## Index of Production, UK: October 2019

Movements in the volume of production for the UK production industries: manufacturing, mining and quarrying, energy supply, and water and waste management. Figures are seasonally adjusted.

## Table of contents

1. Main points
2. Production
3. Manufacturing
4. Mining and quarrying
5. Electricity and gas
6. Water and waste
7. Index of Production data
8. Glossary
9. Measuring the data
10. Strengths and limitations
11. Related links

## 1. Main points

- Total production output decreased by $0.7 \%$ for the three months to October 2019, compared with the three months to July 2019; this was led by manufacturing output, which fell by $0.7 \%$, followed by falls in mining and quarrying (2.6\%) and electricity and gas (1.0\%).
- The three-monthly fall in manufacturing is because of widespread weakness, with 9 of the 13 subsectors providing downward contributions; this was led by pharmaceutical products (4.5\%), machinery and equipment (1.9\%), and chemicals and chemical products (2.3\%).
- Production output rose by $0.1 \%$ between September 2019 and October 2019, with electricity and gas providing the largest upward contribution (2.4\%), followed by manufacturing (0.2\%); these were partially offset by downward contributions from mining and quarrying (4.2\%) and water and waste (1.2\%).
- The monthly increase of $0.2 \%$ in manufacturing output is because of upward contributions from 8 of the 13 subsectors; this was led by pharmaceutical products (2.1\%).
- For the three months to October 2019, production output decreased by $1.5 \%$, compared with the same three months to October 2018; this was led by a fall in manufacturing of $1.5 \%$, followed by falls in mining and quarrying ( $6.4 \%$ ) and electricity and gas ( $0.7 \%$ ).


## 2. Production

Figure 1: Manufacturing provided the largest negative contribution, followed by mining and quarrying and electricity and gas

Contributions to the Index of Production quarter on previous quarter, seasonally adjusted, UK, October 2019

# Figure 1: Manufacturing provided the largest negative contribution, followed by mining and quarrying and electricity and gas 

Contributions to the Index of Production quarter on previous quarter, seasonally adjusted, UK, October 2019


Source: Office for National Statistics - Index of Production

Notes:

1. Weights for main Index of Production sectors are: Sector B - Mining and quarrying (4.7); Sector $C$ Manufacturing (74.9); Sector D - Electricity and gas (10.9); and Sector E - Water and waste (9.5).

Total production output for the three months to October 2019 fell by $0.7 \%$, compared with the three months to July 2019. This was mainly because of manufacturing output falling by $0.7 \%$, led by widespread weakness throughout the sector, with negative contributions from 9 of the 13 subsectors. The fall in manufacturing was followed by falls in mining and quarrying (2.6\%) and electricity and gas (1.0\%).

Table 1: Growths and contributions to production, seasonally adjusted estimates, UK, October 2019

Three months on previous three months

Three months on same three months a year ago

## Month on previous month

Sector | Summary |
| :--- |
| description |

loP Index of Production
Sector Total mining and quarrying

Growth to
(\%) production (\% points)
$-0.7 \quad-0.7$
$-2.6 \quad-0.13$
$1.4 \quad 0.00$
$-3.8 \quad-0.14$
$1.0 \quad 0.01$
$-0.7 \quad-0.52$
1.50 .18
-0.2 0.00
$-0.5 \quad-0.03$
-3.4 -0.03
-2.3 $\quad-0.11$
$-4.5 \quad-0.26$
$-2.0 \quad-0.10$
$-0.8 \quad-0.06$
$-1.2 \quad-0.08$
$-4.7 \quad-0.09$
-1.9 -0.11
$1.4 \quad 0.15$
$0.5 \quad 0.03$
$-1.0 \quad-0.10$
$0.0 \quad 0.00$
transmission and distribution

| 35.2-3 | Manufacture of gas; distribution | -4.2 | -0.10 |
| :--- | :--- | :--- | :--- |
| of gaseous fuels through mains; |  |  |  |
| steam and aircon supply |  |  |  |

Sector Total water and waste
$0.2 \quad 0.02$

36 Water collection, treatment and
$0.7 \quad 0.02$ disposal activities; materials recovery
$0.5 \quad 0.04$
$-0.4 \quad-0.01$
$-0.9 \quad-0.03$
$-1.2 \quad-0.11$
$3.9-0.13$
1.20 .04
$5.9 \quad 0.17$
$-3.5 \quad-0.11$
Growth to
(\%) production

Growth to
(\%) production
(\% points)
$-1.5 \quad-1.5$
$-6.4 \quad-0.33$
$0.1 \quad 0.1$
$-4.2 \quad-0.21$
$-6.9 \quad 0.00$
$-3.9 \quad 0.00$
$-5.4 \quad-0.20$
-1.0 -0.01
$0.2 \quad 0.17$
$0.6 \quad 0.08$
$0.4 \quad 0.01$
$-0.3 \quad-0.02$
$8.6 \quad 0.06$
$0.1 \quad 0.00$
$2.1 \quad 0.11$
$-0.4 \quad-0.02$
$-1.6 \quad-0.13$
$0.6 \quad 0.04$
$-4.3 \quad-0.08$
$0.3 \quad 0.02$
$0.6 \quad 0.07$
$0.5 \quad 0.03$
$2.4 \quad 0.25$
$2.0 \quad 0.16$
$3.8 \quad 0.09$
$-4.3-0.10$
0.
$-5.9 \quad-0.01$

Figure 2: The Index of Production remains below its pre-economic downturn peak

Index of Production rolling three months on previous three months, seasonally adjusted, UK, January 2008 to October 2019

> Ecengmife 2: The Index of Production remains below its pre-
dowtern economic downturn peak

Index of Production rolling three months on previous three months, seasonally adjusted, UK, January 2008 to October 2019


Source: Office for National Statistics - Index of Production
Notes:

1. Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009 - UK economic downturn.

Figure 2 shows that growth for the Index of Production (IOP) was more pronounced from the beginning of 2010, as the economy recovered, before a downturn during 2012. Production output in the UK remained $6.2 \%$ lower for the three months to October 2019 than the pre-downturn peak for the three months to March 2008. Additionally, the current three-monthly rolling index level is the lowest since November 2016.

## 3 . Manufacturing

Figure 3: The Index of Manufacturing remains below its pre-economic downturn peak
Index of Manufacturing rolling three months on previous three months, seasonally adjusted, UK, January 2008 to October 2019 fogntaic 3 : The Index of Manufacturing remains below its pre-
economic downturn peak
Index of Manufacturing rolling three months on previous three months, seasonally adjusted, UK, January 2008 to October 2019


## Source: Office for National Statistics - Index of Production

Notes:

1. Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009 - UK economic downturn.

Figure 3 shows that growth for the Index of Manufacturing was more pronounced from the beginning of 2010, as the economy recovered, before a downturn during 2012. Manufacturing output in the UK remained 3.5\% lower for the three months to October 2019 than the pre-downturn peak for the three months to March 2008. Additionally, the current three-monthly rolling index level is the lowest since December 2016.

For further detail on the longer-term trend within manufacturing, please see the article, Manufacturing sector performance, UK: 2008 to 2018, published on 2 April 2019. The article provides an overview of the changes in the manufacturing sector between 2008 and 2018, focusing on the industries that have grown or shrunk the most.

Total manufacturing output for the three months to October 2019 fell by $0.7 \%$, compared with the three months to July 2019. Of the 13 subsectors, 9 displayed negative contributions, led by:

- basic pharmaceutical products, which fell by $4.5 \%$ mainly because of significant monthly weakness during August and September 2019
- machinery and equipment, which fell by $1.9 \%$, caused by weakness from large businesses
- chemicals and chemical products, which fell by $2.3 \%$, partially because of the impact of maintenance and shutdowns

Partially offsetting the cumulative impact from the negative contributions was widespread growth from food, beverages and tobacco, which rose by $1.5 \%$. Within this sector, there was notable strength from meat and meat products (2.9\%) and other food products (1.9\%), driven by large businesses.

Also providing a notable upward contribution was transport equipment, which increased by $1.4 \%$. Strength within this sector was led by motor vehicles, trailers and semi-trailers, which rose by $2.7 \%$; this was the third consecutive period of three-monthly growth. Strength here is mainly because of the continuing recovery following a very strong monthly decline in April 2019, rather than any notable growth during the latest three months. This industry is still showing a longer-term decline, as highlighted by the three months on same three months a year ago indicator, which fell by $3.0 \%$.

An article to be published on 10 January 2020 will provide a comparison of the methodologies used to measure motor vehicle manufacturing, using official UK statistics compiled by the Office for National Statistics (ONS) and published in the Index of Production (loP) and the Society of Motor Manufacturers and Traders (SMMT).

The growth of $0.1 \%$ in total manufacturing output in October 2019, compared with September 2019, was mainly because of widespread strength, with 8 of the 13 subsectors displaying upward contributions. The largest of these came from the volatile pharmaceutical products subsector, which rose by $2.1 \%$, following two consecutive periods of significant monthly weakness during August and September 2019.

Elsewhere, smaller positive contributions came from:

- food, beverages and tobacco ( $0.6 \%$ ) because of widespread strength, led by the impact of large businesses within other food products, which rose by $1.2 \%$
- the motor vehicles, trailers and semi-trailers industry ( $0.9 \%$ ), which was impacted by the production of new models

However, these were offset by downward contributions from:

- basic metals and metal products (1.6\%), driven by weakness within fabricated metal products and basic iron and steel, which fell by $1.5 \%$ and $5.3 \%$ respectively
- electrical equipment, which fell by $4.3 \%$ because of cumulative weakness from large businesses

For the three months to October 2019, compared with the same three months to October 2018, total output declined by $1.5 \%$, the seventh consecutive fall for this indicator. The current decline was led by:

- machinery and equipment, which fell by $5.4 \%$
- rubber and plastic products, which fell by 5.8\%
- transport equipment, which fell by $2.7 \%$, a continuation of ongoing weakness since August 2018
- other manufacturing and repair, which fell by $3.2 \%$; a strong decrease of $18.6 \%$ from repair and maintenance of aircraft and spacecraft is a continuation of weakness since February 2018

Partially offsetting overall weakness was long-term strength from the pharmaceutical products subsector (3.3\%).

## 4 . Mining and quarrying

Figure 4: Periods of maintenance during August 2019 is a factor behind recent periods of significant weakness for mining and quarrying

Mining and quarrying, three months on three months a year ago, seasonally adjusted, UK, January 2016 to October 2019
Figure 4: Periods of maintenance during August 2019 is a factor behind recent periods of significant weakness for mining and quarrying
Mining and quarrying, three months on three months a year ago, seasonally adjusted, UK, January 2016 to October 2019


## Source: Office for National Statistics - Index of Production

There is a continuation of significant weakness within this sector, with three-monthly output falling by $2.6 \%$ and three months on three months a year ago output falling by $6.4 \%$ (Figure 4), continuing the trend of a weaker 2019 in comparison to 2018. Both quarterly indicators include periods of maintenance during August 2019, impacting on output for the oil and gas extraction industry.

## 5. Electricity and gas

The three-monthly decline of $1.0 \%$ was wholly driven by gas supply, which decreased by $4.2 \%$. This fall was largely temperature-driven, with warmer than average temperatures across August and September 2019 reducing demand.

For the three months on three months a year ago indicator, the fall in output of $0.7 \%$ was mainly because of gas supply, which fell by $4.3 \%$. This was also partially temperature-driven, with colder than average temperatures across the three months to October 2018 increasing demand in comparison with the same three months to October 2019.

In contrast, monthly output rose by $2.4 \%$ for October 2019 because of increased demand for both electricity and gas supply, which rose by $2.0 \%$ and $3.8 \%$ respectively. The Met Office reported that the provisional UK mean temperature for October 2019 was 9.0 degrees Celsius, which is 0.5 degrees Celsius below the 1981 to 2010 long-term average.

## 6 . Water and waste

Work carried out on waste treatment projects is the underlying factor behind the strength across the three months on three months a year ago indicator for the waste collection industry, which rose by $5.9 \%$. In contrast, and partially offsetting this growth, was a $3.9 \%$ fall for sewerage.

Despite strength in the longer-term indicator within waste supply, monthly output declined by $3.5 \%$ for this industry; this was led by weakness from large businesses, driving the overall sector level fall of $1.2 \%$.

## 7 . Index of Production data

## Index of Production time series

Dataset DIOP | Released 10 December 2019
Movements in the volume of production for the UK production industries: manufacturing, mining and quarrying, energy supply, and water and waste management. Figures are seasonally adjusted.

Output of the production industries
Dataset | Released 10 December 2019
Index values and growth rates for production, manufacturing and the main industrial groupings in the UK.

Index of Production and industry sectors to four decimal places
Dataset | Released 10 December 2019
Monthly index values for production and the main Index of Production (loP) sectors in the UK to four decimal places.

Monthly Business Survey turnover in production industries
Dataset | Released 10 December 2019
Monthly Business Survey (MBS) production industries' total turnover, domestic sales and exports in the UK. Figures are in current price and non-seasonally adjusted.

## Export proportions for manufacturing industries

Dataset | Released 10 December 2019
Monthly, quarterly and annual export data for the manufacturing industries, collected by the MBS at industry level in the UK.

All data related to the loP are available on the Related data page.

## 8 . Glossary

## Index number

The index number is a measure of the average level of prices, quantities or other measurable characteristics relative to their level for a defined time period or location.

## Industrial classification or breakdown

The industrial classification or breakdown is the internationally standardised method for classifying the wide range of industrial sectors in an economy. We use the Standard Industrial Classification 2007 (SIC 2007) for industrial breakdowns.

## Manufacturing

The manufacturing sector includes the output of manufacturing industries and is broken down into 13 subsectors.

## Monthly Business Survey

The Monthly Business Survey (MBS) collects information on the monthly turnover of UK businesses within the production and service sectors from various industrial sectors and regions in the UK.

## Production

The production sector includes the output in the manufacturing (the largest component of production), mining and quarrying, energy supply, and water supply and waste management industries.

## Turnover

The turnover of a company is the value of the goods or services sold during a particular time period. It includes total takings or invoiced sales and receipts. Interest and similar income, "other operating income", and extra ordinary income is excluded. Value Added Tax (VAT) invoiced to the customer is excluded.

## 9 . Measuring the data

The Index of Production (loP) uses data from a variety of sources and is calculated by taking turnover and removing the impact of price changes or by using direct volume estimates.

The majority of data are collected as "turnover values" through the Monthly Business Survey (MBS). In addition, direct volume series are collected by the Department for Business, Energy and Industrial Strategy (BEIS) and the International Steel Statistics Bureau (ISSB) for steel industries.

From January 2018, Value Added Tax (VAT) data have also been included across 64 production industries for small- and medium-sized businesses. For more information, see VAT turnover data in National Accounts: background and methodology.

A comprehensive list of the loP source data can be found in the Gross domestic product (GDP(O)) source catalogue (XLS, 715 KB ).

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the UK Index of Production QMI.

## 10. Strengths and limitations

## Seasonal adjustment

The data published in the Index of Production (loP) release are all seasonally adjusted (although non-seasonally adjusted estimates are also available). This aids interpretation by removing annually recurring fluctuations, for example, those caused by holidays or other seasonal patterns.

## Data volatility

Care should be taken when using the month-on-month growth rates as data can be volatile. Longer-term growth rates and examination of the time series allow for better interpretation of the statistics.

## Comparability with UK trade statistics

The Monthly Business Survey (MBS) turnover in production industries dataset produces the proportion of turnover from exports by industry and level of turnover and exports (British Pound, millions). However, this is not always comparable with UK trade statistics. Further information on UK trade and how data on it are compiled can be found in the UK trade release.

## 11. Related links

GDP monthly estimate, UK: October 2019
Bulletin | Released 10 December 2019
Gross domestic product (GDP) measures the value of goods and services produced in the UK. It estimates the size of and growth in the economy and includes the Index of Production (loP), Index of Services (loS) and construction output in Great Britain.

A comparison between official estimates of UK output and diffusion indices
Article | Released 21 October 2019
The level of correlation between Office for National Statistics (ONS) data and IHS Markit and Chartered Institute of Procurement and Supply Purchasing Managers' Indices.

## Producer price inflation, UK: October 2019

Bulletin | Released 13 November 2019
The corresponding price indices used to deflate the IoP are published in the monthly publication of UK producer price inflation.

UK manufacturers' sales by product (ProdCom): 2018 revised results
Bulletin | Released 2 December 2019
Product sales by manufacturers are published on an annual basis in ProdCom statistical bulletins; estimates are in current prices, unlike the chained volume measures published in the loP release.

## Energy Trends: September 2019

Bulletin | Released 26 September 2019
The data published by the Department for Business, Energy and Industrial Strategy (BEIS) in Energy Trends are used to measure the mining and quarrying, electricity and gas, and manufacture of coke and refined petroleum products sectors within this release.

Eurostat short-term business statistics (STS)
Article | Updated monthly
The IoP follows the Eurostat STS regulation for measuring output in production. The industrial production and output in manufacturing are available from Eurostat and are updated monthly. It should be noted that Eurostat data are calculated on a 2015 equals 100 basis, while UK data are calculated on a 2016 equals 100 basis.

Index of Services, UK: October 2019
Bulletin | 10 December 2019
Monthly movements in output for the services industries.
Construction output in Great Britain:October 2019 and new orders July to September 2019
Bulletin | 10 December 2019
Short-term measures of output by the construction industry and contracts awarded for new construction work in Great Britain.

National Statistics

## Output of the Production Industries,

## October 2019

| Page 1 | Output by Broad industry groups and Main industrial groupings <br> Percentage change, latest year on previous year <br> Percentage change, latest month on same month a year ago |
| :---: | :---: |
| Page 2 | Percentage change, latest month on previous month |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 3 | Percentage change, latest 3 months on previous 3 months |
| Page 4 | Output by Manufacturing sub-sectors part 1 |
|  | Percentage change, latest year on previous year |
|  | Percentage change, latest month on same month a year ago |
| Page 5 | Output by Manufacturing sub-sectors part 2 |
|  | Percentage change, latest year on previous year |
|  | Percentage change, latest month on same month a year ago |
| Page 6 | Percentage change, latest month on previous month part 1 |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 7 | Percentage change, latest month on previous month part 2 |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 8 | Percentage change, latest 3 months on previous 3 months part 1 |
| Page 9 | Percentage change, latest 3 months on previous 3 months part 2 |
| Enquiries |  |

## $10 P 5$ Output of the Production Industries

|  |  |  |  |  |  |  |  | Seasonally adjusted 2016 $=100$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Broad industry groups |  |  |  |  |  | Main industrial groupings |  |  |  |  |
|  |  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | Intermediate goods | Energy |
| Section |  | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight |  | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  |  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |
| 2014 |  | 97.9 | 97.0 | 99.9 | 94.3 | 89.2 | 89.6 | 99.9 | 99.9 | 99.5 | 101.9 | 93.8 |
| 2015 |  | 98.9 | 102.0 | 99.8 | 96.4 | 93.3 | 96.3 | 99.2 | 100.1 | 97.9 | 102.7 | 97.3 |
| 2016 |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2017 |  | 101.7 | 101.7 | 102.2 | 98.2 | 102.0 | 101.6 | 103.8 | 99.0 | 105.4 | 101.7 | 99.3 |
| 2018 |  | 101.9 | 106.6 | 102.6 | 96.4 | 100.2 | 109.1 | 114.5 | 100.1 | 107.5 | 99.6 | 99.6 |
| 2018 | Q3 | 102.2 | 110.2 | 102.7 | 95.7 | 101.5 | 113.4 | 113.9 | 99.9 | 107.0 | 100.4 | 100.5 |
|  | Q4 | 101.4 | 108.3 | 102.1 | 95.5 | 99.7 | 111.0 | 115.3 | 100.5 | 105.6 | 99.6 | 99.5 |
| 2019 | Q1 | 102.5 | 107.3 | 104.1 | 92.8 | 99.2 | 109.0 | 118.7 | 104.4 | 105.9 | 101.9 | 97.5 |
|  | Q2 | 100.7 | 106.2 | 101.2 | 95.4 | 100.4 | 108.6 | 117.3 | 101.8 | 102.5 | 99.4 | 98.5 |
|  | Q3 | 100.7 | 104.4 | 101.2 | 94.7 | 101.6 | 106.0 | 115.3 | 101.8 | 103.6 | 98.4 | 97.8 |
| 2018 | Aug | 102.4 | 111.6 | 102.8 | 96.4 | 101.6 | 115.1 | 114.3 | 99.6 | 107.8 | 100.2 | 101.2 |
|  | Sep | 101.7 | 108.1 | 102.5 | 94.2 | 100.7 | 110.5 | 112.3 | 99.9 | 106.3 | 100.7 | 98.9 |
|  | Oct | 101.7 | 110.7 | 102.1 | 96.5 | 100.1 | 113.4 | 114.7 | 100.1 | 105.6 | 100.1 | 100.6 |
|  | Nov | 101.6 | 107.6 | 102.4 | 95.7 | 99.5 | 110.2 | 116.0 | 101.2 | 106.0 | 99.4 | 99.5 |
|  | Dec | 101.0 | 106.6 | 101.8 | 94.4 | 99.7 | 109.5 | 115.2 | 100.1 | 105.3 | 99.4 | 98.4 |
| 2019 | Jan | 102.0 | 104.9 | 103.2 | 96.0 | 98.6 | 105.2 | 116.1 | 103.0 | 105.1 | 101.5 | 99.0 |
|  | Feb | 102.3 | 107.9 | 103.9 | 91.5 | 99.1 | 109.8 | 119.7 | 103.4 | 106.0 | 102.2 | 96.8 |
|  | Mar | 103.2 | 109.2 | 105.1 | 90.9 | 99.8 | 111.9 | 120.5 | 107.0 | 106.5 | 102.1 | 96.8 |
|  | Apr | 100.0 | 105.5 | 100.6 | 94.0 | 99.2 | 107.4 | 117.5 | 102.9 | 99.7 | 99.6 | 97.3 |
|  | May | 101.1 | 106.6 | 101.6 | 94.9 | 100.9 | 109.2 | 120.0 | 100.8 | 104.1 | 99.4 | 98.7 |
|  | Jun | 101.1 | 106.4 | 101.3 | 97.4 | 101.1 | 109.3 | 114.6 | 101.6 | 103.6 | 99.1 | 99.6 |
|  | Jul | 101.2 | 104.5 | 101.8 | 95.6 | 101.4 | 106.5 | 115.9 | 103.0 | 103.7 | 98.9 | 98.5 |
|  | Aug | 100.5 | 103.4 | 101.1 | 94.6 | 101.6 | 104.6 | 114.7 | 101.8 | 103.3 | 98.4 | 97.4 |
|  | Sep | 100.3 | 105.2 | 100.7 | 94.0 | 101.7 | 106.9 | 115.2 | 100.6 | 103.7 | 98.0 | 97.4 |
|  | Oct | 100.4 | 100.8 | 100.9 | 96.3 | 100.6 | 101.2 | 115.9 | 101.2 | 104.2 | 97.3 | 97.8 |



IOP5 output ot the production industries
Chained volume indices of gross value added'

| continued |  |  |  |  |  |  |  |  |  | Seasonally adju | $2016=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Broad industry groups |  |  |  |  |  | Main industrial groupings |  |  |  |  |
|  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | Intermediate goods | Energy |
| Section | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |

Percentage change, latest month on previous month

| 2017 | Aug | 0.1 | -1.3 | 0.4 | 0.3 | -1.1 | -1.1 | 3.5 | 1.5 | -0.6 | - | 0.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | 1.1 | 3.7 | 1.1 | 0.3 | 1.2 | 4.9 | 4.5 | -0.5 | 2.3 | 1.2 | 1.1 |
|  | Oct | 0.3 | 1.4 | 0.6 | -2.3 | 0.5 | 2.3 | -2.4 | 0.7 | 0.5 | 0.7 | -0.8 |
|  | Nov | - | 1.1 | -0.2 | 1.6 | -0.4 | 0.7 | 0.2 | 0.6 | -1.2 | 0.4 | 0.6 |
|  | Dec | -0.2 | -19.3 | 0.7 | 2.4 | - | -25.5 | 3.2 | -0.7 | 1.7 | 0.4 | -3.4 |
| 2018 | Jan | -0.3 | 19.2 | -0.4 | -5.4 | -2.5 | 29.3 | 4.3 | -0.5 | 2.0 | -3.1 | 0.5 |
|  | Feb | - | -1.9 | -0.7 | 6.1 | 0.8 | -2.3 | -0.6 | 1.0 | -1.5 | -1.2 | 3.5 |
|  | Mar | -0.3 | -3.1 | -0.4 | 2.1 | -0.6 | -3.2 | 0.8 | -0.7 | -0.3 | -0.8 | 0.8 |
|  | Apr | -0.5 | 9.1 | -0.6 | -4.1 | -0.8 | 11.3 | -1.3 | 0.6 | -1.5 | -0.4 | -0.3 |
|  | May | -0.5 | -1.4 | 0.3 | -7.2 | 0.7 | -2.9 | 2.6 | 1.1 | -0.1 | 0.4 | -4.8 |
|  | Jun | 1.0 | -0.5 | 0.8 | 1.5 | 2.6 | -1.2 | -0.5 | 2.1 | -0.3 | 1.0 | 1.1 |
|  | Jul | 0.2 | 4.8 | -0.5 | 3.5 | 0.3 | 7.2 | -0.2 | -2.6 | -0.1 | 0.7 | 4.0 |
|  | Aug | - | 0.8 | 0.1 |  | -0.5 | 0.5 | -0.7 | -0.4 | 0.7 | -0.1 | -0.2 |
|  | Sep | -0.6 | -3.2 | -0.2 | -2.3 | -0.9 | -4.0 | -1.8 | 0.3 | -1.3 | 0.5 | -2.3 |
|  | Oct | - | 2.4 | -0.5 | 2.4 | -0.6 | 2.6 | 2.1 | 0.2 | -0.7 | -0.6 | 1.8 |
|  | Nov | -0.1 | -2.8 | 0.3 | -0.8 | -0.7 | -2.8 | 1.2 | 1.0 | 0.4 | -0.7 | -1.2 |
|  | Dec | -0.6 | -0.9 | -0.6 | -1.3 | 0.2 | -0.6 | -0.7 | -1.0 | -0.7 | - | -1.0 |
| 2019 | Jan | 1.0 | -1.7 | 1.4 | 1.7 | -1.0 | -3.9 | 0.8 | 2.8 | -0.2 | 2.1 | 0.5 |
|  | Feb | 0.3 | 2.9 | 0.7 | -4.6 | 0.5 | 4.3 | 3.1 | 0.4 | 0.8 | 0.7 | -2.1 |
|  | Mar | 0.9 | 1.3 | 1.1 | -0.7 | 0.7 | 2.0 | 0.7 | 3.5 | 0.5 | -0.1 | - |
|  | Apr | -3.2 | -3.4 | -4.3 | 3.4 | -0.6 | -4.1 | -2.5 | -3.8 | -6.3 | -2.5 | 0.4 |
|  | May | 1.1 | 1.1 | 1.0 | 1.0 | 1.7 | 1.7 | 2.1 | -2.0 | 4.3 | -0.2 | 1.4 |
|  | Jun | 0.1 | -0.2 | -0.3 | 2.6 | 0.2 | 0.1 | -4.5 | 0.7 | -0.4 | -0.3 | 1.0 |
|  | Jul | 0.1 | -1.8 | 0.5 | -1.9 | 0.3 | -2.6 | 1.2 | 1.4 | 0.1 | -0.2 | -1.2 |
|  | Aug | -0.7 | -1.1 | -0.7 | -1.1 | 0.2 | -1.8 | -1.1 | -1.2 | -0.4 | -0.6 | -1.1 |
|  | Sep | -0.3 | 1.8 | -0.4 | -0.5 | 0.1 | 2.2 | 0.5 | -1.2 | 0.3 | -0.3 |  |
|  | Oct | 0.1 | -4.2 | 0.2 | 2.4 | -1.2 | -5.4 | 0.5 | 0.6 | 0.5 | -0.8 | 0.5 |


| Percentage change, latest 3 months on same 3 months a year ago ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | Aug | 1.5 | 0.1 | 2.2 | -1.3 | 0.8 | -1.2 | 4.3 | 0.3 | 4.5 | 1.5 | -0.7 |
|  | Sep | 2.0 | -0.4 | 2.6 | -0.4 | 1.2 | -1.7 | 3.9 | -0.1 | 6.0 | 1.6 | -0.8 |
|  | Oct | 2.8 | 5.9 | 3.4 | -1.6 | 1.4 | 7.1 | 5.4 | 0.6 | 6.9 | 2.4 | 0.2 |
|  | Nov | 3.1 | 9.1 | 3.9 | -3.3 | 1.1 | 11.4 | 5.7 | 0.7 | 7.7 | 3.1 | -0.4 |
|  | Dec | 2.3 | 2.7 | 3.3 | -3.1 | 0.5 | 2.5 | 4.3 | -0.4 | 7.1 | 2.8 | -1.9 |
| 2018 | Jan | 1.1 | -1.7 | 2.2 | -3.5 | -1.6 | -3.0 | 6.2 | -1.7 | 6.5 | 1.3 | -3.4 |
|  | Feb | 0.7 | -3.3 | 1.5 | -0.6 | -2.9 | -4.3 | 7.7 | -1.3 | 5.5 | -0.2 | -1.8 |
|  | Mar | 1.1 | 0.5 | 1.7 | 2.3 | -4.7 | 2.2 | 11.9 | 0.2 | 5.7 | -1.4 | 1.1 |
|  | Apr | 1.3 | 2.6 | 1.4 | 4.9 | -3.9 | 5.6 | 12.8 | 0.8 | 5.0 | -2.1 | 3.6 |
|  | May | 0.9 | 3.6 | 1.2 | 1.1 | -3.0 | 6.6 | 14.6 | 0.7 | 4.9 | -2.6 | 1.4 |
|  | Jun | 0.7 | 4.5 | 1.2 | -3.8 | -0.4 | 7.1 | 12.1 | 1.6 | 4.1 | -2.4 | -1.3 |
|  | Jul | 0.7 | 4.5 | 1.3 | -5.1 | 0.4 | 6.7 | 12.8 | 2.5 | 2.8 | -1.6 | -1.7 |
|  | Aug | 0.9 | 6.0 | 1.1 | -3.2 | 1.2 | 8.6 | 11.3 | 2.1 | 2.2 | -1.0 | 0.3 |
|  | Sep | 0.3 | 6.7 | 0.4 | -3.0 | 0.2 | 9.5 | 9.4 | 1.5 | 0.6 | -1.0 | 0.8 |
|  | Oct | -0.4 | 5.3 | -0.5 | -2.5 | -0.6 | 6.9 | 7.4 | 1.0 | -0.6 | -1.7 | 0.4 |
|  | Nov | -1.2 | 2.0 | -1.1 | -2.6 | -1.8 | 2.7 | 7.1 | 1.3 | -1.6 | -2.7 | -0.5 |
|  | Dec | -1.5 | 7.6 | -1.7 | -3.0 | -2.1 | 10.8 | 7.7 | 1.1 | -2.3 | -3.6 | 0.6 |
| 2019 | Jan | -1.2 | 6.8 | -1.4 | -2.7 | -1.7 | 9.3 | 5.4 | 2.2 | -3.2 | -2.4 | 0.8 |
|  | Feb | -0.8 | 9.1 | -0.7 | -4.9 | -1.2 | 11.5 | 4.1 | 3.0 | -3.9 | -0.2 | -0.3 |
|  | Mar | 0.2 | 5.8 | 0.9 | -6.9 | -0.4 | 5.7 | 4.2 | 5.4 | -3.6 | 2.4 | -2.4 |
|  | Apr | -0.2 | 4.7 | 0.6 | -8.7 | 0.1 | 4.5 | 4.9 | 5.1 | -4.2 | 2.6 | -4.2 |
|  | May | -0.2 | 2.8 | 0.1 | -4.7 | 0.9 | 2.8 | 4.3 | 3.9 | -4.2 | 1.9 | -2.2 |
|  | Jun | -0.9 | -0.3 | -1.3 | 0.9 | 0.5 | -0.1 | 2.3 | 0.8 | -4.5 | 0.6 | 0.1 |
|  | Jul | -0.7 | -1.6 | -1.1 | 2.3 | - | -1.3 | 1.2 | 0.7 | -3.1 | -0.4 | 0.5 |
|  | Aug | -1.3 | -4.2 | -1.4 | 0.5 | -0.5 | -4.7 | 0.1 | 1.3 | -3.5 | -1.2 | -1.5 |
|  | Sep | -1.4 | -5.3 | -1.4 | -1.0 | 0.1 | -6.5 | 1.2 | 1.9 | -3.2 | -1.9 | -2.7 |
|  | Oct | -1.5 | -6.4 | -1.5 | -0.7 | 0.5 | -7.8 | 1.3 | 1.3 | -2.7 | -2.4 | -2.7 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding |  |  |  |  | ${ }^{\dagger}$ indicates that data are new or have been revised. The period marked is the earliest in the table to have been revised |  |  |  |  |  |  |
| 2 | Any apparent inconsistencies between these tables and the latest GDP estimate are due to rounding. |  |  |  |  |  |  |  |  |  |  |  |

IOP5 cutput ot the production industries
Chained volume indices of gross value added ${ }^{1}$

| continued |  |  |  |  |  |  |  |  |  | Seasonally adju | $2016=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Broad industry groups |  |  |  |  |  | Main industrial groupings |  |  |  |  |
|  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | Intermediate goods | Energy |
| Section | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |


$10 P 5$ Output of the Production Industries

| Seasonally adjusted 2016 = 100 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Food products, beverages and tobacco | Textiles, wearing apparel and leather products | Wood and paper products and printing | Coke and refined petroleum products | Chemicals and chemical products | Basic pharmaceutical products and preparations |
| Sectio |  | CA | CB | CC | CD | CE | CF |
| Latest weight |  | 119.1 | 22.9 | 54.0 | 8.1 | 47.0 | 55.1 |
|  |  | K22B | K22P | K22T | K22X | K22Z | K239 |
| 2014 |  | 100.9 | 104.7 | 100.7 | 99.0 | 101.5 | 94.9 |
| 2015 |  | 100.8 | 102.3 | 101.5 | 101.4 | 106.6 | 95.5 |
| 2016 |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2017 |  | 99.7 | 100.1 | 101.1 | 101.4 | 102.6 | 98.2 |
| 2018 |  | 100.9 | 94.2 | 99.2 | 97.4 | 103.6 | 101.1 |
| 2018 | Q3 | 102.2 | 94.9 | 99.4 | 101.0 | 104.4 | 97.6 |
|  | Q4 | 101.7 | 92.4 | 99.6 | 99.3 | 105.6 | 101.8 |
| 2019 | Q1 | 104.6 | 95.7 | 102.7 | 103.2 | 109.3 | 108.5 |
|  | Q2 | 102.2 | 95.0 | 100.7 | 94.5 | 102.3 | 105.6 |
|  | Q3 | 102.5 | 95.6 | 99.6 | 89.2 | 100.3 | 106.0 |
| 2018 | Aug | 102.7 | 95.4 | 98.1 | 102.8 | 101.0 | 98.0 |
|  | Sep | 101.5 | 92.6 | 99.6 | 102.8 | 107.1 | 99.6 |
|  | Oct | 102.1 | 91.8 | 98.8 | 99.7 | 104.8 | 101.1 |
|  | Nov | 101.3 | 92.2 | 101.2 | 99.1 | 105.7 | 104.6 |
|  | Dec | 101.5 | 93.3 | 98.7 | 99.1 | 106.3 | 99.8 |
| 2019 | Jan | 104.0 | 94.1 | 101.7 | 103.4 | 109.4 | 105.5 |
|  | Feb | 104.2 | 95.9 | 102.0 | 105.8 | 108.9 | 106.1 |
|  | Mar | 105.6 | 97.2 | 104.3 | 100.4 | 109.4 | 113.8 |
|  | Apr | 103.6 | 96.1 | 102.5 | 96.1 | 101.0 | 105.6 |
|  | May | 102.1 | 93.9 | 99.2 | 97.9 | 102.6 | 103.7 |
|  | Jun | 100.9 | 94.9 | 100.4 | 89.5 | 103.4 | 107.6 |
| Jul |  | 101.9 | 97.0 | 99.8 | 91.7 | 101.0 | 111.8 |
| Aug |  | 102.7 | 94.8 | 99.9 | 89.6 | 100.4 | 105.8 |
| Sep |  | 103.0 | 95.1 | 99.1 | 86.2 | 99.7 | 100.4 |
|  |  | 103.7 | 95.4 | 98.8 | 93.7 | 99.8 | 102.4 |

Percentage change, latest year on previous year

| 2014 | 4.2 | -2.9 | 0.9 | -9.0 | -4.9 |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2015 | -0.2 | -2.2 | 0.7 | 2.4 | 0.3 |  |
| 2016 | -0.8 | -2.3 | -1.4 | -1.3 | 4.1 | -6 |
| 2017 | -0.3 | 0.1 | 1.1 | -.4 | -2.6 |  |
| 2018 | 1.2 | -5.9 | -1.9 | -4.0 | -1.8 |  |

Percentage change, latest month on same month a year ago

| 2017 | Aug | -0.3 | 1.0 | 1.0 | 6.4 | 3.0 | 3.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -1.3 | 0.2 | 1.4 | 1.3 | 3.3 | -0.7 |
|  | Oct | 1.0 | 1.9 | 3.0 | -1.6 | 2.8 | 5.8 |
|  | Nov | 1.3 | 5.9 | 2.4 | -8.4 | 4.1 | -0.5 |
|  | Dec | -1.3 | 5.5 | 0.7 | -4.0 | 1.2 | -13.3 |
| 2018 | Jan | -2.3 | -1.1 | -2.9 | -8.1 | -1.6 | 0.7 |
|  | Feb | -1.1 | -6.3 | -0.2 | -11.7 | 2.8 | 10.5 |
|  | Mar | -1.4 | -6.4 | -3.9 | -8.0 | -0.7 | 6.7 |
|  | Apr | -1.2 | -4.9 | -3.6 | -6.6 | -2.6 | 3.9 |
|  | May | 2.7 | -5.1 | -1.1 | -9.5 | -0.1 | 2.7 |
|  | Jun | 1.1 | -3.7 | -1.1 | -6.6 | 0.8 | 8.1 |
|  | Jul | 3.0 | -2.1 | 1.6 | 2.5 | 2.8 | -0.3 |
|  | Aug | 3.8 | -5.9 | -2.7 | -0.1 | -2.1 | -1.5 |
|  | Sep | 3.0 | -8.5 | -1.6 | 0.5 | 2.7 | 1.6 |
|  | Oct | 2.9 | -8.0 | -3.2 | -1.9 | 2.4 | 0.3 |
|  | Nov | 1.4 | -9.4 | -0.7 | 1.7 | 2.8 | 2.8 |
|  | Dec | 2.5 | -8.8 | -3.3 | 1.1 | 4.5 | - |
| 2019 | Jan | 5.2 | -2.2 | 2.8 | 11.1 | 7.7 | 4.8 |
|  | Feb | 5.1 | 3.0 | 2.7 | 18.4 | 5.6 | 4.1 |
|  | Mar | 6.3 | 3.0 | 6.2 | 5.8 | 7.9 | 14.0 |
|  | Apr | 3.7 | 1.6 | 5.0 | -1.2 | 0.3 | 3.9 |
|  | May | 1.0 | -1.1 | -0.5 | 3.2 | - | 1.5 |
|  | Jun | -0.3 | 0.1 | 1.0 | -8.6 | -0.2 | -0.8 |
|  | Jul | -0.4 | 0.3 | -0.8 | -5.8 | -4.0 | 17.3 |
|  | Aug | 0.1 | -0.7 | 1.9 | -12.8 | -0.6 | 7.9 |
|  | Sep | 1.5 | 2.6 | -0.5 | -16.1 | -7.0 | 0.8 |
|  | Oct | 1.5 | 4.0 | 0.1 | -6.1 | -4.8 | 1.4 |

[^0]$\underbrace{}_{\text {continued }} \mathbf{D C D}_{\text {Chained volume indices of gross value added }{ }^{1}}$

| Seasonally adjusted 2016 = 100 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| Sectio |  | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight |  | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  |  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |
| 2014 |  | 96.7 | 103.3 | 102.4 | 103.9 | 115.5 | 90.6 | 96.6 |
| 2015 |  | 98.1 | 102.9 | 100.1 | 104.2 | 100.6 | 96.2 | 95.7 |
| 2016 |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2017 |  | 99.6 | 101.4 | 104.9 | 102.7 | 107.2 | 103.1 | 106.7 |
| 2018 |  | 96.7 | 99.8 | 118.2 | 95.3 | 109.6 | 102.0 | 105.9 |
| 2018 | Q3 | 97.5 | 100.5 | 117.5 | 94.8 | 107.6 | 102.5 | 105.8 |
|  | Q4 | 96.4 | 97.9 | 119.4 | 96.3 | 107.1 | 99.0 | 104.9 |
| 2019 | Q1 | 95.5 | 101.3 | 123.8 | 101.2 | 106.1 | 98.8 | 102.6 |
|  | Q2 | 93.5 | 98.6 | 121.5 | 101.5 | 104.3 | 92.8 | 103.0 |
|  | Q3 | 92.2 | 98.6 | 119.5 | 97.2 | 101.6 | 98.6 | 101.7 |
| 2018 | Aug | 97.0 | 100.8 | 118.5 | 95.8 | 108.5 | 103.1 | 106.0 |
|  | Sep | 97.2 | 100.8 | 115.3 | 94.3 | 106.6 | 102.4 | 105.3 |
|  | Oct | 97.0 | 99.2 | 118.7 | 95.8 | 106.7 | 99.0 | 105.1 |
|  | Nov | 96.7 | 96.6 | 119.8 | 95.0 | 107.5 | 98.9 | 106.4 |
|  | Dec | 95.6 | 97.8 | 119.6 | 98.1 | 107.1 | 99.3 | 103.2 |
| 2019 | Jan | 95.4 | 100.5 | 121.2 | 100.6 | 106.0 | 98.3 | 101.5 |
|  | Feb | 95.4 | 102.3 | 125.1 | 101.1 | 106.2 | 98.7 | 102.1 |
|  | Mar | 95.7 | 101.2 | 125.1 | 101.9 | 106.1 | 99.5 | 104.3 |
|  | Apr | 94.0 | 98.4 | 121.4 | 102.9 | 104.7 | 84.9 | 104.8 |
|  | May | 93.4 | 99.5 | 124.1 | 102.2 | 104.3 | 94.9 | 103.8 |
|  | Jun | 93.2 | 97.8 | 119.1 | 99.5 | 103.8 | 98.6 | 100.3 |
|  | Jul | 93.2 | 98.9 | 120.2 | 98.3 | 102.2 | 98.7 | 100.9 |
|  | Aug | 92.2 | 98.2 | 118.4 | 96.7 | 101.1 | 98.6 | 102.3 |
|  | Sep | 91.2 | 98.6 | 119.9 | 96.6 | 101.5 | 98.5 | 101.8 |
|  | Oct | 90.8 | 97.0 | 120.6 | 92.5 | 101.8 | 99.2 | 102.3 |

Percentage change, latest year on previous year

|  |  |  | 3.7 | -3.3 | 4.2 | 4.0 | 5.1 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2014 | 9.5 | 2.3 | -0.4 | -2.2 | 0.3 | -12.8 | -0.9 |
| 2015 | 1.9 | -2.8 | -0.1 | -4.1 | -0.6 | 4.0 | 4.5 |
| 2016 | -0.4 | 1.4 | 4.9 | 2.7 | 7.2 | 3.1 |  |
| 2017 | -2.9 | -1.6 | 12.7 | -7.2 | 2.2 | -1.1 | -0.7 |

Percentage change, latest month on same month a year ago

| 2017 | Aug | - | -0.3 | 5.6 | 3.6 | 5.7 | 1.8 | 7.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -0.7 | 2.4 | 11.2 | 6.6 | 9.3 | 3.0 | 6.9 |
|  | Oct | -0.2 | 7.7 | 6.5 | 3.8 | 12.2 | 8.6 | 3.9 |
|  | Nov | 1.2 | 4.7 | 7.5 | -1.0 | 11.1 | 0.9 | 10.8 |
|  | Dec | - | 3.5 | 3.4 | 2.7 | 10.3 | 1.8 | 6.8 |
| 2018 | Jan | -1.7 | 0.8 | 13.1 | -2.9 | 13.6 | 2.3 | 2.2 |
|  | Feb | -3.4 | 3.2 | 13.6 | -7.5 | 2.2 | 2.5 | -2.0 |
|  | Mar | -5.2 | 3.0 | 21.2 | -3.3 | 9.8 | 0.6 | -0.3 |
|  | Apr | -6.3 | 0.8 | 16.4 | -6.8 | 9.7 | -2.0 | 3.6 |
|  | May | -3.2 | -3.8 | 18.2 | -4.9 | 2.2 | -0.5 | 2.4 |
|  | Jun | 1.5 | -2.0 | 10.2 | -12.0 | 6.7 | 3.1 | -1.3 |
|  | Jul | -0.3 | 0.9 | 17.7 | -11.0 | 1.0 | -4.3 | -1.4 |
|  | Aug | -2.2 | 0.3 | 13.4 | -3.9 | 1.6 | 0.1 | -1.2 |
|  | Sep | -2.5 | -0.7 | 3.7 | -10.3 | -3.8 | -0.1 | -3.9 |
|  | Oct | -3.0 | -4.5 | 9.8 | -7.8 | -3.7 | -8.4 | 0.5 |
|  | Nov | -4.2 | -7.0 | 10.7 | -7.9 | -4.4 | -2.9 | -1.2 |
|  | Dec | -4.0 | -9.1 | 6.8 | -7.0 | -6.2 | -3.4 | -5.6 |
| 2019 | Jan | -2.3 | -1.4 | 3.0 | 2.6 | -9.5 | -7.1 | -6.2 |
|  | Feb | 0.2 | -0.7 | 6.9 | 5.9 | -4.1 | -6.5 | -3.8 |
|  | Mar | 0.8 | -0.4 | 6.0 | 7.8 | -6.8 | -3.0 | -2.8 |
|  | Apr | - | -1.7 | 4.3 | 8.3 | -6.3 | -16.5 | -0.9 |
|  | May | -3.9 | 3.3 | 3.3 | 7.2 | -4.0 | -6.8 | -1.7 |
|  | Jun | -6.3 | -1.2 | 0.2 | 7.6 | -4.6 | -2.9 | -5.4 |
|  | Jul | -5.3 | -1.2 | 1.2 | 4.3 | -5.0 | -3.2 | -5.0 |
|  | Aug | -5.0 | -2.5 | -0.1 | 0.9 | -6.8 | -4.4 | -3.5 |
|  | Sep | -6.2 | -2.1 | 4.0 | 2.5 | -4.8 | -3.8 | -3.3 |
|  | Oct | -6.4 | -2.2 | 1.6 | -3.5 | -4.6 | 0.2 | -2.6 |

## 105 Output of the Production Industries

| continued |  |  |  |  | Seasonally adjusted 2016=10C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food products, beverages and tobacco | Textiles, wearing apparel and leather products | Wood and paper products and printing | Coke and refined petroleum products | Chemicals and chemical products | Basic pharmaceutical products and preparations |
| Section | CA | CB | CC | CD | CE | CF |
| Latest weight | 119.1 | 22.9 | 54.0 | 8.1 | 47.0 | 55.1 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest month on previous month

| 2017 | Aug | -0.4 | 2.6 | 1.8 | 8.3 | 0.9 | 4.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -0.4 | -0.2 | 0.5 | -0.6 | 1.1 | -1.5 |
|  | Oct | 0.8 | -1.5 | 0.7 | -0.5 | -1.9 | 2.8 |
|  | Nov | 0.6 | 2.0 | -0.1 | -4.2 | 0.5 | 1.0 |
|  | Dec | -0.9 | 0.5 | 0.1 | 0.6 | -1.1 | -1.9 |
| 2018 | Jan | -0.2 | -5.9 | -3.0 | -5.1 | -0.1 | 0.8 |
|  | Feb | 0.3 | -3.4 | 0.4 | -3.9 | 1.5 | 1.3 |
|  | Mar | 0.2 | 1.4 | -1.1 | 6.1 | -1.6 | -2.1 |
|  | Apr | 0.6 | 0.2 | -0.7 | 2.6 | -0.7 | 1.9 |
|  | May | 1.1 | 0.5 | 2.2 | -2.5 | 1.9 | 0.4 |
|  | Jun | 0.2 | -0.2 | -0.4 | 3.2 | 1.0 | 6.2 |
|  | Jul | 1.1 | 2.1 | 1.3 | -0.6 | 1.4 | -12.2 |
|  | Aug | 0.4 | -1.3 | -2.6 | 5.6 | -3.9 | 2.8 |
|  | Sep | -1.2 | -2.9 | 1.6 | - | 6.0 | 1.6 |
|  | Oct | 0.7 | -0.9 | -0.8 | -3.0 | -2.2 | 1.4 |
|  | Nov | -0.8 | 0.5 | 2.4 | -0.6 | 0.9 | 3.6 |
|  | Dec | 0.2 | 1.2 | -2.4 | - | 0.5 | -4.6 |
| 2019 | Jan | 2.5 | 0.9 | 3.1 | 4.3 | 3.0 | 5.7 |
|  | Feb | 0.2 | 1.8 | 0.3 | 2.4 | -0.5 | 0.6 |
|  | Mar | 1.4 | 1.4 | 2.2 | -5.2 | 0.5 | 7.3 |
|  | Apr | -1.9 | -1.1 | -1.8 | -4.2 | -7.7 | -7.2 |
|  | May | -1.4 | -2.2 | -3.1 | 1.9 | 1.6 | -1.9 |
|  | Jun | -1.2 | 1.1 | 1.1 | -8.6 | 0.8 | 3.8 |
|  | Jul | 1.0 | 2.2 | -0.5 | 2.4 | -2.4 | 3.9 |
|  | Aug | 0.8 | -2.3 | 0.1 | -2.3 | -0.5 | -5.4 |
|  | Sep | 0.2 | 0.3 | -0.8 | -3.7 | -0.7 | -5.1 |
|  | Oct | 0.6 | 0.4 | -0.3 | 8.6 | 0.1 | 2.1 |

Percentage change, latest $\mathbf{3}$ months on same $\mathbf{3}$ months a year ago

| 2017 | Aug | -0.1 | 0.2 | 0.2 | 1.1 | 3.0 | 3.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -0.5 | 0.5 | 0.6 | 0.7 | 2.7 | 1.6 |
|  | Oct | -0.2 | 1.0 | 1.8 | 1.9 | 3.1 | 2.8 |
|  | Nov | 0.3 | 2.6 | 2.2 | -3.0 | 3.4 | 1.4 |
|  | Dec | 0.3 | 4.4 | 2.0 | -4.7 | 2.7 | -3.3 |
| 2018 | Jan | -0.8 | 3.4 | 0.1 | -6.9 | 1.2 | -4.8 |
|  | Feb | -1.6 | -0.7 | -0.8 | -7.9 | 0.8 | -1.6 |
|  | Mar | -1.6 | -4.6 | -2.4 | -9.2 | 0.2 | 5.8 |
|  | Apr | -1.2 | -5.9 | -2.6 | -8.7 | -0.2 | 7.0 |
|  | May | - | -5.5 | -2.9 | -8.0 | -1.1 | 4.4 |
|  | Jun | 0.8 | -4.6 | -1.9 | -7.6 | -0.6 | 4.9 |
|  | Jul | 2.3 | -3.7 | -0.2 | -4.8 | 1.2 | 3.6 |
|  | Aug | 2.6 | -3.9 | -0.7 | -1.5 | 0.5 | 2.1 |
|  | Sep | 3.3 | -5.6 | -0.9 | 0.9 | 1.1 | -0.1 |
|  | Oct | 3.2 | -7.5 | -2.5 | -0.5 | 1.0 | 0.1 |
|  | Nov | 2.4 | -8.7 | -1.9 | 0.1 | 2.6 | 1.6 |
|  | Dec | 2.3 | -8.7 | -2.4 | 0.3 | 3.2 | 1.0 |
| 2019 | Jan | 3.1 | -6.9 | -0.4 | 4.5 | 5.0 | 2.6 |
|  | Feb | 4.3 | -2.9 | 0.7 | 9.9 | 5.9 | 3.0 |
|  | Mar | 5.5 | 1.2 | 3.9 | 11.6 | 7.0 | 7.6 |
|  | Apr | 5.0 | 2.5 | 4.6 | 7.3 | 4.6 | 7.3 |
|  | May | 3.7 | 1.1 | 3.5 | 2.5 | 2.7 | 6.4 |
|  | Jun | 1.5 | 0.2 | 1.8 | -2.3 | - | 1.5 |
|  | Jul | 0.1 | -0.2 | -0.1 | -3.8 | -1.4 | 5.6 |
|  | Aug | -0.2 | -0.1 | 0.7 | -9.1 | -1.6 | 7.7 |
|  | Sep | 0.4 | 0.7 | 0.2 | -11.7 | -3.9 | 8.5 |
|  | Oct | 1.0 | 2.0 | 0.5 | -11.7 | -4.2 | 3.3 |

IOP 5 oupumo the proactulon nausumes
Chained volume indices of gross value added ${ }^{1}$
continued

| contınued |  |  |  | Seasonally adjusted $2016=100$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| Section | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest month on previous montr

| 2017 | Aug | 0.5 | 1.4 | 3.6 | -5.8 | 0.4 | -3.2 | -0.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | 0.4 | 1.0 | 6.4 | 5.4 | 3.7 | -0.4 | 2.1 |
|  | Oct | 0.3 | 2.3 | -2.8 | -1.1 | - | 5.4 | -4.5 |
|  | Nov | 1.0 | - | 0.2 | -0.7 | 1.5 | -5.8 | 2.9 |
|  | Dec | -1.4 | 3.5 | 3.4 | 2.3 | 1.5 | 0.9 | 1.5 |
| 2018 | Jan | -1.8 | -5.3 | 5.1 | -7.0 | 2.6 | 3.1 | -1.0 |
|  | Feb | -2.5 | 1.2 | -0.5 | -2.6 | -5.5 | -0.3 | -1.9 |
|  | Mar | -0.4 | -1.5 | 0.8 | -1.1 | 2.8 | -2.8 | 1.1 |
|  | Apr | -0.9 | -1.4 | -1.4 | 0.5 | -1.8 | -0.8 | -1.5 |
|  | May | 3.4 | -3.8 | 3.2 | 0.3 | -2.8 | 0.1 | -0.1 |
|  | Jun | 2.3 | 2.7 | -1.0 | -2.9 | 0.2 | -0.3 | 0.4 |
|  | Jul | -1.1 | 1.1 | -0.1 | 1.9 | -1.2 | 0.4 | 0.1 |
|  | Aug | -1.4 | 0.7 | -0.2 | 1.6 | 1.0 | 1.3 | -0.1 |
|  | Sep | 0.2 | - | -2.7 | -1.6 | -1.8 | -0.7 | -0.6 |
|  | Oct | -0.2 | -1.6 | 2.9 | 1.6 | 0.1 | -3.3 | -0.2 |
|  | Nov | -0.3 | -2.6 | 1.0 | -0.8 | 0.8 | -0.1 | 1.2 |
|  | Dec | -1.2 | 1.2 | -0.2 | 3.2 | -0.4 | 0.4 | -3.0 |
| 2019 | Jan | -0.2 | 2.7 | 1.4 | 2.6 | -1.0 | -1.0 | -1.6 |
|  | Feb | - | 1.9 | 3.2 | 0.5 | 0.2 | 0.4 | 0.6 |
|  | Mar | 0.3 | -1.1 | - | 0.8 | -0.2 | 0.8 | 2.1 |
|  | Apr | -1.7 | -2.7 | -3.0 | 1.0 | -1.3 | -14.6 | 0.5 |
|  | May | -0.7 | 1.1 | 2.3 | -0.7 | -0.4 | 11.8 | -0.9 |
|  | Jun | -0.2 | -1.8 | -4.0 | -2.7 | -0.4 | 3.8 | -3.4 |
|  | Jul | - | 1.2 | 0.9 | -1.2 | -1.6 | 0.1 | 0.6 |
|  | Aug | -1.1 | -0.7 | -1.5 | -1.6 | -1.0 | - | 1.4 |
|  | Sep | -1.0 | 0.4 | 1.3 | -0.1 | 0.4 | -0.1 | -0.5 |
|  | Oct | -0.4 | -1.6 | 0.6 | -4.3 | 0.3 | 0.6 | 0.5 |

Percentage change, latest 3 months on same 3 months a year agr

| 2017 | Aug | -0.6 | 0.2 | 5.9 | 6.1 | 5.4 | 1.8 | 5.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -0.3 | 0.2 | 5.9 | 6.5 | 7.2 | 3.8 | 7.3 |
|  | Oct | -0.3 | 3.2 | 7.8 | 4.7 | 9.0 | 4.4 | 6.2 |
|  | Nov | 0.1 | 4.9 | 8.4 | 3.1 | 10.9 | 4.1 | 7.2 |
|  | Dec | 0.3 | 5.2 | 5.7 | 1.8 | 11.2 | 3.7 | 7.1 |
| 2018 | Jan | -0.2 | 3.0 | 7.9 | -0.4 | 11.7 | 1.7 | 6.5 |
|  | Feb | -1.7 | 2.5 | 9.9 | -2.6 | 8.6 | 2.2 | 2.3 |
|  | Mar | -3.4 | 2.3 | 15.8 | -4.6 | 8.4 | 1.8 | - |
|  | Apr | -5.0 | 2.3 | 16.9 | -5.9 | 7.1 | 0.4 | 0.4 |
|  | May | -4.9 | - | 18.5 | -5.0 | 7.2 | -0.6 | 1.9 |
|  | Jun | -2.7 | -1.7 | 14.8 | -8.0 | 6.1 | 0.2 | 1.5 |
|  | Jul | -0.7 | -1.6 | 15.3 | -9.4 | 3.2 | -0.6 | -0.1 |
|  | Aug | -0.3 | -0.2 | 13.7 | -9.1 | 3.0 | -0.4 | -1.3 |
|  | Sep | -1.7 | 0.2 | 11.4 | -8.5 | -0.4 | -1.4 | -2.2 |
|  | Oct | -2.6 | -1.7 | 8.9 | -7.4 | -2.0 | -2.9 | -1.6 |
|  | Nov | -3.2 | -4.1 | 8.0 | -8.7 | -4.0 | -3.9 | -1.6 |
|  | Dec | -3.7 | -6.9 | 9.1 | -7.6 | -4.8 | -5.0 | -2.2 |
| 2019 | Jan | -3.5 | -5.9 | 6.7 | -4.2 | -6.7 | -4.5 | -4.3 |
|  | Feb | -2.1 | -3.8 | 5.5 | 0.3 | -6.6 | -5.7 | -5.2 |
|  | Mar | -0.5 | -0.8 | 5.3 | 5.4 | -6.9 | -5.6 | -4.3 |
|  | Apr | 0.3 | -0.9 | 5.7 | 7.3 | -5.7 | -8.6 | -2.5 |
|  | May | -1.0 | 0.4 | 4.5 | 7.8 | -5.7 | -8.7 | -1.8 |
|  | Jun | -3.5 | 0.1 | 2.6 | 7.7 | -5.0 | -8.7 | -2.6 |
|  | Jul | -5.2 | 0.3 | 1.6 | 6.4 | -4.5 | -4.3 | -4.0 |
|  | Aug | -5.5 | -1.7 | 0.4 | 4.2 | -5.5 | -3.5 | -4.6 |
|  | Sep | -5.5 | -1.9 | 1.7 | 2.6 | -5.5 | -3.8 | -3.9 |
|  | Oct | -5.8 | -2.3 | 1.8 | - | -5.4 | -2.7 | -3.2 |

[^1]is the earliest in the table to have been revised.

| cont | ed |  |  |  |  | Seasona | djusted $2016=10 \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Food products, beverages and tobacco | Textiles, wearing apparel and leather products | Wood and paper products and printing | Coke and refined petroleum products | Chemicals and chemical products | Basic pharmaceutical products and preparations |
| Section |  | CA | CB | CC | CD | CE | CF |
| Latest weight |  | 119.1 | 22.9 | 54.0 | 8.1 | 47.0 | 55.1 |
|  |  | K22B | K22P | K22T | K22X | K22Z | K239 |
| Percentage change, latest 3 months on previous 3 months |  |  |  |  |  |  |  |
| 2017 | Aug | -0.6 | -0.6 | -1.3 | -3.0 | - | 1.6 |
|  | Sep | -1.0 | 1.2 | -0.5 | -4.4 | 0.3 | -1.5 |
|  | Oct | -0.4 | 1.7 | 1.3 | 0.7 | 0.7 | 1.0 |
|  | Nov | -0.2 | 1.4 | 1.7 | -0.4 | 0.4 | 1.7 |
|  | Dec | 0.5 | 0.8 | 1.6 | -0.9 | -0.9 | 3.2 |
| 2018 | Jan | 0.3 | -0.7 | -0.4 | -6.0 | -1.2 | 1.3 |
|  | Feb | -0.2 | -3.7 | -1.6 | -6.9 | -1.0 | 0.6 |
|  | Mar | -0.3 | -6.6 | -3.1 | -6.7 | -0.2 | - |
|  | Apr | 0.2 | -6.1 | -2.6 | -2.4 | -0.3 | 0.4 |
|  | May | 1.1 | -2.6 | -1.6 | 2.3 | -0.6 | 0.4 |
|  | Jun | 1.6 | 0.2 | - | 4.6 | 0.2 | 3.3 |
|  | Jul | 2.1 | 1.6 | 1.5 | 3.0 | 2.0 | 0.8 |
|  | Aug | 2.0 | 1.1 | 0.8 | 3.8 | 1.7 | -0.6 |
|  | Sep | 1.4 | 0.2 | 0.6 | 4.4 | 2.1 | -6.2 |
|  | Oct | 0.6 | -2.3 | -1.1 | 5.2 | 0.5 | -2.4 |
|  | Nov | -0.4 | -3.6 | 0.5 | 1.2 | 2.5 | 1.2 |
|  | Dec | -0.5 | -2.7 | 0.1 | -1.6 | 1.1 | 4.3 |
| 2019 | Jan | 0.2 | -0.1 | 1.7 | -1.2 | 2.7 | 3.8 |
|  | Feb | 1.6 | 2.4 | 0.9 | 2.2 | 2.2 | 2.0 |
|  | Mar | 2.9 | 3.6 | 3.1 | 3.9 | 3.5 | 6.5 |
|  | Apr | 2.2 | 3.4 | 2.4 | 0.2 | -0.7 | 5.0 |
|  | May | 0.5 | 1.4 | 1.2 | -4.5 | -3.6 | 3.8 |
|  | Jun | -2.3 | -0.8 | -1.9 | -8.4 | -6.3 | -2.6 |
|  | Jul | -2.7 | -1.1 | -3.0 | -7.7 | -3.9 | -0.7 |
|  | Aug | -1.8 | -0.2 | -1.9 | -8.0 | -2.6 | 0.6 |
|  | Sep | 0.3 | 0.7 | -1.1 | -5.6 | -1.9 | 0.3 |
|  | Oct | 1.5 | -0.2 | -0.5 | -3.4 | -2.3 | -4.5 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding. |  |  |  | ${ }^{\dagger}$ indicates that data are new or have been revised. The perioc marked is the earliest in the table to have been revised. |  |  |


Seasonally adjusted 2016=100

|  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Section | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest 3 months on previous $\mathbf{3}$ months

| 2017 | Aug | -1.6 | 0.8 | 4.7 | 3.6 | 1.1 | -0.1 | 3.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep | -0.4 | 0.2 | 2.3 | 1.1 | 4.5 | 2.4 | 3.8 |
|  | Oct | 0.6 | 1.9 | 4.3 | -0.8 | 4.4 | 2.1 | 1.0 |
|  | Nov | 1.6 | 2.9 | 4.6 | 0.5 | 5.9 | 1.5 | -0.1 |
|  | Dec | 1.0 | 4.8 | 3.7 | 0.6 | 4.1 | 0.2 | -0.9 |
| 2018 | Jan | -0.2 | 2.5 | 4.3 | -0.7 | 4.7 | -1.0 | 1.1 |
|  | Feb | -2.7 | 1.0 | 5.8 | -4.2 | 2.4 | 0.5 | 0.6 |
|  | Mar | -4.2 | -2.8 | 7.4 | -7.8 | 1.3 | 0.4 | - |
|  | Apr | -4.7 | -2.7 | 4.0 | -7.1 | -2.1 | -0.2 | -1.9 |
|  | May | -2.2 | -4.6 | 2.3 | -4.8 | -2.3 | -2.6 | -1.6 |
|  | Jun | 1.0 | -3.6 | 0.8 | -1.9 | -3.7 | -2.9 | -1.3 |
|  | Jul | 3.8 | -3.1 | 1.8 | -1.1 | -3.4 | -1.5 | -0.4 |
|  | Aug | 3.1 | 0.6 | 0.5 | -0.8 | -2.8 | 0.1 | -0.1 |
|  | Sep | 0.7 | 2.1 | -0.8 | 0.5 | -2.0 | 0.8 | - |
|  | Oct | -1.3 | 1.8 | -1.5 | 1.4 | -1.0 | -0.2 | -0.4 |
|  | Nov | -1.3 | -1.1 | -0.6 | 0.9 | -1.3 | -2.0 | -0.4 |
|  | Dec | -1.1 | -2.6 | 1.5 | 1.6 | -0.4 | -3.4 | -0.9 |
| 2019 | Jan | -1.2 | -1.9 | 2.3 | 2.8 | -0.4 | -2.7 | -1.7 |
|  | Feb | -1.5 | 1.4 | 3.4 | 5.2 | -0.5 | -1.3 | -3.2 |
|  | Mar | -1.0 | 3.5 | 3.7 | 5.1 | -0.9 | -0.2 | -2.1 |
|  | Apr | -0.9 | 2.4 | 3.1 | 4.2 | -1.1 | -4.5 | - |
|  | May | -1.2 | -0.5 | 1.3 | 2.4 | -1.3 | -5.7 | 2.0 |
|  | Jun | -2.1 | -2.7 | -1.8 | 0.3 | -1.7 | -6.1 | 0.3 |
|  | Jul | -1.9 | -1.9 | -2.2 | -2.0 | -2.1 | 3.2 | -2.0 |
|  | Aug | -1.6 | -1.4 | -3.5 | -4.1 | -2.5 | 5.9 | -3.0 |
|  | Sep | -1.4 | - | -1.7 | -4.3 | -2.6 | 6.2 | -1.3 |
|  | Oct | -2.0 | -0.8 | -1.2 | -4.7 | -1.9 | 1.4 | 0.5 |

[^2]\footnotetext{
Office for
National Statistics

| Page 1 | Output by Broad industry groups and Main industrial groupings <br> Percentage change, latest year on previous year <br> Percentage change, latest month on same month a year ago |
| :---: | :---: |
| Page 2 | Percentage change, latest month on previous month |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 3 | Percentage change, latest 3 months on previous 3 months |
| Page 4 | Output by Manufacturing sub-sectors part 1 |
|  | Percentage change, latest year on previous year |
|  | Percentage change, latest month on same month a year ago |
| Page 5 | Output by Manufacturing sub-sectors part 2 |
|  | Percentage change, latest year on previous year |
|  | Percentage change, latest month on same month a year ago |
| Page 6 | Percentage change, latest month on previous month part 1 |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 7 | Percentage change, latest month on previous month part 2 |
|  | Percentage change, latest 3 months on same 3 months a year ago |
| Page 8 | Percentage change, latest 3 months on previous 3 months part 1 |
| Page 9 | Percentage change, latest 3 months on previous 3 months part 2 |
| Enquiries |  |

## Revisions to Output of the Production

Industries, October 2019

## IOP5R

Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

|  |  | Broad industry groups |  |  |  |  |  | Main industrial groupings |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | $\begin{array}{r} \text { Intermediate } \\ \text { goods } \\ \hline \end{array}$ | Energy |
| Sectio |  | $\mathrm{B}+\mathrm{C}+\mathrm{D}+\mathrm{E}$ | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight |  | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  |  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |
| 2014 |  | - | - | - | - | - | - | - |  | - | - | - |
| 2015 |  | - | - | - | - | - | - | - |  | - | - |  |
| 2016 |  | - | - | - | - | - | - | - |  |  | - |  |
| 2017 |  | - | - | - | - | - | - | - |  | - | - |  |
| 2018 |  | - | - | - | - | - | - | - | - | - | - | - |
| 2018 |  | - | - | - | - | - | - | - | - | - | - | - |
|  | Q4 | - | - | - | - | - | - | - | - | - | - | - |
| 2019 | Q1 | - | - | - | - | - | - | - |  | - | - | - |
|  | Q2 | - | - | - | - | - | - | - | - | - | - |  |
|  | Q3 | - | - | - | - | - | - | - | - | - | - | - |
| 2018 |  | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - | - | - |  | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
| Percentage change, latest year on previous year |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 |  | - | - | - | - | - | - | - | - | - | - | - |
| 2015 |  | - | - | - | - | - | - | - |  | - | - |  |
| 2016 |  | - | - | - | - | - | - | - |  | - | - |  |
| 2017 |  | - | - | - | - | - | - | - |  | - | - |  |
| 2018 |  | - | - | - | - | - | - | - | - | - | - | - |
| Percentage change, latest month on same month a year ago |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | Jul | - | - | - | - | - | - | - |  | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - |  | - | - |  |
|  | Oct | - | - | - | - | - | - | - |  | - | - |  |
|  | Nov | - | - | - | - | - | - | - |  | - | - |  |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2018 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |

## IOP5R

Output of the Production Industries
Chained volume indices of gross value added
Seasonally adjusted 2016 $=100$

| continued | Broad industry groups |  |  |  |  |  |  |  |  | asonally adju | $2016=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Main industrial groupings |  |  |  |  |
|  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | Intermediate goods | Energy |
| Section | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |



## IOP5R

Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$
Seasonally adjusted $2016=100$

| continued |  |  |  |  |  |  | Seasonally adjusted 2016 $=100$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Broad industry groups |  |  |  |  |  | Main industrial groupings |  |  |  |  |
|  | Production industries | Mining and quarrying | Manufacturing | Electricity, gas, steam and air conditioning | Water supply, sewerage and waste management | Oil and gas extraction | Consumer durables | Consumer non-durables | Capital goods | Intermediate goods | Energy |
| Section | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MIG-NRG |
| Latest weight | 1000.0 | 47.5 | 748.5 | 108.7 | 95.3 | 34.6 | 68.2 | 211.6 | 272.3 | 252.2 | 182.5 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |


| Percentage change, latest 3 months on previous 3 months |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2018 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2019 |  | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |


|  | Output of the Production Industries Chained volume indices of gross value added ${ }^{1}$ |  |  |  | Seasonally adjusted 2016=100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food products, beverages and tobacco | Textiles, wearing apparel and leather products | Wood and paper products and printing | Coke and refined petroleum products | Chemicals and chemical products | Basic pharmaceutical products and preparations |
| Section | CA | CB | CC | CD | CE | CF |
| Latest weight | 119.1 | 22.9 | 54.0 | 8.1 | 47.0 | 55.1 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |


| 2014 |  | - | - | - | - | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 |  | - | - | - | - | - | - |
| 2016 |  | - | - | - | - | - | - |
| 2017 |  | - | - | - | - | - | - |
| 2018 |  | - | - | - | - | - | - |
| 2018 | Q3 | - | - | - | - | - | - |
|  | Q4 | - | - | - | - | - | - |
| 2019 | Q1 | - | - | - |  | - |  |
|  | Q2 | - | - | - | - | - | - |
|  | Q3 | - | - | - | - | - | - |
| 2018 | Jul | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |

Percentage change, latest year on previous year

| 2014 | - | - | - | - | - |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2015 | - | - | - | - |  |
| 2016 | - | - | - | - |  |
| 2018 | - | - | - | - |  |

Percentage change, latest month on same month a year ago


|  | Output of the Production Industries <br> Chained volume indices of gross value added ${ }^{1}$ |  |  |  |  | Seasonally adjusted $2016=100$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| Section | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K232 |


| 2014 |  | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 |  | - | - | - | - | - | - | - |
| 2016 |  | - | - | - | - |  | - | - |
| 2017 |  | - | - | - | - |  |  | - |
| 2018 |  | - | - | - | - | - | - | - |
| 2018 | Q3 | - | - | - | - | - | - | - |
|  | Q4 | - | - | - | - | - | - | - |
| 2019 | Q1 | - | - | - | - |  |  | - |
|  | Q2 | - | - | - | - | - | - | - |
|  | Q3 | - | - | - | - | - | - | - |
| 2018 | Jul | - | - | - | - |  |  |  |
|  | Aug | - | - | - | - |  |  |  |
|  | Sep | - | - | - | - |  |  |  |
|  | Oct | - | - | - | - |  |  |  |
|  | Nov | - | - | - | - |  |  | - |
|  | Dec | - | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - |  |  |  |
|  | Mar | - | - | - | - |  |  |  |
|  | Apr | - | - | - | - |  | - |  |
|  | May | - | - | - | - |  |  | - |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - |  |  | - |
|  | Sep | - | - | - | - | - | - | - |

Percentage change, latest year on previous year
2014
2015
2016
2017
2018


Percentage change, latest month on same month a year ago


IOP5R
Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

| continued |  | ded |  |  | Seasonally adjusted 2016=10C |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food products, beverages and tobacco | Textiles, wearing apparel and leather products | Wood and paper products and printing | Coke and refined petroleum products | Chemicals and chemical products | Basic pharmaceutical products and preparations |
| Section | CA | CB | CC | CD | CE | CF |
| Latest weight | 119.1 | 22.9 | 54.0 | 8.1 | 47.0 | 55.1 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest month on previous month

| 2017 | Jul |
| :---: | :---: |
|  | Aug |
|  | Sep |
|  | Oct |
|  | Nov |
|  | Dec |
| 2018 | Jan |
|  | Feb |
|  | Mar |
|  | Apr |
|  | May |
|  | Jun |
|  | Jul |
|  | Aug |
|  | Sep |
|  | Oct |
|  | Nov |
|  | Dec |
| 2019 | Jan |
|  | Feb |
|  | Mar |
|  | Apr |
|  | May |
|  | Jun |
|  | Jul |
|  | Aug |
|  | Sep |

Percentage change, latest $\mathbf{3}$ months on same $\mathbf{3}$ months a year ago

| 2017 | Jul | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2018 | Jan | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - |  |
|  | May | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - |  |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - |  |
|  | May | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - |


|  | Output of the Production Industries Chained volume indices of gross value added ${ }^{1}$ |  |  |  |  | Seasonally adjusted 2016=100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| Section | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest month on previous montr

| 2017 | Jul | - | - | - | - | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aug | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - |  |
|  | Oct | - | - | - |  | - | - |  |
|  | Nov | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - |
| 2018 | Jan | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - |  |  |
|  | Sep | - | - | - | - | - |  |  |
|  | Oct | - | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - |
| 2019 | Jan | - | - | - | - | - |  |  |
|  | Feb | - | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - |  |  |
|  | Aug | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - |

Percentage change, latest 3 months on same 3 months a year ags


|  |  |  | Output of the Production Industries |
| :--- | :--- | :--- | :--- |
| Chained volume indices of gross value added |  |  |  |

Percentage change, latest $\mathbf{3}$ months on previous $\mathbf{3}$ months

| 2017 | Jul | - | - | - | - | - |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - |  |
| 2018 | Jan | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - |  |
|  | May | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - |  |
|  | Jul | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - |  |
| 2019 | Jan | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - |  |
|  | May | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - |  |
|  | Jul | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - |  |


|  | Output of the Production Industries Chained volume indices of gross value added ${ }^{1}$ |  |  |  |  | Seasonally adjusted 2016 = 100 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rubber and plastic products and non-metallic mineral products | Basic metals and metal products | Computer, electronic and optical products | Electrical equipment | Machinery and equipment not elsewhere classified | Transport equipment | Other manufacturing and repair |
| Section | CG | CH | Cl | CJ | CK | CL | CM |
| Latest weight | 56.4 | 82.3 | 51.6 | 19.4 | 58.1 | 108.5 | 66.1 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest 3 months on previous 3 months


Office for
National Statistics

| Next publication: | 13 January 2020 |
| :---: | :---: |
| Issued by: | Office for National Statistics, Government Buildings, Cardiff Road, Newport NP10 8XG |
| Media contact: |  |
| Tel: | Media Relations Office +44 (0) 8456041858 |
|  | Emergency on-call +44 (0) 7867906553 |
| Email: | press.office@ons.gsi.gov.uk |
| Statistical contact: |  |
| Name: | Mark Stephens |
| Tel: | Mark Stephens +44 (0) 1633456387 |
| Email: | indexofproduction@ons.gsi.gov.uk |
| Contact us: |  |
| Tel: | +44 (0) 8456013034 |
| Email: | info@ons.gsi.gov.uk |
| Website: | www.statistics.gov.uk |
| Twitter: | www.twitter.com/statisticsONS |


[^0]:    1 Any apparent inconsistencies between the index numbers and the $\quad{ }^{\dagger}$ indicates that data are new or have been revised. The perioc
    percentage changes shown in these tables are due to rounding

[^1]:    1 Any apparent inconsistencies between the index numbers and the $\quad{ }^{\dagger}$ indicates that data are new or have been revised. The period marked
    percentage changes shown in these tables are due to rounding

[^2]:    1 Any apparent inconsistencies between the index numbers and the $\quad{ }^{\dagger}$ indicates that data are new or have been revised. The period marked percentage changes shown in these tables are due to rounding.
    is the earliest in the table to have been revised.

