## Index of Production, UK: August 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. Blue Book 2019
3. Production
4. Manufacturing
5. Mining and quarrying
6. Electricity and gas
7. Water and waste
8. Production data
9. Glossary
10. Measuring the data
11. Strengths and limitations
12. Related links

## 1. Main points

- Total production output fell by $0.4 \%$ for the three months to August 2019, compared with the three months to May 2019; falls in manufacturing (1.1\%) and mining and quarrying ( $2.3 \%$ ) were partially offset by rises in electricity and gas (3.2\%) and water and waste (1.6\%).
- The three-monthly fall in manufacturing of $1.1 \%$ is because of widespread weakness with 11 of the 13 subsectors decreasing; this was led by food, beverages and tobacco (2.0\%) and computer, electronic and optical products (3.5\%).
- Production output fell by $0.6 \%$ between July 2019 and August 2019; manufacturing provided the largest downward contribution ( $0.7 \%$ ), supported by electricity and gas ( $0.7 \%$ ) and mining and quarrying (1.0\%).
- The $0.7 \%$ monthly decrease in manufacturing output was widespread with falls in 10 of the 13 subsectors; the largest downward contribution came from a $4.7 \%$ fall in basic pharmacutical products.
- For the three months to August 2019, production output decreased by $1.3 \%$, compared with the same three months to August 2018; led by a fall in manufacturing of $1.5 \%$.
- In this release of data, the earliest period open to revision is January 1997 as this dataset contains the annual updates that will be included in the Blue Book 2019 due to be published on 31 October 2019.


## 2. Blue Book 2019

This release is consistent with the Blue Book 2019 dataset published in the latest Quarterly National Accounts, published on 30 September 2019, a number of methodological changes have been made and improved source data have been used, in addition to revisions caused by taking on updated source data as would happen in all quarterly national accounts releases. Further details about the main changes affecting this release are provided in this latest Quarterly National Accounts release, along with analysis of the revisions to each quarter from 2017 onwards.

## 3. Production

Figure 1: Manufacturing provided the largest downward contribution to the Index of Production in August 2019

Contributions to the Index of Production, three months on previous three months, seasonally adjusted, UK, August 2019
Figure 1: Manufacturing provided the largest downward contribution to the Index of Production in August 2019

Contributions to the Index of Production, three months on previous three months, seasonally adjusted, UK, August 2019


Source: Office for National Statistics - Index of Production

Total production output for the three months to August 2019 decreased by $0.4 \%$, compared with the same three months to May 2019. This is the fourth consecutive three-monthly decline. The current three-monthly weakness was driven by downward contributions from manufacturing and mining and quarrying (Figure 1). Table 1 shows the growth rates and contributions for the IoP and production sectors for August 2019.

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

Three months on
previous three months

Three months on same Month on previous three months a year ago month

| Sector | Summary Description | Growth (\%) | Contribution to production (\% points) | Growth (\%) | Contribution to production (\% points) | Growth (\%) | Contribution to production (\% points) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IoP | Index of Production | -0.4 | -0.4 | -1.3 | -1.3 | -0.6 | -0.6 |
| Sector B | Total Mining and Quarrying | -2.3 | -0.12 | -4.3 | -0.22 | -1.0 | -0.05 |
| 5 | Coal and Lignite | -0.2 | 0.00 | -9.7 | 0.00 | 2.3 | 0.00 |
| 6 | Crude petroleum and Natural gas | -2.6 | -0.10 | -4.9 | -0.19 | -1.3 | -0.05 |
| 789 | Other mining and quarrying | -1.5 | -0.02 | -2.5 | -0.03 | 0.0 | 0.00 |
| Sector C | Total Manufacturing | -1.1 | -0.80 | -1.5 | -1.12 | -0.7 | -0.53 |
| CA | Food, beverages and tobacco | -2.0 | -0.24 | -0.4 | -0.04 | 0.5 | 0.06 |
| CB | Textiles and leather products | -0.9 | -0.02 | -0.8 | -0.02 | -1.7 | -0.04 |
| CC | Wood, paper and printing | -2.4 | -0.13 | 0.2 | 0.01 | -0.2 | -0.01 |
| CD | Coke and petroleum | -9.1 | -0.07 | -10.2 | -0.08 | -5.7 | -0.04 |
| CE | Chemical products | -2.9 | -0.14 | -1.8 | -0.09 | -0.8 | -0.04 |
| CF | Pharmaceutical products | 1.0 | 0.06 | 8.1 | 0.44 | -4.7 | -0.29 |
| CG | Rubber and plastic products | -1.5 | -0.08 | -5.5 | -0.30 | -1.0 | -0.05 |
| CH | Metal products | -1.5 | -0.12 | -1.7 | -0.14 | -0.8 | -0.07 |
| Cl | Computer, electronic and optical | -3.5 | -0.22 | 0.4 | 0.02 | -1.8 | -0.11 |
| CJ | Electrical equipment | -3.8 | -0.07 | 4.5 | 0.08 | -2.5 | -0.05 |
| CK | Machinery and equipment | -2.5 | -0.15 | -5.5 | -0.34 | -1.0 | -0.06 |
| CL | Transport equipment | 5.8 | 0.58 | -3.6 | -0.39 | 0.3 | 0.03 |
| CM | Other manufacturing and repair | -2.6 | -0.18 | -4.3 | -0.29 | 2.0 | 0.13 |
| Sector D | Total Electricity and Gas | 3.2 | 0.32 | 1.0 | 0.10 | -0.7 | -0.07 |


| 35.1 | Electric power generation, transmission and distribution | 2.5 | 0.19 | -0.3 | -0.02 | -0.2 | -0.01 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 35.2-3 | Manufacture of gas; distribution of gaseous fuels through mains; steam and aircon supply | 5.4 | 0.13 | 5.1 | 0.12 | -2.4 | -0.06 |
| Sector E | Total Water and Waste | 1.6 | 0.15 | -0.3 | -0.03 | 0.3 | 0.03 |
| 36 | Water collection, treatment and supply | 1.0 | 0.03 | -2.6 | -0.08 | 0.1 | 0.00 |
| 37 | Sewerage | 0.5 | 0.01 | -6.3 | -0.21 | 0.5 | 0.02 |
| 38 | Waste collection, treatment and disposal activities; materials recovery | 3.4 | 0.11 | 8.6 | 0.25 | 0.3 | 0.01 |
| 39 | Remediation activities and other waste management services | 0.9 | 0.00 | 7.7 | 0.01 | -1.0 | 0.00 |

Source: Office for National Statistics - Index of Production

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

Seasonally adjusted, UK, Index of Production, January 2008 to August 2019, rolling three months on previous three months

## Ecengmife 2: The Index of Production remains below its pre- Dowpurn economic downturn peak

Seasonally adjusted, UK, Index of Production, January 2008 to August 2019, rolling three months on previous three months


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 (loP) was more pronounced from the beginning of 2010, as the economy recovered, before a downturn during 2012. Production output in the UK remains $5.7 \%$ lower in the three months to August 2019 than the pre-downturn peak for the three months to March 2008.

## 4 . Manufacturing

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


## 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.

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 August 2019 decreased by $1.1 \%$, compared with the three months to May 2019. This is the fourth consecutive three-monthly decline and follows a fall of $1.6 \%$ during July 2019.

For the three months to August 2019 compared with the three months to May 2019, 11 of the 13 subsectors displayed negative contributions, led by:

- food products, beverages and tobacco, which fell by $2.0 \%$, mainly because of notable weakness from the bakery, alcoholic beverages and meat products industries
- computer, electronic and optical products, which fell by $3.5 \%$, caused by notable weakness during June 2019

Partially offsetting the three-monthly decline is a rise of $5.8 \%$ in transport equipment led by strength within motor vehicles, trailers and semi-trailers, which rose by $11.4 \%$, mainly because of growth during June 2019. However, this industry is still reflecting a longer-term decline as highlighted by the three months on a year ago growth, which fell by $3.9 \%$. In August 2019 compared to July 2019, motor vehicles, trailers and semi-trailers, rose by $0.7 \%$. Nominal total turnover and exports are at normal levels compared with previous Augusts following planned shutdowns for many of the large businesses (see our monthly business survey turnover in the production industries).

The fall of $0.7 \%$ in August 2019 compared with July 2019 is mainly because of widespread weakness, with 10 of the 13 sub-industries falling. The largest downward contribution came from the pharmaceutical products subsector, which fell by $4.7 \%$ mainly because of export-driven strength during July 2019.

Elsewhere, falls within computer, electronic and optical products, and machinery and equipment not elsewhere classified, of $1.8 \%$ and $1.0 \%$ respectively, were mainly caused by weakness from large businesses.

In the three months to August 2019 compared to the three months to August 2018, the fall of $1.5 \%$ is the third consecutive fall since May 2019. This is mainly because of the $3.9 \%$ fall in the production of motor vehicles. Other notable downward contributions were machinery and equipment, which fell by $5.5 \%$, a continuation of ongoing weakness since August 2018, and rubber and plastic products, which fell by $5.5 \%$ because of weakness from large businesses.

Other manufacturing and repair fell by $4.3 \%$, where a strong fall of $26.4 \%$ from repair and maintenance of aircraft and spacecraft, is a continuation of weakness since May 2018.

Partially offsetting overall weakness was notable strength from the pharmaceutical products subsector (8.1\%) and the continuation of strength since January 2019 from electrical equipment (4.5\%).

## 5. Mining and quarrying

There is significant weakness within the oil and gas extraction industry following periods of maintenance during July and August 2019. This is reflected in the declines in the different indicators for August 2019 with threemonthly (2.3\%), monthly (1.0\%) and three-monthly on a year ago (4.3\%) output falling for this sector.

## 6 . Electricity and gas

Electricity supply is impacted by demand, mainly because of temperature, as well as the fuel mix used to generate electricity.

Electricity and gas rose by $3.2 \%$ for the three months to August 2019 compared with the three months to May 2019. Electricity generation and distribution provided the largest upward contribution in August 2019, increasing by $2.5 \%$.

Monthly output reflects a decline of $0.7 \%$ driven by reduced demand for gas supply, which fell by $2.4 \%$. The Met Office reported that the mean average temperature was 15.8 degrees Celsius, which is 0.9 degrees Celsius above the 1980 to 2010 long-term average.

In contrast, for the three months to August 2019 compared with the same three months to August 2018, output increased by $1.0 \%$, mainly because of gas supply which rose by $5.1 \%$. This is influenced by higher average temperatures during June and July 2018 compared with June and July 2019.

## 7. Water and waste

For the latest three months to August 2019 compared with the three months to May 2019, output increased by $1.6 \%$ mainly because of a $3.4 \%$ rise from waste collection.

In contrast, output fell by $0.3 \%$ for the three months to August 2019 compared with the same three months to August 2018, where falls of $6.3 \%$ from sewerage and $2.6 \%$ from water collection and supply was partially offset by an $8.6 \%$ rise from waste collection.

## 8 . Production data

Output of the production industries
Dataset | Released 10 October 2019

Index values and growth rates for production, manufacturing and the main industrial groupings in the UK.

Revisions to output of the production industries
Dataset | Released 10 October 2019

Revisions to 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 October 2019

Monthly index values for production and the main Index of Production sectors in the UK to four decimal places.

Monthly Business Survey turnover in production industries
Dataset | Released 10 October 2019

Monthly Business Survey 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 October 2019

Monthly, quarterly and annual export data for the manufacturing industries, collected by the Monthly Business Survey at industry level in the UK.

Index of Production revisions triangles
Dataset | Released 10 October 2019

Comparison of estimates produced for production and manufacturing in the UK at first publication against estimates published 12 months later.

Weights of lower-level industrial groupings within the main Index of Production sectors. Data are calculated on a 2016 equals 100 basis.

Monthly Business Survey (Production) response rates
Dataset | Released 10 October 2019

Monthly response rates for the UK Monthly Business Survey (production) by turnover and questionnaire.

Index of Production time series
Dataset | Dataset ID: DIOP | Released 10 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.

## 9 . Glossary

## Index number

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

This 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

Production 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.

## 10. 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 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 ).

## 11. Strengths and limitations

The Index of Production Quality and Methodology Information report contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users of the data
- how the output was created
- the quality of the output including the accuracy of the data


## Survey data

The data in this bulletin come primarily from the monthly business surveys.

## Seasonal adjustment

The data published in the Index of Production release are all seasonally adjusted (although non-seasonally adjusted estimates are also available). This aids interpretation by removing annually recurring fluctuations, for example, 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 pounds, 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.

## 12. Related links

GDP monthly estimate, UK

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, Index of Services and Construction output in Great Britain.

## Producer price inflation, UK

The corresponding price indices used to deflate the Index of Production (loP) are published in the monthly publication of UK producer price inflation.

## UK manufacturers' sales by product (ProdCom)

Product sales by manufacturers are published on an annual basis in UK manufacturers' sales by product (ProdCom) statistical bulletins; estimates are in current prices, unlike the chained volume measures published in the loP release.

## Energy trends

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 the manufacture of coke and refined petroleum products sectors within this release.

## Eurostat short-term statistics (STS)

The loP follows the Eurostat short-term statistics (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 Eurostat data are calculated on a 2015 equals 100 basis, while UK data are calculated on a 2016 equals 100 basis.

National Statistics

## Output of the Production Industries,

 August 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 |  |

## IOP5 ${ }^{\text {output ot the Procucction industries }}$

| Seasonally adjusted $2016=$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 |
| Sectio |  | 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 | $97.0{ }^{1}$ | $99.9{ }^{1}$ | $94.3{ }^{\text {' }}$ | $89.2{ }^{1}$ | $89.6{ }^{1}$ | $99.9{ }^{1}$ | $99.9{ }^{1}$ | ' 99.5 ${ }^{\text {' }}$ | $101.9{ }^{\text {' }}$ | 93.8 |
| 2015 |  | $98.9{ }^{\text {I }}$ | 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 | Q2 | $101.6{ }^{\text {' }}$ | $106.5{ }^{\text {' }}$ | $102.5{ }^{\text {' }}$ | $94.6{ }^{1}$ | $99.9{ }^{1}$ | $108.8{ }^{\text { }}$ | $114.7{ }^{\prime}$ | $100.9{ }^{1}$ | ' $107.3^{\text {' }}$ | $98.8{ }^{\text {' }}$ | 98.4 |
|  | 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 |
| 2018 | Jun | $102.1{ }^{\text {' }}$ | $105.7{ }^{\text {' }}$ | $103.2{ }^{\text {I }}$ | $93.1{ }^{1}$ | $101.8{ }^{\text { }}$ | $106.8{ }^{\text { }}$ | $115.3{ }^{\text {' }}$ | $102.7{ }^{\text {' }}$ | ' $107.1^{\prime}$ | $99.6{ }^{\text {' }}$ | 97.5 |
|  | Jul | 102.3 | 110.8 | 102.7 | 96.4 | 102.2 | 114.5 | 115.1 | 100.1 | 107.0 | 100.3 | 101.4 |
|  | 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 |
| $\begin{aligned} & \text { Jul } \\ & \text { Aug } \end{aligned}$ |  | 101.2 | 104.3 | 101.7 | 96.0 | 101.7 | 106.1 | 116.1 | 102.8 | 103.7 | 98.9 | 98.5 |
|  |  | 100.6 | 103.3 | 101.0 | 95.3 | 102.0 | 104.6 | 114.7 | 101.6 | 103.5 | 98.1 | 97.6 |


| Percentage change, latest year on previous year |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | $1.6{ }^{\prime}$ | -0.3 ${ }^{1}$ | 2.9 | -4.4 ${ }^{\text {' }}$ | $0.6{ }^{\prime}$ | $-1.9{ }^{\prime}$ | $5.5{ }^{\text {' }}$ | $0.9{ }^{\text {1 }}$ | $3.4{ }^{1}$ | $4.2{ }^{\text {1 }}$ | -3.1 |
| 2015 | 1.0 | 5.1 | -0.1 ${ }^{1}$ | 2.2 | 4.6 | 7.5 | -0.7 | 0.2 | -1.6 | 0.7 | 3.7 |
| 2016 | 1.1 | -2.0 | 0.2 | 3.7 | 7.1 | 3.8 | 0.8 | -0.1 | 2.1 | -2.6 | 2.8 |
| 2017 | 1.7 | 1.7 | 2.2 | -1.8 | 2.0 | 1.6 | 3.8 | -1.0 | 5.4 | 1.7 | -0.7 |
| 2018 | 0.1 | 4.8 | 0.4 | -1.9 | -1.8 | 7.4 | 10.2 | 1.1 | 2.0 | -2.1 | 0.3 |


| Percentage change, latest month on same month a year ago |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | Jun | $1.3{ }^{\text {' }}$ | $6.5{ }^{\text {1 }}$ | $1.6{ }^{\prime}$ | -2.2 ${ }^{1}$ | $0.5{ }^{\text {' }}$ | $7.6{ }^{1}$ | $8.9{ }^{1}$ | $0.7{ }^{1}$ | $2.4{ }^{1}$ | $1.8{ }^{\text {I }}$ | 1.1 |
|  | Jul | 1.6 | -3.7 | 2.4 | -0.9 | 1.2 | -6.5 | -0.1 | -0.2 | 6.2 | 1.5 | -2.1 |
|  | Aug | 1.7 | -2.1 | 2.4 | -0.6 | 0.7 | -3.8 | 4.2 | 0.5 | 5.0 | 1.2 | -1.1 |
|  | Sep | 2.7 | 4.9 | 3.0 | 0.2 | 1.8 | 5.5 | 7.7 | -0.7 | 6.9 | 2.3 | 0.9 |
|  | Oct | 4.1 | 15.9 | 4.9 | -4.4 | 1.6 | 21.6 | 4.3 | 2.0 | 8.7 | 3.8 | 0.9 |
|  | Nov | 2.4 | 7.0 | 3.7 | -5.5 | -0.1 | 8.1 | 5.1 | 0.8 | 7.3 | 3.1 | -2.8 |
|  | Dec | 0.5 | -13.7 | 1.3 | 0.8 | -0.1 | -19.8 | 3.6 | -3.8 | 5.4 | 1.5 | -3.6 |
| 2018 | Jan | 0.3 | 1.4 | 1.7 | -5.7 | -4.7 | 2.6 | 10.1 | -1.9 | 6.9 | -0.8 | -3.9 |
|  | Feb | 1.3 | 2.4 | 1.6 | 3.3 | -4.0 | 4.6 | 9.5 | 2.1 | 4.2 | -1.3 | 2.2 |
|  | Mar | 1.6 | -2.2 | 1.7 | 9.9 | -5.5 | -0.6 | 16.4 | 0.4 | 5.9 | -2.0 | 5.3 |
|  | Apr | 0.9 | 7.8 | 0.8 | 1.8 | -2.1 | 12.9 | 12.7 | -0.2 | 4.9 | -3.1 | 3.2 |
|  | May | 0.1 | 5.3 | 1.1 | -8.0 | -1.2 | 7.6 | 14.6 | 2.0 | 3.9 | -2.6 | -3.9 |
|  | Jun | 0.9 | 0.7 | 1.7 | -5.2 | 1.9 | 1.1 | 9.1 | 3.0 | 3.5 | -1.4 | -3.1 |
|  | Jul | 1.0 | 7.6 | 1.0 | -2.0 | 0.5 | 11.5 | 14.8 | 2.6 | 0.9 | -0.7 | 2.1 |
|  | Aug | 0.9 | 9.9 | 0.7 | -2.3 | 1.1 | 13.4 | 10.2 | 0.6 | 2.3 | -0.9 | 1.8 |
|  | Sep | -0.9 | 2.6 | -0.6 | -4.8 | -0.9 | 3.7 | 3.6 | 1.4 | -1.4 | -1.6 | -1.5 |
|  | Oct | -1.3 | 3.7 | -1.6 | -0.2 | -2.0 | 4.0 | 8.4 | 1.0 | -2.6 | -2.8 | 1.0 |
|  | Nov | -1.4 | -0.3 | -1.1 | -2.6 | -2.3 | 0.4 | 9.5 | 1.4 | -1.0 | -3.9 | -0.8 |
|  | Dec | -1.7 | 22.4 | -2.4 | -6.1 | -2.1 | 33.9 | 5.3 | 1.0 | -3.3 | -4.2 | 1.6 |
| 2019 | Jan | -0.4 | 1.0 | -0.6 | 0.9 | -0.6 | -0.5 | 1.7 | 4.4 | -5.3 | 0.9 | 1.6 |
|  | Feb | -0.2 | 5.9 | 0.8 | -9.3 | -0.9 | 6.2 | 5.4 | 3.8 | -3.1 | 2.8 | -3.9 |
|  | Mar | 1.1 | 10.7 | 2.4 | -11.8 | 0.4 | 11.8 | 5.3 | 8.2 | -2.4 | 3.5 | -4.7 |
|  | Apr | -1.6 | -2.0 | -1.4 | -5.0 | 0.7 | -3.6 | 4.0 | 3.4 | -7.2 | 1.3 | -4.0 |
|  | May | - | 0.4 | -0.7 | 3.5 | 1.7 | 1.1 | 3.5 | 0.3 | -3.1 | 0.8 | 2.3 |
|  | Jun | -1.0 | 0.7 | -1.8 | 4.5 | -0.8 | 2.4 | -0.6 | -1.1 | -3.3 | -0.5 | 2.2 |
|  | Jul | -1.1 | -5.9 | -0.9 | -0.4 | -0.4 | -7.4 | 0.8 | 2.7 | -3.1 | -1.4 | -2.8 |
|  | Aug | -1.8 | -7.5 | -1.7 | -1.1 | 0.4 | -9.1 | 0.3 | 2.0 | -4.0 | -2.0 | -3.5 |
| 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 period marked is the earliest in the table to have been revised. |  |  |  |  |  |  |



| continued | Broad industry groups |  |  |  |  |  |  |  |  | Seasonally 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 |

Percentage change, latest month on previous month

| 2017 | Jun | $0.2{ }^{\top}$ | $4.1{ }^{\top}$ | 0.2 | $-1.4{ }^{\top}$ | -0.5 ${ }^{\top}$ | $5.1{ }^{\top}$ | $4.5{ }^{\top}$ | $1.1{ }^{\top}$ | $0.1{ }^{\top}$ | -0.3 ${ }^{\top}$ | $0.2{ }^{\top}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul | 0.2 | -1.9 | $0.2{ }^{\top}$ | 0.1 | 1.7 | -2.8 | -5.1 | -2.2 | 2.5 | - | -1.3 |
|  | 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 | -2.0 | 0.4 | -1.4 | 0.7 | -3.0 | 1.3 | 1.2 | 0.1 | -0.2 | -1.1 |
|  | Aug | -0.6 | -1.0 | -0.7 | -0.7 | 0.3 | -1.3 | -1.2 | -1.1 | -0.2 | -0.8 | -0.9 |
| Percentage change, latest 3 months on same 3 months a year ago ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 | Jun | $0.2{ }^{\top}$ | $2.8{ }^{\text { }}$ | $0.6{ }^{\text { }}$ | $-3.7{ }^{\text {' }}$ | $0.2{ }^{\top}$ | $2.8{ }^{\text { }}$ | $2.8{ }^{\text { }}$ | $-1.9{ }^{\text { }}$ | $2.1{ }^{1}$ | $1.1{ }^{\text { }}$ | -1.1 ${ }^{\text { }}$ |
|  | Jul | 1.1 | 1.0 | 1.5 | -0.9 | 0.3 | 0.2 | 3.4 | -0.8 | 3.8 | 1.4 | -0.1 |
|  | 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 | -1.7 | -1.2 | 2.5 | 0.2 | -1.5 | 1.2 | 0.6 | -3.2 | -0.3 | 0.5 |
|  | Aug | -1.3 | -4.3 | -1.5 | 1.0 | -0.3 | -4.9 | 0.2 | 1.2 | -3.5 | -1.3 | -1.4 |
| 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 proactucton nausstries

| 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 3 months on previous 3 months ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | Jun | -0.4 ${ }^{\top}$ | $1.0{ }^{\top}$ | -0.1 ${ }^{\top}$ | 0.9 | $-4.0{ }^{\top}$ | $0.7{ }^{\top}$ | $0.4{ }^{\top}$ | $0.5{ }^{\top}$ | -0.8 ${ }^{\top}$ | $0.3{ }^{\top}$ | $0.9{ }^{\top}$ |
|  | Jul | 0.4 | 2.8 | 0.3 | $2.7{ }^{\text {' }}$ | -2.6 | 3.6 | 1.6 | - | 0.8 | 0.2 | 2.4 |
|  | Aug | 0.6 | 2.6 | 0.6 | 1.6 | -1.4 | 3.3 | 3.4 | -0.2 | 2.0 | -0.1 | 1.4 |
|  | Sep | 0.9 | 1.3 | 0.9 | 0.3 | 1.0 | 2.0 | 1.7 | -1.0 | 3.2 | 0.2 | - |
|  | Oct | 1.2 | 1.6 | 1.5 | -0.7 | 0.8 | 2.7 | 3.5 | 0.3 | 2.8 | 1.0 | -0.3 |
|  | Nov | 1.5 | 3.4 | 1.7 | -0.5 | 1.2 | 5.0 | 3.4 | 0.4 | 2.7 | 1.8 | 0.4 |
|  | Dec | 1.1 | -2.6 | 1.5 | -0.2 | 0.6 | -3.3 | 2.9 | 1.0 | 1.6 | 1.9 | -0.8 |
| 2018 | Jan | 0.3 | -4.7 | 0.8 | -0.1 | -0.5 | -6.2 | 3.7 | 0.3 | 1.6 | 0.5 | -1.7 |
|  | Feb | -0.3 | -8.5 | 0.2 | 0.9 | -1.5 | -10.5 | 5.3 |  | 1.8 | -1.6 | -1.8 |
|  | Mar | -0.5 | 0.8 | -0.7 | 1.2 | -2.3 | 2.9 | 6.5 | -0.3 | 1.6 | -3.7 | 1.0 |
|  | Apr | -0.6 | 3.1 | -1.2 | 3.0 | -1.6 | 5.9 | 3.4 | 0.2 | -0.3 | -3.7 | 3.1 |
|  | May | -0.9 | 6.8 | -1.3 | -1.0 | -1.3 | 9.8 | 1.8 | 0.5 | -1.6 | -2.7 | 1.5 |
|  | Jun | -0.7 | 5.0 | -0.6 | -5.1 | 0.3 | 5.5 | 0.6 | 1.9 | -2.3 | -0.7 | -1.5 |
|  | Jul | -0.2 | 4.7 | 0.2 | -7.1 | 1.8 | 4.6 | 1.6 | 1.8 | -1.3 | 0.8 | -2.8 |
|  | Aug | 0.6 | 5.0 | 0.6 | -2.6 | 2.8 | 5.3 | 0.4 | 1.1 | -0.6 | 1.6 | 0.2 |
|  | Sep | 0.5 | 3.4 | 0.1 | 1.2 | 1.6 | 4.2 | -0.7 | -1.1 | -0.2 | 1.6 | 2.1 |
|  | Oct | 0.1 | 2.4 | -0.3 | 2.1 | -0.2 | 2.9 | -1.5 | -1.2 | -0.5 | 0.8 | 1.9 |
|  | Nov | -0.6 | -0.5 | -0.6 | 0.1 | -1.7 | -0.7 | -0.5 | -0.4 | -1.2 | - | -0.3 |
|  | Dec | -0.7 | -1.7 | -0.6 | -0.2 | -1.7 | -2.1 | 1.3 | 0.6 | -1.3 | -0.7 | -1.0 |
| 2019 | Jan | -0.4 | -3.4 | - | -0.3 | -1.6 | -4.1 | 1.8 | 1.5 | -1.0 | -0.2 | -1.3 |
|  | Feb | 0.1 | -2.1 | 0.6 | -1.5 | -1.0 | -2.9 | 2.3 | 1.7 | -0.5 | 1.0 | -1.6 |
|  | Mar | 1.1 | -0.9 | 2.0 | -2.8 | -0.6 | -1.8 | 3.0 | 3.9 | 0.2 | 2.3 | -2.0 |
|  | Apr | 0.3 | 1.1 | 0.8 | -3.4 | 0.1 | 1.3 | 2.9 | 3.0 | -1.3 | 1.2 | -2.0 |
|  | May | -0.3 | 0.6 | -0.5 | -0.8 | 0.9 | 1.2 | 2.0 | 1.4 | -1.9 | -0.7 | -0.5 |
|  | Jun | -1.8 | -1.1 | -2.8 | 2.8 | 1.2 | -0.3 | -1.2 | -2.6 | -3.2 | -2.5 | 1.0 |
|  | Jul | -0.7 | -1.6 | -1.6 | 4.3 | 1.9 | -1.4 | -2.0 | -2.6 | -0.3 | -2.1 | 2.0 |
|  | Aug | -0.4 | -2.3 | -1.1 | 3.2 | 1.6 | -2.6 | -3.5 | -1.5 | 0.2 | -1.6 | 1.0 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding Any apparent inconsistencies between these tables and the latest GDP estimate 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 |  |  |  |  |  |  |  |  |  |  |  |  |

$10 P 5$ 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 <br> 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 |  | $100.9{ }^{\text { }}$ | $104.7{ }^{\top}$ | $100.7{ }^{\top}$ | $99.0{ }^{\top}$ | $101.5{ }^{\text { }}$ | $94.9{ }^{\top}$ |
| 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 | Q2 | $100.7{ }^{\text {「 }}$ | $94.8{ }^{\top}$ | $98.9{ }^{\top}$ | $96.7{ }^{\text {T}}$ | $102.3{ }^{\top}$ | 104.1 |
|  | 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 |
| 2018 | Jun | $101.2{ }^{\text { }}$ | $94.8{ }^{\top}$ | $99.3{ }^{\text {T}}$ | $97.9{ }^{\text {T}}$ | $103.6{ }^{\text { }}$ | $108.5{ }^{\top}$ |
|  | Jul | 102.3 | 96.7 | 100.6 | 97.3 | 105.1 | 95.3 |
|  | 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 | 101.8 | 95.6 | 99.3 | 91.7 | 100.7 | 112.0 |
|  | Aug | 102.3 | 94.0 | 99.1 | 86.4 | 99.9 | 106.7 |
| Percentage change, latest year on previous year |  |  |  |  |  |  |  |
| 2014 |  | 4.2 | -2.9 ${ }^{\top}$ | $0.9{ }^{\top}$ | $-9.0{ }^{\top}$ | $2.3{ }^{\top}$ | -4.9 ${ }^{\top}$ |
| 2015 |  | -0.2 ${ }^{\top}$ | -2.2 | 0.7 | 2.4 | 5.1 | 0.6 |
| 2016 |  | -0.8 | -2.3 | -1.4 | -1.3 | -6.2 | 4.7 |
| 2017 |  | -0.3 | 0.1 | 1.1 | 1.4 | 2.6 | -1.8 |
| 2018 |  | 1.2 | -5.9 | -1.9 | -4.0 | 1.0 | 2.9 |

Percentage change, latest month on same month a year ago

| 2017 | Jun | -0.1 | -0.5 | - | 2.6 | 4.1 | 4.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul | 0.1 | 0.1 | -0.6 | -5.4 | 1.9 | 2.0 |
|  | 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 | -0.5 | -1.1 | -1.3 | -5.8 | -4.2 | 17.5 |
|  | Aug | -0.4 | -1.5 | 1.1 | -15.9 | -1.1 | 8.9 |
| 1 | Any a perce | ies betw n in the | numbers e to rou |  | at data a he earlies | been rev have be |  |

$\underset{\text { continued }}{10 \text { Output of the Production Industries }}$


Percentage change, latest month on same month a year ago


| 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 | Jun | 1.8 | $-1.7{ }^{\top}$ | -0.4 ${ }^{\top}$ | - ${ }^{\top}$ | $0.1{ }^{\top}$ | $0.9{ }^{\top}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul | -0.8 | 0.4 | -1.4 | -9.4 | -0.5 | -4.8 |
|  | 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 | 0.9 | 0.8 | -1.1 | 2.4 | -2.6 | 4.1 |
|  | Aug | 0.5 | -1.7 | -0.2 | -5.7 | -0.8 | -4.7 |

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


## OP5 oupput th te Procuculon noususnes <br> Chained volume indices of gross value added ${ }^{1}$ <br> 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 | Jun | $-2.4{ }^{\text {I }}$ | $0.8{ }^{\prime}$ | $6.1{ }^{\text {' }}$ | $4.9{ }^{\prime}$ | $-4.0{ }^{\text {I }}$ | $-3.8{ }^{\text {' }}$ | 4.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul | 0.7 | -1.8 | -6.5 | 0.8 | 4.3 | 8.1 | 0.2 |
|  | 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 | - | 1.1 | 1.0 | -0.3 | -1.6 | -0.2 | 0.8 |
|  | Aug | -1.0 | -0.8 | -1.8 | -2.5 | -1.0 | 0.3 | 2.0 |
| Percentage change, latest 3 months on same 3 months a year agr |  |  |  |  |  |  |  |  |
| 2017 | Jun | $-1.5{ }^{\top}$ | $0.2{ }^{\top}$ | $3.7{ }^{\top}$ | $3.2{ }^{\top}$ | $3.8{ }^{\top}$ | $-0.9{ }^{\top}$ | $3.2{ }^{\top}$ |
|  | Jul | -0.6 | -0.1 | 4.7 | 5.7 | 5.9 | 1.1 | 4.3 |
|  | 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 | 0.2 | 1.6 | 6.7 | -4.5 | -4.4 | -3.9 |
|  | Aug | -5.5 | -1.7 | 0.4 | 4.5 | -5.5 | -3.6 | -4.3 |

[^0]percentage changes shown in these tables are due to rounding.

| continued |  |  |  |  | Seasonally | justed $2016=10 \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 $\mathbf{3}$ months on previous $\mathbf{3}$ months

| 2017 | Jun | $-0.8{ }^{\top}$ | $0.2{ }^{\top}$ | -0.4 | $2.7{ }^{\top}$ | 1.0 | 4.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul | -1.4 | -0.7 | -0.9 | -1.3 | $0.6{ }^{\top}$ | 4.2 |
|  | 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 | -1.6 | -3.2 | -7.7 | -3.9 | -0.7 |
|  | Aug | -2.0 | -0.9 | -2.4 | -9.1 | -2.9 | 1.0 |
| 1 | Any perce | ies betw in the | number due to rou |  | t data ar earlies | been re have be |  |


| continued | Rubber and plastic products and non-metallic mineral products |  |  |  |  | Seasonally adjusted $2016=100$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 $\mathbf{3}$ months on previous $\mathbf{3}$ months


\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, August 2019

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


Output of the Production Industries
Chained volume indices of gross value added

| continued |  |  |  |  |  |  |  |  |  | Seasonally adjus | $2016=100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Broad ind | stry groups |  |  |  |  | industrial group |  |  |
|  | 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 | May | -0.3 | -0.8 | -0.3 | 0.5 | -0.3 | -1.2 | -1.4 | -0.8 | -0.3 | 0.1 | -0.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.2 | -0.1 | - | -0.9 | -0.3 | -0.9 | 1.3 | 0.3 | -0.1 | -0.3 | -1.0 |
|  | Jul | - | 0.9 | -0.2 | -0.9 | 1.7 | 1.7 | -0.7 | -0.6 | 0.1 | -0.2 | -0.1 |
|  | Aug | 0.2 | 0.6 | 0.3 | -0.1 | -0.5 | 0.6 | -0.2 | 0.8 | -0.2 | 0.2 | 0.3 |
|  | Sep | -0.2 | 0.9 | - | -1.3 | 1.1 | 1.0 | 0.7 | -0.3 | 0.2 | - | -1.1 |
|  | Oct | 0.3 | 0.4 | 0.1 | 1.5 | -0.3 | 0.6 | -0.2 | -0.1 | 0.4 | 0.1 | 1.0 |
|  | Nov | -0.1 | 2.7 | -0.4 | -0.2 | 0.7 | 3.6 | 0.8 | -0.4 | -0.4 | -0.3 | 0.6 |
|  | Dec | 0.7 | -2.4 | 0.5 | 0.5 | -0.1 | -2.0 | 1.1 | 0.3 | 0.3 | 0.7 | 1.1 |
| 2018 | Jan | -0.9 | -1.1 | -0.3 | -1.3 | -0.4 | -3.2 | -0.3 | -0.5 | 1.0 | -1.9 | -3.0 |
|  | Feb | -0.2 | -2.3 | -0.3 | 2.3 | 0.2 | -3.1 | 0.4 | 0.2 | -0.8 | -0.3 | 0.8 |
|  | Mar | -0.1 | -0.1 | 0.1 | -0.7 | -0.8 | -0.3 | 0.2 | -0.1 | 0.5 | -0.1 | -0.3 |
|  | Apr | -0.1 | 2.1 | -0.1 | -0.8 | 0.1 | 2.4 | -0.3 | -0.3 | - | 0.1 | -0.5 |
|  | May | 0.2 | 2.6 | - | -2.0 | -0.2 | 4.0 | 0.9 | 0.1 | - | -0.1 | 0.2 |
|  | Jun | - | -1.7 | -0.2 | 1.3 | 0.7 | -2.2 | -0.2 | - | -0.1 | -0.2 | 0.3 |
|  | Jul | -0.2 | 1.5 | - | -0.5 | 0.1 | 2.4 | -0.1 | -0.4 | -0.1 | 0.2 | 0.1 |
|  | Aug | 0.1 | -0.1 | 0.2 | 0.4 | -0.6 | -0.4 | 0.2 | 0.5 | 0.2 | - | -0.2 |
|  | Sep | -0.2 | - | -0.2 | -1.0 | -0.4 | 0.3 | -0.3 | -0.2 | -0.5 | 0.3 | -0.4 |
|  | Oct | 0.3 | 0.4 | 0.1 | 2.4 | -0.1 | 0.7 | 0.3 | 0.5 | 0.4 | -0.6 | 1.5 |
|  | Nov | 0.1 | -1.0 | 0.2 | -0.2 | -0.5 | -1.3 | 0.4 | - | 0.3 | 0.1 | -0.4 |
|  | Dec | -0.3 | -1.7 | -0.1 | -1.2 | -0.1 | -2.9 | -0.1 | -0.1 | -0.1 | 0.2 | -1.5 |
| 2019 | Jan | 0.3 | 0.2 | 0.3 | 1.1 | - | 0.9 | 0.2 | 0.7 | -0.3 | 0.5 | 1.3 |
|  | Feb |  | -0.6 | -0.2 | 0.3 | 0.7 | -0.3 | 0.2 | -0.1 |  | -0.4 | -0.3 |
|  | Mar | -0.5 | -0.4 | -0.5 | -1.3 | - | -0.5 | -0.4 | 0.2 | -0.3 | -1.2 | -0.9 |
|  | Apr | -0.1 | -0.5 | 0.1 | 0.2 | -0.2 | 0.2 | -1.3 | -0.4 | 1.0 | -0.2 | 0.2 |
|  | May | -0.1 | 0.6 | -0.4 | 0.2 | 0.5 | 0.3 | 0.1 | 0.1 | -1.5 | -0.1 | 0.2 |
|  | Jun | 0.2 | -0.3 | -0.1 | 2.3 | -0.1 | -0.5 | -0.8 | 0.1 | 0.2 | -0.2 | 1.0 |
|  | Jul | - | -0.8 | 0.1 | - | -0.4 | -0.5 | -1.1 | -0.1 | -0.1 | 0.3 | - |

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

| 2017 | May | -0.5 | 1.1 | -0.9 | 1.1 | -2.1 | 2.8 | 0.8 | -0.2 | -1.5 | -1.1 | 1.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.5 | 1.9 | -0.8 | 0.9 | -2.7 | 3.6 | 0.9 | 0.2 | -1.7 | -1.1 | 1.2 |
|  | Jul | -0.4 | 2.3 | -0.8 | 1.0 | -2.0 | 3.6 | 1.0 | -0.1 | -1.4 | -1.2 | 1.9 |
|  | Aug | -0.2 | 3.4 | -0.5 | -0.4 | -1.6 | 4.5 | 1.0 | 0.2 | -1.2 | -1.1 | 1.5 |
|  | Sep | -0.2 | 3.6 | -0.4 | -1.8 | -1.1 | 4.7 | 0.6 | 0.3 | -1.0 | -1.0 | 0.6 |
|  | Oct | -0.2 | 4.2 | -0.2 | -2.4 | -1.0 | 5.6 | 0.8 | 0.4 | -0.9 | -0.5 | -0.4 |
|  | Nov | -0.1 | 4.7 | - | -2.3 | -1.0 | 6.3 | 0.9 | 0.5 | -0.7 | -0.1 | -0.7 |
|  | Dec | 0.1 | 3.2 | 0.1 | -1.4 | -1.2 | 4.7 | 0.9 | 0.4 | -0.7 | 0.3 | -0.1 |
| 2018 | Jan | -0.1 | 1.4 | -0.1 | -1.1 | -1.4 | 2.4 | 0.8 | -0.1 | -0.3 | -0.3 | -0.1 |
|  | Feb | -0.5 | -0.6 | -0.5 | -1.0 | -1.3 | -0.3 | 1.1 | -0.6 | -0.3 | -1.0 | -0.6 |
|  | Mar | -0.9 | -0.9 | -0.6 | -1.2 | -1.5 | -1.0 | 2.0 | -0.6 | -0.1 | -1.8 | -1.3 |
|  | Apr | -0.9 | -0.6 | -0.6 | -1.3 | -0.6 | -1.0 | 2.2 | -0.7 |  | -1.8 | -1.4 |
|  | May | -0.7 | 1.1 | -0.5 | -2.4 |  | 1.2 | 3.0 | -0.8 | 0.6 | -1.9 | -1.7 |
|  | Jun | -0.4 | 2.0 | -0.5 | -2.5 | 1.4 | 2.5 | 2.6 | -1.1 | 0.9 | -2.0 | -1.4 |
|  | Jul | -0.3 | 2.9 | -0.4 | -2.6 | 1.2 | 4.1 | 3.1 | -0.8 | 1.0 | -1.9 | -0.9 |
|  | Aug | -0.4 | 2.4 | -0.5 | -1.6 | 1.1 | 3.6 | 2.9 | -0.9 | 1.1 | -1.9 | -0.5 |
|  | Sep | -0.5 | 2.1 | -0.5 | -1.1 | - | 3.3 | 2.9 | -1.0 | 0.9 | -1.7 | -0.4 |
|  | Oct | -0.5 | 1.5 | -0.6 | -0.7 | -0.4 | 2.6 | 2.9 | -0.8 | 0.7 | -1.9 | -0.1 |
|  | Nov | -0.5 | -0.1 | -0.4 | -0.3 | -1.2 | 0.6 | 2.5 | -0.3 | 0.8 | -1.9 | -0.1 |
|  | Dec | -0.8 | -1.1 | -0.4 | -0.5 | -1.4 | -1.4 | 2.1 | -0.1 | 0.9 | -2.1 | -1.1 |
| 2019 | Jan | -0.6 | -1.5 | -0.2 | -0.2 | -1.7 | -2.0 | 1.7 | 0.2 | 0.6 | -1.4 | -1.0 |
|  | Feb | -0.5 | 0.1 | -0.1 | -0.5 | -1.4 | 0.4 | 1.3 | 0.4 | 0.3 | -0.8 | -0.9 |
|  | Mar | -0.1 | 0.9 | - | -0.6 | -0.9 | 2.3 | 1.2 | 0.8 | -0.1 | -0.5 |  |
|  | Apr | -0.1 | 0.5 | -0.1 | -1.0 | -0.5 | 2.4 | 0.5 | 0.8 | 0.2 | -0.9 | -0.4 |
|  | May | -0.4 | -1.2 | -0.3 | -0.2 | -0.2 | 0.4 | -0.3 | 0.9 | -0.2 | -1.4 | -0.3 |
|  | Jun | -0.4 | -2.2 | -0.4 | 1.2 | -0.4 | -0.9 | -1.1 | 0.9 | -0.2 | -1.4 | 0.1 |
|  | Jul | -0.4 | -3.4 | -0.5 | 2.5 | -0.5 | -2.7 | -1.9 | 1.0 | -0.7 | -1.3 | 0.4 |

Any apparent inconsistencies between the index numbers and the
percentage changes shown in these tables are due to rounding
indicates that data are new or have been revised. The period marked
is the earliest in the table to have been revised

## IOP5R

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

| continued | Broad industry groups |  |  |  |  |  | Seasonally adjusted $2016=100$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 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 | May | -0.3 | -1.3 | -0.2 | 0.5 | -2.2 | -1.5 | -1.2 | - | -0.6 | - | 0.1 |
|  | Jun | -0.7 | -0.5 | -0.2 | - | -3.2 | -0.4 | -0.1 | 0.1 | -0.8 | -0.1 | -0.1 |
|  | Jul | -0.6 | $\bigcirc$ | -0.3 | -0.7 | -1.7 |  | -0.2 | -0.3 | -0.7 | -0.1 | -0.5 |
|  | Aug | -0.4 | 0.6 | -0.1 | -1.5 | -0.5 | 0.4 | 0.3 | -0.1 | -0.4 | -0.3 | -0.9 |
|  | Sep | -0.1 | 1.2 | -0.2 | -1.9 | 1.5 | 1.6 | -0.4 | -0.2 | -0.2 | -0.2 | -0.9 |
|  | Oct | 0.2 | 1.9 | 0.1 | -1.4 | 1.1 | 2.4 | - | 0.3 | 0.1 | 0.1 | -0.5 |
|  | Nov | 0.2 | 2.7 | - | -0.8 | 1.3 | 3.7 | 0.4 | -0.2 | 0.3 | - |  |
|  | Dec | 0.5 | 1.9 | - | 0.6 | 0.6 | 2.9 | 1.2 | -0.3 | 0.3 | 0.3 | 1.1 |
| 2018 | Jan | 0.1 | 0.9 | -0.2 | 0.2 | 0.6 | 1.8 | 1.7 | -0.5 | 0.3 | -0.3 | 0.7 |
|  | Feb |  | -2.3 | -0.1 | 0.6 | 0.1 | -2.5 | 1.6 | -0.2 | 0.4 | -0.8 | 0.2 |
|  | Mar | -0.6 | -3.8 | -0.4 | 0.1 | -0.4 | -5.4 | 1.1 | -0.3 | 0.6 | -1.7 | -1.5 |
|  | Apr | -0.6 | -3.5 | -0.3 | 0.7 | -0.6 | -5.4 | 0.6 | -0.1 | 0.3 | -1.3 | -1.1 |
|  | May | -0.5 | 0.5 | -0.2 | -0.9 | -0.9 | -0.1 | 0.4 | -0.4 | 0.4 | -0.9 | -0.9 |
|  | Jun | -0.1 | 2.5 | -0.1 | -1.4 | -0.3 | 3.0 | 0.5 | -0.3 | 0.1 | -0.2 | -0.2 |
|  | Jul | - | 3.5 | -0.1 | -2.0 | 0.2 | 4.8 | 0.6 | -0.3 | 0.2 | -0.2 | -0.1 |
|  | Aug | - | 1.8 | -0.1 | -0.6 | 0.5 | 2.8 | 0.2 | -0.2 | 0.1 | -0.1 | 0.2 |
|  | Sep | -0.1 | 1.2 | -0.1 | -0.4 | - | 2.1 | - | -0.2 | . | 0.1 | 0.1 |
|  | Oct | - | 0.5 | - | 0.7 | -0.5 | 0.9 | -0.1 | 0.3 | - | - | 0.3 |
|  | Nov | - | 0.3 | - | 0.6 | -0.9 | 0.8 | 0.1 | 0.3 | -0.1 | -0.1 | 0.5 |
|  | Dec | 0.1 | -0.9 | 0.1 | 1.3 | -0.8 | -1.1 | 0.5 | 0.5 | 0.3 | -0.2 | 0.4 |
| 2019 |  | 0.1 | -1.8 | 0.3 | 0.7 | -0.7 | -2.3 | 0.5 | 0.5 | 0.3 | 0.2 | -0.1 |
|  | Feb | 0.1 | -2.3 | 0.2 | 0.3 | -0.3 | -3.0 | 0.4 | 0.5 | 0.1 | 0.3 | -0.5 |
|  | Mar | 0. | -1.8 | 0.1 | - | 0.2 | -1.7 | 0.2 | 0.6 | -0.4 | - | -0.4 |
|  | Apr | -0.2 | -1.5 | -0.2 | -0.2 | 0.5 | -0.8 | -0.6 | 0.4 | -0.1 | -0.9 | -0.5 |
|  | May | -0.4 | -0.9 | -0.5 | -0.6 | 0.5 | -0.2 | -1.1 | 0.2 | -0.2 | -1.5 | -0.5 |
|  | Jun | -0.4 | -0.7 | -0.5 | 0.3 | 0.2 | -0.2 | -1.7 | -0.2 | - | -1.2 | - |
|  | Jul | -0.2 | -0.4 | -0.5 | 1.5 | 0.2 | -0.3 | -1.8 | -0.1 | -0.8 | -0.6 | 0.7 |
| 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 |  |  |  |  |  |  |



IOP5R
Output of the Production Industries
Chained volume indices of gross value added
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 |  | -4.9 | 1.3 | 0.1 | -0.1 | -0.1 | -0.1 | 1.0 |
| 2015 |  | -0.6 | 0.6 | -0.1 | -0.1 | -0.1 | 0.2 | 0.9 |
| 2016 |  | - | - | - | - | - | - | - |
| 2017 |  | -0.5 | -0.3 | 0.4 | -2.0 | -2.4 | -0.7 | -0.3 |
| 2018 |  | -3.2 | -2.1 | 3.4 | -1.4 | -2.0 | -2.2 | -0.4 |
| 2018 | Q2 | -2.7 | -2.2 | 3.4 | -1.7 | -2.2 | -2.3 | -0.4 |
|  | Q3 | -3.4 | -1.8 | 3.5 | -1.3 | -1.7 | -2.3 | -0.6 |
|  | Q4 | -4.4 | -1.8 | 4.1 | -0.4 | -1.7 | -2.5 | -0.6 |
| 2019 | Q1 | -6.7 | -1.8 | 3.7 | -1.5 | -1.1 | -2.5 | -2.0 |
|  | Q2 | -7.9 | -2.0 | 1.0 | -6.5 | -1.0 | -3.2 | -0.5 |
| 2018 | May | -1.7 | -2.8 | 3.8 | -1.5 | -2.3 | -2.7 | -0.3 |
|  | Jun | -2.7 | -2.3 | 3.7 | -2.0 | -2.0 | -2.4 | -0.7 |
|  | Jul | -3.2 | -1.7 | 3.5 | -1.9 | -1.9 | -2.3 | -0.4 |
|  | Aug | -3.5 | -1.9 | 3.7 | -0.5 | -1.4 | -2.2 | -0.4 |
|  | Sep | -3.4 | -1.7 | 3.4 | -1.5 | -2.1 | -2.4 | -1.0 |
|  | Oct | -3.6 | -2.7 | 3.7 | -0.9 | -1.8 | -2.4 | -0.6 |
|  | Nov | -4.3 | -2.0 | 4.4 | -1.6 | -1.5 | -2.3 | -0.6 |
|  | Dec | -5.1 | -0.9 | 4.3 | 1.2 | -1.8 | -2.6 | -0.6 |
| 2019 | Jan | -5.7 | -1.8 | 4.2 | 1.4 | -1.5 | -2.2 | -1.9 |
|  | Feb | -6.9 | -1.0 | 3.8 | -0.1 | -0.9 | -2.4 | -2.1 |
|  | Mar | -7.6 | -2.4 | 3.1 | -6.0 | -0.8 | -2.8 | -1.9 |
|  | Apr | -7.6 | -1.5 | 1.4 | -5.8 | -0.5 | -3.2 | 1.1 |
|  | May | -7.7 | -2.8 | 1.2 | -5.7 | -0.9 | -3.9 | -0.5 |
|  | Jun | -8.4 | -1.7 | 0.5 | -7.8 | -1.8 | -2.4 | -2.0 |
|  | Jul | -7.8 | -1.8 | -0.6 | -8.1 | -2.5 | -2.0 | -1.9 |
| Percentage change, latest year on previous year |  |  |  |  |  |  |  |  |
| 2014 |  | -3.6 | 0.8 | -0.2 | -0.1 | - | 0.6 | -0.5 |
| 2015 |  | 4.3 | -0.7 | -0.1 | - | - | 0.4 | -0.1 |
| 2016 |  | 0.6 | -0.5 | 0.1 | - | 0.1 | -0.2 | -1.0 |
| 2017 |  | -0.5 | -0.3 | 0.4 | -2.0 | -2.4 | -0.7 | -0.3 |
| 2018 |  | -2.7 | -1.8 | 2.7 | 0.4 | 0.4 | -1.5 | - |

Percentage change, latest month on same month a year ago

| 2017 | May | -0.5 | -1.6 | 0.3 | -2.9 | -2.5 | -1.2 | -1.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.7 | -0.9 | 0.4 | -2.5 | -3.2 | -0.8 | -2.6 |
|  | Jul | -0.8 | -1.2 | 0.3 | -2.1 | -3.0 | -0.5 | -0.2 |
|  | Aug | -0.9 | -1.7 | - | -2.0 | -2.6 | 0.2 | -0.5 |
|  | Sep | -0.8 | -0.5 | -1.7 | -1.7 | -3.2 | -0.2 | -0.8 |
|  | Oct | -0.4 | -2.1 | - | -0.8 | -2.2 | 0.6 | -1.0 |
|  | Nov | - | -2.3 | 0.6 | -1.1 | -1.4 | -2.4 | 2.7 |
|  | Dec | 0.7 | - | 1.0 | 0.1 | 0.4 | -1.6 | 1.4 |
| 2018 | Jan | -0.7 | -3.6 | 0.5 | - | 0.2 | -1.2 | -0.7 |
|  | Feb | -1.6 | -4.7 | 1.6 | -0.2 | -0.3 | -1.6 | -0.5 |
|  | Mar | -3.1 | -2.4 | 2.9 | 0.9 | 0.1 | -1.7 | -1.0 |
|  | Apr | -3.6 | -2.0 | 0.5 | 0.9 | 0.1 | -1.5 | 0.4 |
|  | May | -1.5 | -2.9 | 4.4 | 0.9 | -0.4 | -1.9 | 0.5 |
|  | Jun | -2.3 | -1.1 | 3.5 | -0.5 | 0.3 | -1.5 | -0.5 |
|  | Jul | -2.7 | -1.1 | 3.2 | -0.1 | 0.5 | -2.0 | 0.2 |
|  | Aug | -2.9 | -0.8 | 4.4 | 1.7 | 1.5 | -1.8 | 0.3 |
|  | Sep | -2.6 | -1.2 | 3.4 | 0.1 | 0.6 | -1.1 | 0.2 |
|  | Oct | -2.9 | -1.2 | 3.7 | 0.4 | 0.6 | -2.9 | 1.3 |
|  | Nov | -2.8 | -0.9 | 3.4 | 0.1 | 1.1 | -0.4 | -0.3 |
|  | Dec | -5.1 | 0.2 | 1.3 | 1.5 | -0.1 | -0.5 | -0.5 |
| 2019 | Jan | -4.1 | - | 1.8 | 3.5 | 0.2 | -0.7 | -1.9 |
|  | Feb | -4.7 | 2.1 | 1.1 | 2.5 | 1.8 | -0.6 | -2.5 |
|  | Mar | -4.4 | 0.2 | -0.2 | -4.3 | 1.5 | -1.0 | -1.8 |
|  | Apr | -4.1 | - | -1.2 | -4.2 | 1.6 | -1.5 | 1.3 |
|  | May | -6.1 | - | -2.4 | -4.3 | 1.1 | -1.4 | -0.2 |
|  | Jun | -5.7 | 0.6 | -2.7 | -5.9 | - | -0.1 | -1.3 |
|  | Jul | -4.6 | - | -3.6 | -6.4 | -0.7 | 0.3 | -1.5 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding. |  |  |  | at data e earl | have le to h | he per <br> d. |  |


| continued |  |  | Seasonally adjusted $2016=10 C$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Percentage change, latest month on previous month

| 2017 | May | -0.9 | 0.7 | -0.4 | -0.5 | 1.0 | -1.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | 0.8 | -1.6 | 0.2 | 0.7 | -0.9 | 0.2 |
|  | Jul | -0.9 | -0.9 | -0.6 | -0.4 | 0.5 | 0.2 |
|  | Aug | -0.1 | 2.5 | 1.3 | 6.2 | -0.4 | 1.5 |
|  | Sep | 0.3 | -0.2 | -0.6 | -5.8 | 0.8 | -1.9 |
|  | Oct | -0.3 | -1.0 | 0.6 | -0.2 | 0.9 | -0.1 |
|  | Nov | -0.2 | 0.3 | -1.3 | -0.6 | -1.0 | 0.2 |
|  | Dec | 0.2 | 0.5 | 0.1 | 0.6 | 1.0 | 0.1 |
| 2018 | Jan | -0.5 | -2.2 | -2.2 | -1.3 | -1.8 | -0.7 |
|  | Feb | -0.1 | -0.4 | 0.5 | -0.4 | 0.1 | -0.2 |
|  | Mar | -0.1 | -1.5 | -0.6 | 1.7 | 0.9 | 0.4 |
|  | Apr | 0.6 | -1.4 | -0.3 | 0.9 | -0.1 | -0.7 |
|  | May | 0.1 | -2.0 | 0.6 | -0.2 | 0.5 | -0.4 |
|  | Jun | 0.1 | -0.1 | -0.2 | 0.3 | 0.1 | -0.5 |
|  | Jul | 0.3 | - | 0.2 | -0.2 | 0.1 | -1.4 |
|  | Aug | 0.2 | 0.2 | 0.4 | 0.4 | -1.5 | 1.7 |
|  | Sep | -0.4 | -1.6 | 0.3 | 0.3 | 2.2 | -0.8 |
|  | Oct | 0.2 | - | 0.1 | -0.4 | -0.8 | 1.5 |
|  | Nov | - | 0.3 | -0.4 | -0.4 | 1.2 | 0.5 |
|  | Dec | 0.4 | 0.5 | 0.2 | 0.2 | -1.5 | -1.0 |
| 2019 | Jan | 0.4 | 0.7 | 1.7 | 0.2 | 1.3 | 2.2 |
|  | Feb | -0.5 | -0.5 | 0.7 | -0.6 | -1.0 | 0.2 |
|  | Mar | 0.1 | -1.8 | 1.2 | 0.1 | 1.0 | -0.6 |
|  | Apr | -0.3 | 0.6 | -1.1 | -0.1 | -0.9 | 0.7 |
|  | May | -0.1 | 0.3 | -0.3 | -0.6 | 0.4 | 0.4 |
|  | Jun | -0.1 | -0.5 | 0.9 | -4.2 | 0.9 | - |
|  | Jul | 0.1 | -0.9 | 0.2 | -1.6 | 0.5 | 0.3 |

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

| 2017 | May | -1.9 | -3.1 | -1.3 | -1.7 | -0.9 | 4.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -1.5 | -3.1 | -1.3 | -2.0 | -1.6 | 4.9 |
|  | Jul | -1.6 | -3.5 | -1.2 | -1.9 | -1.2 | 4.1 |
|  | Aug | -1.1 | -4.0 | -0.7 | 1.8 | -1.4 | 4.4 |
|  | Sep | -1.0 | -3.4 | -0.5 | 2.2 | -0.3 | 3.7 |
|  | Oct | -0.8 | -2.6 | 0.2 | 2.3 | 0.6 | 3.3 |
|  | Nov | -0.8 | -1.8 | 0.1 | 0.2 | 1.5 | 3.7 |
|  | Dec | -1.1 | -0.8 | 0.2 | - | 2.0 | 3.2 |
| 2018 | Jan | -1.8 | -0.3 | -0.8 | -0.2 | 1.2 | 2.7 |
|  | Feb | -2.0 | -0.6 | -1.5 | -0.4 | 0.7 | 0.9 |
|  | Mar | -2.2 | -1.3 | -2.5 | -0.3 | 0.3 | 0.6 |
|  | Apr | -1.6 | -2.9 | -2.7 | -0.1 | 0.6 | -0.4 |
|  | May | -1.1 | -4.9 | -2.8 | 0.3 | 0.9 | -0.9 |
|  | Jun | -0.8 | -6.3 | -2.7 | 0.3 | 1.1 | -2.0 |
|  | Jul | -0.2 | -6.5 | -2.3 | 0.3 | 1.1 | -2.3 |
|  | Aug | -0.1 | -6.4 | -2.4 | -1.5 | 0.9 | -3.2 |
|  | Sep | 0.2 | -7.3 | -2.1 | -1.4 | 0.8 | -3.2 |
|  | Oct | 0.2 | -8.1 | -2.2 | -1.2 | 0.4 | -2.2 |
|  | Nov | 0.1 | -8.2 | -1.9 | 0.8 | 0.9 | -1.2 |
|  | Dec | 0.5 | -7.9 | -1.8 | 0.7 | 0.2 | -1.0 |
| 2019 | Jan | 0.9 | -7.2 | -0.2 | 1.1 | 1.2 | -0.3 |
|  | Feb | 1.1 | -6.6 | 1.2 | 1.5 | 1.0 | 0.3 |
|  | Mar | 1.3 | -5.9 | 3.3 | 1.5 | 1.6 | 1.0 |
|  | Apr | 0.8 | -5.4 | 3.7 | 0.5 | 1.0 | 1.3 |
|  | May | 0.5 | -4.0 | 3.6 | -0.4 | 0.7 | 1.7 |
|  | Jun | 0.1 | -2.7 | 3.4 | -2.3 | 0.6 | 2.6 |
|  | Jul | -0.1 | -2.3 | 3.3 | -4.4 | 1.0 | 3.7 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding. |  |  |  | t data <br> earli | been have |  |


| contınued | - - | ned volume | dices of gross | 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 | May | -0.3 | -0.5 | -2.5 | 0.1 | 0.6 | -0.3 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.3 | -1.4 | 0.4 | 0.9 | -0.3 | -0.3 | 0.6 |
|  | Jul | - | 0.6 | 0.2 | -0.2 | -0.2 | 0.7 | -0.4 |
|  | Aug | -0.1 | -0.4 | -0.9 | -0.3 | -0.4 | -0.1 | - |
|  | Sep | -0.3 | 0.6 | 0.4 | 0.6 | 0.1 | -0.7 | -0.5 |
|  | Oct | 0.1 | -1.0 | 0.1 | 0.3 | 0.2 | 2.0 | -0.7 |
|  | Nov | -0.7 | 0.4 | 1.0 | -0.4 | -0.2 | -2.6 | 1.6 |
|  | Dec | 1.3 | -0.2 | 1.7 | 1.5 | 0.9 | -0.2 | 0.2 |
| 2018 | Jan | -1.5 | -0.7 | -0.6 | -1.6 | -0.1 | 0.8 | 0.2 |
|  | Feb | -0.7 | -1.3 | 0.3 | -0.4 | -1.0 | -0.4 | 0.5 |
|  | Mar | -1.1 | 0.5 | 0.6 | 0.5 | 0.3 | - | -0.5 |
|  | Apr | -0.2 | 1.1 | -0.4 | 0.1 | 0.3 | -0.1 | -0.4 |
|  | May | 2.0 | -1.3 | 1.0 | 0.1 | 0.1 | -0.7 | 0.1 |
|  | Jun | -1.0 | 0.5 | -0.1 | -0.5 | 0.3 | 0.2 | -0.4 |
|  | Jul | -0.5 | 0.6 | -0.2 | 0.1 | - | 0.1 | 0.3 |
|  | Aug | -0.4 | -0.2 | 0.3 | 1.4 | 0.6 | 0.2 | - |
|  | Sep | 0.1 | 0.2 | -0.2 | -1.0 | -0.7 | -0.1 | -0.5 |
|  | Oct | -0.3 | -1.0 | 0.1 | 0.6 | 0.3 | -0.1 | 0.4 |
|  | Nov | -0.7 | 0.6 | 0.7 | -0.7 | 0.3 | - | -0.1 |
|  | Dec | -0.9 | 1.1 | -0.2 | 2.9 | -0.3 | -0.3 | - |
| 2019 | Jan | -0.6 | -1.0 | - | 0.2 | 0.3 | 0.4 | -1.2 |
|  | Feb | -1.2 | 0.9 | -0.5 | -1.5 | 0.6 | -0.3 | -0.1 |
|  | Mar | -0.7 | -1.4 | -0.6 | -5.9 | - | -0.4 | 0.2 |
|  | Apr | - | 0.9 | -1.3 | 0.2 | 0.3 | -0.7 | 2.8 |
|  | May | -0.3 | -1.3 | -0.1 | - | -0.4 | -0.4 | -1.5 |
|  | Jun | -0.6 | 1.0 | -0.5 | -2.1 | -0.8 | 1.6 | -1.5 |
|  | Jul | 0.6 | - | -1.0 | -0.3 | -0.7 | 0.5 | - |

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

| 2017 | May | -0.9 | -0.6 | 0.9 | -3.0 | -2.3 | -1.0 | -1.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.8 | -0.9 | 0.6 | -2.7 | -2.7 | -1.2 | -1.8 |
|  | Jul | -0.7 | -1.2 | 0.3 | -2.5 | -2.9 | -0.8 | -1.6 |
|  | Aug | -0.8 | -1.3 | 0.2 | -2.2 | -2.9 | -0.4 | -1.1 |
|  | Sep | -0.8 | -1.2 | -0.5 | -1.9 | -3.0 | -0.2 | -0.5 |
|  | Oct | -0.7 | -1.5 | -0.5 | -1.4 | -2.7 | 0.1 | -0.8 |
|  | Nov | -0.4 | -1.6 | -0.3 | -1.1 | -2.2 | -0.7 | 0.3 |
|  | Dec | - | -1.5 | 0.5 | -0.6 | -1.0 | -1.2 | 1.0 |
| 2018 | Jan | -0.1 | -1.9 | 0.7 | -0.3 | -0.2 | -1.7 | 1.1 |
|  | Feb | -0.5 | -2.8 | 1.0 | - | 0.1 | -1.5 | 0.1 |
|  | Mar | -1.8 | -3.6 | 1.6 | 0.2 | - | -1.5 | -0.7 |
|  | Apr | -2.8 | -3.0 | 1.6 | 0.5 | -0.1 | -1.6 | -0.4 |
|  | May | -2.7 | -2.4 | 2.6 | 0.9 | - | -1.7 | - |
|  | Jun | -2.5 | -2.0 | 2.8 | 0.4 | - | -1.6 | 0.1 |
|  | Jul | -2.2 | -1.6 | 3.8 | - | 0.1 | -1.7 | 0.1 |
|  | Aug | -2.6 | -0.9 | 3.7 | 0.3 | 0.7 | -1.7 | - |
|  | Sep | -2.7 | -1.0 | 3.7 | 0.5 | 0.9 | -1.5 | 0.2 |
|  | Oct | -2.8 | -1.1 | 3.8 | 0.7 | 0.9 | -2.0 | 0.5 |
|  | Nov | -2.7 | -1.1 | 3.5 | 0.2 | 0.7 | -1.5 | 0.3 |
|  | Dec | -3.6 | -0.7 | 2.8 | 0.6 | 0.5 | -1.4 | 0.1 |
| 2019 | Jan | -4.0 | -0.3 | 2.1 | 1.7 | 0.4 | -0.6 | -0.9 |
|  | Feb | -4.7 | 0.8 | 1.4 | 2.5 | 0.7 | -0.6 | -1.6 |
|  | Mar | -4.5 | 0.8 | 0.9 | 0.6 | 1.1 | -0.8 | -2.1 |
|  | Apr | -4.4 | 0.8 | -0.2 | -2.0 | 1.7 | -1.0 | -1.0 |
|  | May | -4.8 | 0.1 | -1.3 | -4.2 | 1.4 | -1.2 | -0.2 |
|  | Jun | -5.4 | 0.2 | -2.1 | -4.8 | 0.9 | -1.0 | - |
|  | Jul | -5.5 | 0.1 | -2.9 | -5.5 | 0.2 | -0.4 | -1.0 |

[^1]percentage changes shown in these tables are due to rounding
is the earliest in the table to have been revised.

|  |  | Chained volume indices of gross value added |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Percentage change, latest 3 months on previous 3 months

| 2017 | May | -0.8 | 0.4 | 0.3 | 0.5 | 0.2 | 1.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | -0.8 | 1.2 | 0.1 | 0.9 | - | 1.7 |
|  | Jul | -0.7 | 0.1 | -0.3 | 0.3 | 0.4 | 0.5 |
|  | Aug | -0.4 | -0.5 | - | 2.1 | - | 0.9 |
|  | Sep | -0.6 | -0.1 | - | 1.8 | 0.3 | 0.3 |
|  | Oct | -0.3 | 1.0 | 0.8 | 1.9 | 0.5 | 0.4 |
|  | Nov | -0.3 | 0.7 | 0.1 | -2.3 | 1.0 | -0.9 |
|  | Dec | -0.2 | 0.2 | -0.2 | -2.2 | 1.0 | -0.7 |
| 2018 | Jan | -0.4 | -0.8 | -1.7 | -2.6 | - | -0.7 |
|  | Feb | -0.4 | -1.2 | -1.8 | -0.8 | -0.5 | -0.4 |
|  | Mar | -0.5 | -2.4 | -2.5 | -0.8 | -1.1 | -0.5 |
|  | Apr | -0.2 | -3.0 | -1.5 | 0.2 | -0.2 | -0.6 |
|  | May | 0.1 | -4.0 | -1.0 | 1.3 | 0.4 | -0.5 |
|  | Jun | 0.6 | -3.9 | -0.2 | 1.7 | 0.8 | -0.9 |
|  | Jul | 0.6 | -3.6 | 0.1 | 0.9 | 0.8 | -1.5 |
|  | Aug | 0.6 | -1.8 | 0.3 | 0.3 | - | -1.3 |
|  | Sep | 0.3 | -1.1 | 0.7 | 0.2 | 0.1 | -1.0 |
|  | Oct | 0.2 | -0.9 | 0.7 | 0.3 | -0.3 | 0.4 |
|  | Nov | -0.1 | -1.4 | 0.6 | - | 1.0 | 1.0 |
|  | Dec | - | -0.8 | 0.2 | -0.3 | 0.4 | 1.5 |
| 2019 | Jan | 0.3 | 0.1 | 0.4 | -0.4 | 0.8 | 1.2 |
|  | Feb | 0.5 | 0.9 | 1.2 | -0.3 | -0.5 | 1.2 |
|  | Mar | 0.3 | 0.2 | 2.5 | -0.2 | 0.3 | 1.5 |
|  | Apr | -0.2 | -0.9 | 2.3 | -0.3 | -0.4 | 1.1 |
|  | May | -0.5 | -1.4 | 1.4 | -0.4 | 0.1 | 0.9 |
|  | Jun | -0.6 | -0.8 | 0.1 | -1.9 | -0.1 | 0.7 |
|  | Jul | -0.3 | -0.6 | - | -3.9 | 0.9 | 0.8 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding. |  |  |  | at data earli | been <br> have |  |

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


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

| 2017 | May | 0.6 | -0.5 | -0.6 | -1.0 | - | -0.1 | -0.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jun | 0.4 | -1.1 | -0.5 | 0.1 | 0.2 | -0.5 | -1.6 |
|  | Jul | -0.1 | -1.1 | -1.2 | 0.5 | 0.4 | -0.4 | -1.0 |
|  | Aug | -0.4 | -1.1 | -0.9 | 0.7 | -0.2 | -0.2 | -0.3 |
|  | Sep | -0.5 | -0.5 | -0.7 | 0.2 | -0.5 | - | -0.2 |
|  | Oct | -0.3 | -0.4 | -0.3 | 0.2 | -0.5 | 0.4 | -0.7 |
|  | Nov | -0.5 | - | 0.3 | 0.4 | -0.2 | -0.2 | -0.5 |
|  | Dec | -0.1 | -0.4 | 1.3 | 0.8 | 0.3 | -0.5 | 0.1 |
| 2018 | Jan | -0.3 | -0.3 | 2.1 | 0.4 | 0.6 | -1.5 | 1.0 |
|  | Feb | -0.3 | -1.1 | 2.1 | 0.1 | 0.5 | -1.1 | 1.3 |
|  | Mar | -1.6 | -1.3 | 1.3 | -0.8 | -0.1 | -0.6 | 0.9 |
|  | Apr | -2.0 | -1.0 | 0.7 | -0.6 | -0.4 | - | 0.1 |
|  | May | -1.6 | -0.2 | 0.7 | -0.2 | -0.2 | -0.3 | -0.4 |
|  | Jun | -0.2 | 0.3 | 0.7 | 0.2 | 0.2 | -0.6 | -0.6 |
|  | Jul | 0.6 | 0.1 | 0.8 | - | 0.5 | -0.6 | -0.5 |
|  | Aug | -0.1 | 0.3 | 0.4 | 0.1 | 0.6 | -0.2 | -0.2 |
|  | Sep | -0.6 | 0.5 | 0.1 | 0.4 | 0.3 | 0.1 | -0.1 |
|  | Oct | -1.0 | 0.2 | - | 0.9 | 0.2 | 0.2 | -0.2 |
|  | Nov | -0.6 | -0.2 | 0.3 | 0.2 | -0.1 | - | -0.2 |
|  | Dec | -1.0 | -0.1 | 0.4 | 0.9 | 0.1 | -0.3 | -0.1 |
| 2019 | Jan | -1.6 | 0.5 | 0.6 | 1.5 | 0.1 | -0.2 | -0.4 |
|  | Feb | -2.1 | 0.9 | 0.1 | 2.4 | 0.3 | -0.1 | -0.8 |
|  | Mar | -2.4 | 0.1 | -0.5 | -1.1 | 0.6 | - | -1.3 |
|  | Apr | -2.3 | - | -1.4 | -4.4 | 0.8 | -0.5 | - |
|  | May | -1.8 | -1.0 | -1.9 | -6.8 | 0.6 | -1.0 | 1.1 |
|  | Jun | -1.3 | -0.3 | -2.1 | -4.8 | - | -0.9 | 1.4 |
|  | Jul | -0.8 | -0.4 | -1.9 | -3.2 | -0.9 | 0.1 | -0.5 |
| 1 | Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding. |  |  |  | hat da st in th | have ve be | The p |  |

Office for
National Statistics

| Next publication: | 11 November 2019 |
| :---: | :---: |
| 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
    is the earliest in the table to have been revised

[^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

