.2%), tomato juice (by 38.3%), frozen fruit and nuts (by 36.8%), milk and cream powder (by 26.3%), buckwheat groats and meal (by 21.2%), rendered pork fat suitable for consumption (by 20.0%), vegetable pickles (by 19.2%), apple juice (by 19.0%), fruit and vegetable juice (by 18.8%), fresh or chilled pig meat (by 16.9%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of women's or girls' overcoats and similar articles (by 29.9%), women's or girls' suits and ensembles (by 27.1%), unsplit bovine leather for shoes (by 24.7%), women's or girls' trousers, overalls and shorts (by 15.6%), men's or boys' jackets and blazers (by 14.4%), footwear with uppers of textile materials (by 13.2%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of flat pallets and pallet collars of wood (by 21.6%), testliner-recycled paper for cover layer of corrugated cardboard (by 21.1%), fibreboard of wood or ligneous materials (by 14.0%), napkins and napkin liners for babies (by 9.5%), paper and paperboard (by 8.2%), sacks and bags of paper (by 8.1%), wooden flooring materials (by 6.8%). In the division *Chemical products* production decreased of paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 31.5%), toluene (by 27.5%), acetic acid (by 23.4%), liquefied propane and butane (by 21.4%), soap and organic surface-active products and preparations for use as soap; (by 20.5%), phosphatic fertilizers (by 17.2%), polypropylene (by 17.1%), glues and adhesives based on synthetic resins (by 16.5%). In the division *Rubber and plastic products* production decreased of plates, sheet, film, foil of cellular polymers of styrene (by 14.5%), rigid tubes, pipes and hoses of polymers of propylene (by 11.9%), tyres for passenger cars (by 9.6%), tyres for agricultural machinery (by 5.6%), tubes, pipes and hoses of vulcanised rubber other than hard rubber (by 4.4%). In the division *Other non-metallic mineral products* production decreased of non-woven glass fibre webs, felts, mattresses and boards (by 69.4%), factory made mortars (by 27.0%), products of heat insulation of mineral wools (by 24.6%), boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by 21.1%), cement (by 20.7%), float glass and surface ground glass (by 20.4%), boards, sheets and similar articles of plaster, faced or reinforced with paper only (by 19.4%), gypsum plasters (by 14.8%). In the division *Basic metals* production decreased of railway or tramway steel rails (by 95.7%), hot-rolled steel rods and bars (by 31.0%), crude steel (by 30.1%), cold-rolled steel

sheet width 600 mm or wider (by 29.4%), steel rods and flat bars (by 19.2%), hot rolled steel products (by 15.2%), wire of steel (by 12.5%). In the division *Fabricated metal products* production decreased of radiators for central heating of iron or steel (by 27.1%), conductors not electrically insulated (by 6.6%), steel doors (by 5.6%), aluminium windows (by 5.3%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of filament lamps (by 29.1%), water meters (by 20.1%), dish washing machines for households (by 15.8%), automatic washing and washing-drying machines for households (by 14.1%), gas meters (by 13.7%). In the division *Machinery and equipment* production decreased of field sowers (by 23.3%), oil or petrol-filters for internal combustion engines (by 12.1%), loaders for general use in agriculture (by 10.4%), machining centres, unit construction machines and multi-station transfer machines for working metal (by 8.1%), ploughs (by 8.0%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of rail goods wagons (by 35.8%), passenger cars (by 23.4%), sea-going boats for pleasure or sports (by 4.8%).

Compared with the previous month, production increase was recorded for 140 products, among others for: brass (by 235.1%), gas-electric cookers (by 117.1%), bricks made of clay (by 116.4%), nitric acid (by 65.2%), 6-hexanelactam (by 63.4%), oleum (by 61.1%), barley groats and meal (by 56.7%), anhydrous ammonia (by 55.1%), phenol (by 51.3%), domestic gas cookers with an oven (by 49.3%), sodium hydroxide, solid (by 44.9%), telephone sets, excluding cellular phones (by 37.5%), wire of aluminium (by 36.4%), women's or girls' blouses and shirts (by 35.8%), copper plates, sheets and strip (by 28.2%), nitrogenous fertilizers (by 25.4%), tyres for tractors (by 24.7%), women's or girls' dresses and skirts (by 23.0%), concrete mixers (by 22.7%), ethylene (by 22.1%), electric cookers including gas-electric cookers (by 21.3%), textile floor coverings (by 20.5%), table candles (by 19.7%), sodium hydroxide in aqueous solution (by 19.5%), vacuum cleaners (by 19.5%), medicaments and other pharmaceutical preparations (by 19.0%), sulphuric acid (by 17.8%), soups and broths and preparations therefor (by 17.7%), pick-up straw and fodder balers (by 17.5%).

In January - November 2022 compared with the corresponding period of the previous year, production decrease was recorded for 179 products, among others for: brass (by 81.2%), food grinders, mixers and juice extractors (by 66.2%), domestic gas cookers with an oven (by 59.2%), cash registers (by 55.4%), LED light bulbs (by 55.1%), bronze (by 54.1%), acetic acid (by 47.7%), gas-electric cookers (by 37.5%), radio receivers of a kind used in motor vehicles (by 35.6%), vacuum cleaners (by 34.7%), concrete mixers (by 34.4%), sodium hydroxide, solid (by 28.5%), loaders for general use in agriculture (by 27.8%), radiators for central heating of iron or steel (by 27.5%), unsplit bovine leather for shoes (by 27.0%), phosphatic fertilizers (by 26.9%), tyres for tractors (by 26.0%), woven fabrics of synthetic or artificial filament yarns (by 25.9%), footwear with leather uppers (by 25.6%), women's or girls' overcoats and similar articles (by 25.3%), lead-acid accumulators for motor vehicles (by 24.3%), electric ovens for building-in (by 24.1%), electricity meters (by 23.3%), gas meters (by 23.2%), bricks made of clay (by 22.9%), woven fabrics of cotton weighing more than 200 g/m² (by 22.4%), electric hobs for building-in (by 22.3%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 21.9%), cold-rolled steel sheet width 600 mm or wider (by 21.4%).

In January - November 2022 compared with the corresponding period of the previous year, production increase was recorded for 140 products, among others for: men's or boys' overcoats and similar articles (by 70.7%), butadiene-1,3 (by 55.7%), prepared meals and dishes based on meat (by 47.7%), polyethylene (by 41.9%), edible rock salt (by 41.6%), barley groats and meal (by 40.4%), machinery for construction, road and drainage work (by 39.3%), telephone sets, excluding cellular phones (by 38.6%), ethylene (by 38.6%), non-woven glass fibre webs, felts, mattresses and boards (by 38.0%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 38.0%), special fabrics including pile fabrics and terry towelling (by 37.9%), table candles (by 37.5%), air-cooled transformers (by 37.2%), agricultural tractors (by 35.9%), sea-going boats for pleasure or sports (by 34.2%), polyurethane adhesives (by 33.2%), vehicle

compression-ignition engines (by 32.1%), buckwheat groats and meal (by 32.0%), canned poultry meat (by 32.0%), lorries and road tractors for semi-trailers (by 29.5%), polyvinyl chloride not mixed with any other substances (by 25.5%), yarn of carded wool (by 25.1%), basic pharmaceutical products (by 25.0%), propylene (by 25.0%).

Production of structural-floor clay hollow bricks was at the same level as in the corresponding period of the previous year.

SOLD PRODUCTION

Indicators of the dynamics of sold industrial products were different in various sectors.

In November 2022 in comparison to November 2021, in the divisions covering energy raw materials production decreased of hard coal (by 20.0%). In the divisions *Food products* and *Beverages* production decreased of sugar confectionery containing cocoa (by 38.9%), rendered pork fat suitable for consumption (by 35.7%), vegetable pickles (by 31.7%), tomato juice (by 28.2%), buckwheat groats and meal (by 25.7%), fresh or chilled pig meat (by 22.9%), sweetened or flavoured waters (by 22.1%), frozen salt water fish (by 16.6%), fruit wines (by 15.0%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of leather of bovine animals (by 34.9%), women's or girls' trousers, overalls and shorts (by 24.4%), women's or girls' blouses and shirts (by 13.3%), men's or boys' jackets and blazers (by 9.7%), men's or boys' trousers, overalls and shorts (by 9.2%). 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 37.7%), veneers (by 36.1%), flat pallets and pallet collars of wood (by 31.1%), assembled parquet panels of wood other than for mosaic floors (by 30.0%), doors of wood (by 25.0%), other paper and paperboard for graphic purposes (by 23.7%), wooden flooring materials (by 22.9%), windows of wood (by 21.4%), non-coniferous sawnwood (by 15.7%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of nitrogenous fertilizers (by 41.1%), phosphatic fertilizers (by 36.3%), paints and varnishes other than colodium containing in solution more than 50% of solvent by weight (by 33.9%), motor oils (by 26.8%), glues and adhesives based on synthetic resins (by 24.7%), paints and varnishes, based on polyesters, weight of the solvent not more than 50% (by 22.8%), coke (by 21.0%), chemical fibres (by 19.5%), pesticides (by 17.5%). In the division *Rubber and plastic products* production decreased of rigid tubes, pipes and hoses of polymers of vinyl chloride (by 33.7%), plastic floor, wall, ceiling coverings (by 32.4%), rigid tubes, pipes and hoses of polymers of propylene (by 18.6%), plastic sacks and bags (by 14.7%), rigid tubes, pipes and hoses of polymers of ethylene (by 14.5%). In the division *Other non-metallic mineral products* production decreased of structural-floor clay hollow bricks (by 78.4%), bricks made of clay (by 63.3%), ceramic ridge tiles (by 47.3%), factory made mortars (by 37.4%), products of heat insulation of mineral wools (by 33.7%), lime (by 33.0%), structural-wall clay hollow bricks (by 30.4%), ceramic tiles and flags (by 29.9%). In the division *Basic metals* production decreased of copper and copper alloy bars, rods and profiles (by 46.6%), flat bars, rods and profiles of aluminium (by 28.8%), wire of steel (by 21.7%), hot-rolled steel rods and bars (by 18.2%), steel tubes (by 18.1%), flat cold-rolled steel products width less than 600 mm (by 16.4%), steel rods and flat bars (by 12.5%). In the division *Fabricated metal products* production decreased of steel doors (by 23.8%), iron or steel reservoirs and similar containers for solids, of a capacity > 300 litres (by 6.3%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of single-phase current motors (by 59.2%), domestic gas cookers with an oven (by 58.1%), gas meters (by 48.3%), electric cookers including gas-electric cookers (by 45.7%), automatic drying machines for households (by 38.7%), electric ovens for building-in (by 34.4%), dish washing machines for households (by 27.3%), water meters (by 20.2%), vacuum cleaners (by 20.2%), lead-acid accumulators for motor vehicles (by 13.0%). In the division *Machinery and equipment* production decreased of scarifiers and cultivators (by 55.8%), field sowers (by 50.9%), loaders for general use in agriculture (by 49.6%), pick-up

straw and fodder balers (by 36.5%), cash registers (by 26.6%), ploughs (by 22.3%), kitchen and bathroom mixing valves (by 17.4%), refrigerated show-cases and counters including for frozen articles (by 15.7%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of city/touring bicycles (by 36.4%), public transport vehicles (by 28.9%), containers for freight transport (by 8.2%). In the division *Furniture* production decreased of kitchen furniture of wood (by 17.6%), seats with wooden frames (by 17.5%), wooden furniture for the dining-room and living-room (by 8.8%), wooden bedroom furniture (by 6.4%).

Compared with the corresponding month of the previous year, production increase was recorded for, among others: hair care products (by 140.4%), special fabrics including pile fabrics and terry towelling (by 65.8%), polyurethane adhesives (by 59.7%), air-cooled transformers (by 57.9%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 34.5%), electricity meters (by 33.3%), prepared meals and dishes based on meat (by 32.1%), women's or girls' jackets (by 32.0%), basic pharmaceutical products (by 31.9%), napkins and napkin liners for babies (by 31.2%), medicaments and other pharmaceutical preparations (by 28.1%), table candles (by 26.0%), internal combustion engines for vehicles (by 23.0%), multi-phase current motors, excluding traction motors (by 20.8%), women's or girls' dresses and skirts (by 20.6%), men's or boys' shirts (by 19.3%), soups and broths and preparations therefor (by 17.6%), plastic doors (by 16.8%), bottles of coloured glass of a nominal capacity < 2,5 litres, for beverages and foodstuff (by 15.6%), passenger cars (by 15.3%), barley groats and meal (by 14.7%), wheat groats and meal (by 11.0%), boards, sheets and similar articles of plaster, other than faced or reinforced with paper only (by 10.9%), paints and varnishes, based on acrylic or vinyl polymers, weight of the solvent more than 50% (by 10.7%), aluminium windows (by 10.4%), cigarettes (by 9.6%), wheat bread (by 9.5%), synthetic calcium sulphate (by 9.4%), prepared pet foods (by 8.2%), standardized cream (by 7.4%), kefir, sour milk and sour cream (by 7.3%).

In comparison with the corresponding month of the previous year, production of pasta was at the same level.

Compared to October, in November 2022 sold production decreased for 136 products. In the divisions *Food products* and *Beverages* production decreased of tomato juice (by 34.7%), fresh or chilled pig meat (by 18.1%), canned pig meat (by 15.6%), liquid buttermilk (by 14.8%), edible evaporated salt (by 14.2%), sweetened or flavoured waters (by 13.8%), poultry carcasses (by 12.2%), cured meat products (by 11.2%). In the divisions *Wearing apparel* and *Leather and related products* production decreased of footwear (by 22.4%), leather of bovine animals (by 20.2%), men's or boys' trousers, overalls and shorts (by 19.5%), men's or boys' jackets and blazers (by 10.8%), women's or girls' trousers, overalls and shorts (by 9.9%). In the divisions *Wood and products of wood* and *Paper and paper products* production decreased of flat pallets and pallet collars of wood (by 12.6%), veneers (by 11.3%), napkins and napkin liners for babies (by 7.2%). In the divisions *Coke, briquette and refined petroleum products* and *Chemical products* production decreased of phosphatic fertilizers (by 19.2%), toilet waters (by 19.2%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 18.2%), potassic fertilizers (by 16.2%), glues and adhesives based on synthetic resins (by 15.9%), motor oils (by 14.8%), liquefied propane and butane (by 11.7%), asphalt (by 10.8%). In the division *Rubber and plastic products* production decreased of plates, sheet, film, foil of cellular polymers of styrene (by 14.4%), tyres (by 9.5%), rigid tubes, pipes and hoses of polymers of ethylene (by 9.1%), rubber products (by 8.5%). In the division *Other non-metallic mineral products* production decreased of structural-floor clay hollow bricks (by 36.0%), factory made mortars (by 19.4%), building bituminous felt (by 16.8%), lime (by 15.6%), gypsum plasters (by 15.3%), cement (by 13.0%), ceramic tiles and flags (by 12.8%), ceramic ridge tiles (by 12.1%), ready-mixed concrete (by 12.0%). In the division *Basic metals* production decreased of copper and copper alloy bars, rods and profiles (by 30.5%), wire of steel (by 13.0%). In the division *Fabricated metal products* production decreased of steel doors (by 8.0%). In the divisions *Computer, electronic and optical products* and *Electrical equipment* production decreased of dish washing machines

for households (by 22.2%), automatic washing and washing-drying machines for households (by 15.7%), automatic drying machines for households (by 14.9%), water meters (by 14.4%), electric ovens for building-in (by 9.7%), household refrigerators and freezers (by 7.3%). In the division *Machinery and equipment* production decreased of field sowers (by 31.1%), ploughs (by 9.5%), kitchen and bathroom mixing valves (by 8.9%), machinery for construction, road and drainage work (by 6.9%). In the divisions *Motor vehicles* and *Other transport equipment* production decreased of vehicle compression-ignition engines (by 8.4%), sea-going boats for pleasure or sports (by 8.4%).

Compared with the previous month, production increase was recorded for 92 products, among others for: pesticides (by 66.3%), soups and broths and preparations therefor (by 62.8%), vacuum cleaners (by 60.5%), nitrogenous fertilizers (by 56.7%), frozen salt water fish fillets (by 40.6%), fruit wines (by 34.3%), rail goods wagons (by 33.9%), pick-up straw and fodder balers (by 32.6%), barley groats and meal (by 29.2%), sodium hydroxide in aqueous solution (by 22.8%), sugar confectionery containing cocoa (by 20.5%), public transport vehicles (by 17.9%), women's or girls' dresses and skirts (by 15.4%), kitchen furniture of wood (by 14.8%), electricity meters (by 14.2%), single-phase current motors (by 13.9%), non-alcoholic beer (by 13.1%), frozen salt water fish (by 12.3%), scarifiers and cultivators (by 12.2%), domestic gas cookers with an oven (by 11.5%), calcium-silicate brick (by 11.4%).

Production of ceramic sanitary fixtures, copper wire and electric cookers including gas-electric cookers remained at the same level as in the previous month.

In January - November 2022 compared with the corresponding period of the previous year, production decrease was recorded for 136 products, among others for: domestic gas cookers with an oven (by 59.0%), cash registers (by 53.3%), electric cookers including gas-electric cookers (by 37.4%), vacuum cleaners (by 34.8%), gas meters (by 34.4%), nitrogenous fertilizers (by 32.0%), leather of bovine animals (by 29.0%), loaders for general use in agriculture (by 28.0%), phosphatic fertilizers (by 26.0%), lead-acid accumulators for motor vehicles (by 25.2%), potassic fertilizers (by 24.7%), structural-floor clay hollow bricks (by 24.3%), non-coniferous sawnwood (by 23.4%), frozen salt water fish (by 23.2%), paints and varnishes other than colodium containing in solution more than 50% of solvent by weight (by 21.9%), electric ovens for building-in (by 21.9%), cans other than for preserving food and drink of iron or steel, of a capacity < 50 l (by 21.7%), woven fabrics of synthetic or artificial filament yarns (by 21.5%), structural-wall clay hollow bricks (by 21.1%), paints and varnishes, based on acrylic or vinyl polymers in an aqueous medium (by 20.0%), sugar confectionery containing cocoa (by 19.6%), field sowers (by 19.5%), vegetable pickles (by 18.9%), automatic drying machines for households (by 18.5%), veneers (by 18.2%), rendered pork fat suitable for consumption (by 18.1%), women's or girls' trousers, overalls and shorts (by 17.8%), doors of wood (by 17.6%), electricity meters (by 17.1%).

In January - November compared with the corresponding period of the previous year, production increase was recorded for 93 products, among others for: special fabrics including pile fabrics and terry towelling (by 44.8%), prepared meals and dishes based on meat (by 43.0%), sanitary towels and similar articles of paper pulp, paper and cellulose wadding (by 38.7%), vehicle compression-ignition engines (by 37.7%), air-cooled transformers (by 35.1%), polyurethane adhesives (by 32.8%), napkins and napkin liners for babies (by 30.0%), canned poultry meat (by 28.2%), barley groats and meal (by 27.4%), sea-going boats for pleasure or sports (by 26.7%), internal combustion engines for vehicles (by 25.7%), basic pharmaceutical products (by 25.0%), sodium hydroxide in aqueous solution (by 23.4%), synthetic calcium sulphate (by 23.2%), table candles (by 21.8%), buckwheat groats and meal (by 21.1%), electric motors and generators, excluding traction motors (by 20.7%), women's or girls' jackets (by 19.8%), multi-phase current motors, excluding traction motors (by 19.0%), food cans of tinfoil (by 17.6%), toilet waters (by 15.8%), edible evaporated salt (by 15.6%), toilet paper (by 14.8%), apple juice (by 14.6%), men's or boys' shirts (by 14.4%), wheat bread (by 13.3%), medicaments and other pharmaceutical preparations (by 13.1%), men's or boys' jackets and blazers (by 11.9%), soups and broths and

preparations therefor (by 11.8%), wheat groats and meal (by 11.8%), chocolate (by 11.3%), margarine and spreads (by 11.3%).

Production of cured meat products 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.