## Index of Production, UK: March 2016

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.

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## 1. Main points

Total production output is estimated to have decreased by 0.4\% between Quarter 4 (Oct to Dec) 2015 and Quarter 1 (Jan to Mar) 2016. The largest contribution to the quarterly decrease came from mining \& quarrying, which fell by 2.3\%.

Manufacturing, the largest component of production, is estimated to have decreased by $0.4 \%$ between Quarter 4 (Oct to Dec) 2015 and Quarter 1 (Jan to Mar) 2016. The largest contribution to the decrease came from the manufacture of coke \& refined petroleum products, which decreased by 12.1\%.

Total production output is estimated to have decreased by 0.2\% in March 2016 compared with March 2015. There were decreases in 2 of its 4 main sectors, with the largest contribution coming from manufacturing, which decreased by $1.9 \%$.

Total production output is estimated to have increased by $0.3 \%$ in March 2016 compared with February 2016. There were increases in 3 of the 4 main sectors, with the largest contribution coming from electricity, gas, steam \& air conditioning output, which increased by $3.3 \%$.

Manufacturing output increased by $0.1 \%$ in March 2016 compared with February 2016. The largest contribution to the increase came from the manufacture of transport equipment, which increased by $2.7 \%$.

In the 3 months to March 2016, production and manufacturing were $10.0 \%$ and $6.9 \%$ respectively below their level reached in the pre-downturn GDP peak in Quarter 1 (Jan to Mar) 2008.

The earliest period open for revision in this release was January 2016. The Index of Production monthly growth rate for January 2016 was revised upwards by 0.4 percentage points from $0.2 \%$ to $0.6 \%$. This was primarily due to a revision to the growth rate for the production of crude petroleum \& natural gas, as a result of new data received by the Department for Energy and Climate Change (DECC). This revision was already incorporated in the loP estimate contained within the Preliminary Estimate of Gross Domestic Product published on 27 April 2016.

This release of data estimates that total production decreased by $0.4 \%$ between Quarter 4 (Oct to Dec) 2015 and Quarter 1 (Jan to Mar) 2016, the same as that published in the recent preliminary estimate of GDP. Hence there is no impact on the previously published GDP estimate for Quarter 1 (Jan to Mar) 2016.

## 2. Index of Production headline figures

This bulletin presents the monthly estimates of the Index of Production (loP) for the UK production industries, March 2016. The loP is one of the earliest indicators of growth and it measures output in the manufacturing (the largest component of production), mining \& quarrying, energy supply and water supply \& waste management industries. The production industries account for $14.9 \%$ of the output approach to the measurement of gross domestic product.

IoP values are referenced to 2012 so that the average for 2012 is equal to 100 . Therefore, an index value of 110 would indicate that output is $10 \%$ higher than the average for 2012. The index estimates are mainly based on a monthly business survey (MBS) of approximately 6,000 businesses, covering all the territory of the UK without geographical breakdown. The total loP estimate and various breakdowns are widely used in private and public sector institutions. Care should be taken when using the month-on-month growth rates due to their volatility. All figures contained within this release are chained volume seasonally adjusted estimates, unless otherwise stated.

This release presents:

- the most recent loP figures
- the economic context to the loP
- GDP impact and components
- a supplementary analysis to the loP
- spotlight
- background notes section including an assessment of the quality of the loP, as well as an explanation of the terms used in this bulletin

Table 1 shows the main figures for this release. Figure 1 shows the production and manufacturing series from December 2013 to March 2016.

Table 1: Index of Production main figures, March 2016, UK
Percentage change

|  | Index number <br> $(2012=100)$ | Most recent <br> month on a year <br> earlier | Most recent 3 <br> months on a year <br> earlier | Most recent month <br> on previous month | Most recent 3 months <br> on previous 3 months |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Production | 101.2 | -0.2 | 0.1 | 0.3 | -0.4 |
| Manufacturing | 100.3 | -1.9 | -1.3 | 0.1 | -0.4 |

Source: Office for National Statistics

Figure 1: Seasonally adjusted production and manufacturing, December 2013 to March 2016, UK
Figure 1: Seasonally adjusted production and manufacturing, December 2013 to March 2016, UK

Index year, 2012=100


## Source: Primarily Monthly Business Survey (Production and Services) - Office for National Statistics

## 3. Quality of the Index of Production

We have developed guidelines for measuring statistical quality; these are based upon the 5 European Statistical System (ESS) quality dimensions. The loP in its current form adheres to these requirements. One important dimension for measuring statistical quality is accuracy. That is, the extent to which the estimate measures the underlying "true" value of the output growth (of the production industries) in the UK for a particular period. Although the loP meets its legal requirements for statistical accuracy, still as in all survey-based estimates, by definition, its estimates are subject to statistical uncertainty or errors. These errors consist of 2 main elements; the sampling error and the non-sampling error.

For many well-established statistics we measure and publish the sampling error associated with the estimate, using this as an indicator of accuracy. The loP however, is constructed from a variety of data sources, some of which are not based on random samples. As a result, we currently do not publish a measure of the sampling error associated with the loP underlying data, mainly the monthly business survey (MBS). However, research is currently under way to attempt to measure the standard error and the results of this will be published on completion.

Non-sampling errors are not easy to quantify but can be caused by coverage issues, measurement, processing and non-response. The response rate gives an indication of the likely impact of non-response error on the survey estimates. From January 2015, the MBS response rates for data included in the loP publication have been published in the background notes "methods" section of the statistical bulletin. This is to give further information of the percentages of the amount of turnover and questionnaire forms returned. We publish MBS historical response rates back to 2010.

A further dimension of measuring accuracy is reliability, which can be measured using evidence from analyses of revisions to assess the closeness of early estimates to subsequent estimated values. Revisions are an inevitable consequence of the trade-off between timeliness and accuracy.

Figures for the most recent months are provisional and subject to revision in light of:

- late responses to surveys and administrative sources
- forecasts being replaced by actual data
- revisions to seasonal adjustment factors, which are re-estimated every month and reviewed annually

Revisions to the loP are typically small (around 0.1 to 0.2 percentage points), with the frequency of upward and downward revisions broadly equal.

Further information on the most recent revisions analysis can be found in the revisions to loP section and in the revision triangles section in the bulletin background notes.

It should be noted that care should be taken when using the month-on-month growth rates, due to their volatility. Further information on the latest quality and methodology information (QMI) for the loP can be found in the QMI report. Furthermore, the loP is constantly being reviewed and improved for accuracy and uncertainty as part of the $\operatorname{GDP}(\mathrm{O})$ improvement project; further details of improvements are published each year as part of a suite of Blue Book articles. A full list of the $\operatorname{GDP}(\mathrm{O})$ improvement project articles can be found on the Improvements page of our website.

## 4 . Economic context

Production output grew in March 2016, following a contraction in February and growth in January 2016. Overall, the level of production in the latest month is $0.2 \%$ lower than the level in March 2015 but $0.9 \%$ above its level in March 2014. Moreover, in the latest quarter (Quarter 1 (Jan to Mar) 2016) production output contracted for a second consecutive quarter but remains $0.1 \%$ above its level in Quarter 1 (Jan to Mar) 2015.

Throughout the previous 12 months, manufacturing the largest component of production - experienced alternating periods of expansion and contraction which have resulted in current manufacturing levels being $1.9 \%$ lower than those recorded in March 2015 (for more information and analysis of the latest figures see the production and sectors supplementary analysis section of the bulletin).

Looking over a longer-term period - from Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2016 production and its main components have followed very different paths (Figure 2). Over this period, the electricity, gas, steam \& air conditioning and water supply, sewerage \& waste management sectors grew at compound average growth rates of $0.2 \%$ and $0.5 \%$ per quarter respectively, while production as a whole contracted at a compound average growth rate of $0.1 \%$ per quarter. Over the same period, manufacturing and mining \& quarrying contracted at compound average growth rates of $0.1 \%$ and $1.1 \%$ per quarter respectively. A compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods.

During the economy's downturn (from Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009), production and all of its components contracted. However, the path of mining \& quarrying was broadly unaffected by the economy's downturn, with its output continuing to decline (Figure 2). Between the economy's peak in Quarter 1 (Jan to Mar) 2008 and the economy's trough in Quarter 2 (Apr to June) 2009, manufacturing experienced the largest contraction in output (12.3\%) followed by total production (10.6\%), water supply, sewerage \& waste management ( $8.8 \%$ ), mining \& quarrying ( $7.3 \%$ ) and electricity, gas, steam \& air conditioning (3.5\%).

Following the economy's downturn (from Quarter 3 (July to Sep) 2009 to Quarter 1 (Jan to Mar) 2016), total production remained broadly stable while manufacturing and water supply, sewerage \& waste management returned to growth at compound average growth rates of $0.2 \%$ and $0.8 \%$ per quarter respectively. Over the same period, mining \& quarrying and electricity, gas, steam \& air conditioning continued to contract at compound average growth rates of $1.2 \%$ and $0.3 \%$ per quarter respectively.

In Quarter 1 (Jan to Mar) 2016, production and manufacturing output remained below their Quarter 1 (Jan to Mar) 2008 levels by $10.0 \%$ and $6.9 \%$, respectively. Moreover, in Quarter 1 (Jan to Mar) 2016, mining \& quarrying and electricity, gas, steam \& air conditioning output, which continued to decline following the downturn, were $32.5 \%$ and $12.2 \%$ below their respective values in Quarter 1 (Jan to Mar) 2008. In contrast, water supply, sewerage \& waste management is the only main sector within production to have surpassed its value in Quarter 1 (Jan to Mar) 2008, by 11.7\%, as of Quarter 1 (Jan to Mar) 2016.

Headline GDP surpassed its pre-downturn peak in Quarter 2 (Apr to June) 2013 and services remains the only headline industry grouping to have achieved this. This is consistent with the historical trend of services growing at a faster rate than production and manufacturing, despite the fact that productivity in the production industries (manufacturing in particular) has on average grown at a faster rate than in the services industries since 1997 (more information can be found in Gross Domestic Product, Preliminary Estimate: January to March 2016 and UK Productivity: Oct to Dec 2015). The slower output growth and increased productivity, therefore, reflect the falling share of the labour force employed in manufacturing, which fell from $16.5 \%$ to $9.6 \%$ between 1997 and 2015 ( UK Labour Market: April 2016, EMP13).

Over the past year the manufacturing industry has experienced deflation, in terms of the prices manufacturers pay for materials and fuels used in the production process (input prices) and the prices they charge for the goods they produce (output prices). Input prices paid by UK manufacturers fell by $6.5 \%$ in the year to March 2016, from a fall of $8.2 \%$ in the year to February 2016. Output prices have also experienced deflation, falling by $0.9 \%$ in the year to March 2016 (more information can be found in Producer Price Inflation: March 2016).

Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK

Figure 2: Index of production and sub-components, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK


Source: Primarily Monthly Business Survey (Production and Services) - Office for National Statistics
Notes:

1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

Figure 3 shows the share of nominal gross value added (GVA) accounted for by production in the UK and a selection of other major economies (more information on data for France, Germany, Italy, Japan and the USA can be found on the Organisation for Economic Co-operation and Development (OECD) website). In 1997, the share of nominal GVA accounted for by production in the UK was $23.3 \%$, around the middle of the range relative to the other economies. By 2014, the UK had become relatively less reliant on production, as its share fell to $14.8 \%$ of nominal GVA.

The same trend was observed in manufacturing, where the share of nominal GVA fell from $18.4 \%$ in 1997 to $10.6 \%$ in 2014. Moreover, between 1997 and 2014, the composition of production in the UK changed, with the share of production attributed to manufacturing decreasing from $78.8 \%$ in 1997 to $72.1 \%$ in 2014.

Figure 3: Production as a percentage of nominal GVA in comparable economies to the UK, 1997 to 2014

## Figure 3: Production as a percentage of nominal GVA in comparable economies to the UK, 1997 to 2014

30
Percentage


Source: Office for National Statistics, Organisation for Economic Co-operation and Development (OECD)

## 5. Gross domestic product (GDP) impact and components

In this release, periods back to January 2016 were open for revision, in line with the National Accounts revisions policy.

The preliminary estimate of GDP, published on 27 April 2016, contained a forecasted decrease of $0.4 \%$ for production in Quarter 1 (Jan to Mar) 2016. This release also estimates that production decreased by $0.4 \%$ in Quarter 1 (Jan to Mar) 2016; therefore there is no impact on the recently published GDP preliminary estimate.

The estimates for the production industries are generally the first of the main components for the output approach to the measurement of GDP to be published (agriculture, construction and services are the other components). A forecast for all the components are available for Quarter 1 (Jan to Mar) 2016. Details of the data already published can be found in Table 2. The Retail Sales Index reported in Table 2 is not a direct component of the output approach to measuring GDP. It does, however, feed into estimates of GDP in 2 ways. Firstly, it feeds into the services industries when GDP is measured from the output approach. Secondly, it is a data source used to measure household final consumption expenditure, which feeds into GDP estimates when measured from the expenditure approach. Output in the construction industry for March 2016 will be published on 13 May 2016 and services output for the same period on 26 May 2016.

Table 2: Components of GDP, March 2016, UK

|  |  |  |  |  |  |  | Percentage change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Publication | Percentage of GDP4 | Release date | Month or quarter of GDP2 | Most recent 3 months on a year earlier | Most recent 3 months on 3 months earlier ${ }^{3}$ | Most recent month on the same month a year ago ${ }^{3}$ | Most recent month on the previous month |
| Index of | 14.9 | 11 May | $\begin{gathered} \text { Mar } \\ 2016 \end{gathered}$ | 0.1 | -0.4 | -0.2 | 0.3 |
| Production ${ }^{1}$ |  |  | $\begin{gathered} \text { Feb } \\ 2016 \end{gathered}$ | 0.1 | -1.2 | 0.1 | -0.2 |
| Construction | 5.9 | 15 Apr | $\begin{aligned} & \text { Feb } \\ & 2016 \end{aligned}$ | 0.3 | 1.5 | 0.3 | -0.3 |
|  |  |  | Jan 2016 | 0.1 | 1.1 | -0.9 | -0.4 |
| Index of | 78.6 | 27 Apr | $\begin{aligned} & \text { Feb } \\ & 2016 \end{aligned}$ | 2.6 | 0.7 | 2.5 | 0.1 |
| services |  |  | Jan 2016 | 2.6 | 0.9 | 2.8 | 0.1 |
| Retail |  | 21 Apr | $\begin{gathered} \text { Mar } \\ 2016 \end{gathered}$ | 3.7 | 0.8 | 2.7 | -1.3 |
| sales |  |  | $\begin{gathered} \text { Feb } \\ 2016 \end{gathered}$ | 3.5 | 0.5 | 3.6 | -0.5 |
| Agriculture | 0.7 |  | Q1 2016 | 1.1 | -0.1 | .. | . |

Source: Office for National Statistics
Notes:

1. The data for the index of production reflects the latest revisions published as part of this release.
2. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).
3. Any apparent inconsistencies between this table and the latest GDP estimate are due to rounding.
4. 'Percentage of GDP' column does not add up to 100 due to rounding.

## 6 . Production and sectors supplementary analysis

Table 3: Headline growth rates and contributions for the Index of Production, March 2016, UK

| Description <br> 1 | \% of <br> production | Month on same month a <br> year ago growth (\%) | Contribution to <br> production (\% <br> points) | Month on previous <br> month growth (\%) | Contribution to <br> production (\% <br> points) |
| :--- | ---: | ---: | ---: | ---: | ---: |
| loP | 100.0 | -0.2 | -0.2 | 0.3 | 0.3 |
| Sector B | 13.5 | 4.7 | 0.61 | -0.4 | -0.06 |
| Division 06 | 10.6 | 10.9 | 1.05 | -0.1 | -0.01 |
| Sector C | 69.1 | -1.9 | -1.35 | 0.1 | 0.09 |
| Sector D | 9.3 | -0.6 | -0.05 | 3.3 | 0.28 |
| Sector E | 8.1 | 6.6 | 0.57 | 0.2 | 0.02 |

Source: Office for National Statistics
Notes:
1: loP Total Index of Production; Sector B Mining \& quarrying; and within this Division 06 Oil \& gas extraction; Sector C Manufacturing; Sector D Electricity, gas, steam \& air conditioning; and Sector E Water supply, sewerage \& waste management.

Table 4: Growths and contributions to production, quarter on previous quarter, March 2016, UK

| Sector | Summary Description | Quarter on previous quarter growth (Percentage) | Contribution to production (Percentage points) |
| :---: | :---: | :---: | :---: |
| loP | Index of Production | -0.4 | -0.39 |
| Sector <br> B | Total Mining \& Quarrying | -2.3 | -0.32 |
| 5 | Coal \& Lignite | -57.0 | -0.04 |
| 6 | Crude petroleum \& Natural gas | -1.4 | -0.15 |
| 789 | Other mining \& quarrying | -4.4 | -0.13 |
| Sector C | Total Manufacturing | -0.4 | -0.31 |
| CA | Food, beverages \& tobacco | -0.5 | -0.06 |
| CB | Textiles \& leather products | -3.0 | -0.06 |
| CC | Wood, paper \& printing | -0.3 | -0.02 |
| $C D$ | Coke \& petroleum | -12.1 | -0.23 |
| CE | Chemical products | -2.4 | -0.09 |
| CF | Pharmaceutical products | -1.8 | -0.10 |
| CG | Rubber \& plastic products | 1.6 | 0.09 |
| CH | Metal products | 1.6 | 0.12 |
| Cl | Computer, electronic \& optical | -2.1 | -0.09 |
| CJ | Electrical equipment | -2.9 | -0.06 |
| CK | Machinery \& equipment | 0.1 | 0.00 |
| CL | Transport equipment | -1.4 | -0.13 |
| CM | Other manufacturing \& repair | 4.9 | 0.31 |
| Sector D | Total Electricity \& Gas | 0.4 | 0.03 |
| 35.1 | Electric power generation, transmission \& distribution | $-2.7$ | -0.17 |
| 35.2-3 | Manufacture of gas; distribution of gaseous fuels through mains; steam \& aircon supply | 9.3 | 0.20 |
| Sector E | Total Water | 2.3 | 0.20 |
| 36 | Water collection, treatment \& supply | -0.6 | -0.01 |
| 37 | Sewerage | 0.9 | 0.02 |
| 38 | Waste collection, treatment \& disposal activities; materials recovery | 4.6 | 0.19 |
| 39 | Remediation activities \& other waste management services | 9.5 | 0.01 |

Source: Office for National Statistics

Table 5: Growths and contributions to production, month on same month a year ago, March 2016, UK

| Sector | Summary Description | Month on same month a year ago growth (Percentage) | Contribution to production (Percentage points) |
| :---: | :---: | :---: | :---: |
| IoP | Index of Production | -0.2 | -0.23 |
| Sector B | Total Mining \& Quarrying | 4.7 | 0.61 |
| 5 | Coal \& Lignite | -80.2 | -0.11 |
| 6 | Crude petroleum \& Natural gas | 10.9 | 1.05 |
| 789 | Other mining \& quarrying | -10.4 | -0.34 |
| Sector C | Total Manufacturing | -1.9 | -1.35 |
| CA | Food, beverages \& tobacco | -0.4 | -0.05 |
| CB | Textiles \& leather products | -7.1 | -0.14 |
| CC | Wood, paper \& printing | -1.7 | -0.09 |
| CD | Coke \& petroleum | -1.8 | -0.03 |
| CE | Chemical products | -4.2 | -0.17 |
| CF | Pharmaceutical products | -2.4 | -0.14 |
| CG | Rubber \& plastic products | -0.7 | -0.04 |
| CH | Metal products | -4.0 | -0.31 |
| Cl | Computer, electronic \& optical | -5.3 | -0.22 |
| CJ | Electrical equipment | -6.4 | -0.13 |
| CK | Machinery \& equipment | -6.3 | -0.28 |
| CL | Transport equipment | 3.2 | 0.28 |
| CM | Other manufacturing \& repair | -0.4 | -0.03 |
| Sector D | Total Electricity \& Gas | -0.6 | -0.05 |
| 35.1 | Electric power generation, transmission \& distribution | -3.1 | -0.20 |
| 35.2-3 | Manufacture of gas; distribution of gaseous fuels through mains; steam \& aircon supply | 6.4 | 0.15 |
| Sector E | Total Water | 6.6 | 0.57 |
| 36 | Water collection, treatment \& supply | -1.6 | -0.04 |
| 37 | Sewerage | 7.9 | 0.18 |
| 38 | Waste collection, treatment \& disposal activities; materials recovery | 10.4 | 0.40 |
| 39 | Remediation activities \& other waste management services | 17.8 | 0.01 |

Source: Office for National Statistics

Table 6: Growths and contributions to production, month on previous month, March 2016, UK

| Sector | Summary Description | Month on previous month growth (Percentage) | Contribution to production (Percentage points) |
| :---: | :---: | :---: | :---: |
| loP | Index of Production | 0.3 | 0.33 |
| Sector <br> B | Total Mining \& Quarrying | -0.4 | -0.06 |
| 5 | Coal \& Lignite | -6.1 | 0.00 |
| 6 | Crude petroleum \& Natural gas | -0.1 | -0.01 |
| 789 | Other mining \& quarrying | -1.4 | -0.04 |
| Sector C | Total Manufacturing | 0.1 | 0.09 |
| CA | Food, beverages \& tobacco | -1.4 | -0.15 |
| CB | Textiles \& leather products | -1.3 | -0.03 |
| CC | Wood, paper \& printing | 0.7 | 0.04 |
| $C D$ | Coke \& petroleum | -5.1 | -0.09 |
| CE | Chemical products | -0.4 | -0.02 |
| CF | Pharmaceutical products | -0.2 | -0.01 |
| CG | Rubber \& plastic products | -0.4 | -0.03 |
| CH | Metal products | 0.8 | 0.06 |
| Cl | Computer, electronic \& optical | -1.2 | -0.05 |
| CJ | Electrical equipment | -2.6 | -0.05 |
| CK | Machinery \& equipment | 2.9 | 0.12 |
| CL | Transport equipment | 2.7 | 0.24 |
| CM | Other manufacturing \& repair | 0.7 | 0.05 |
| Sector D | Total Electricity \& Gas | 3.3 | 0.28 |
| 35.1 | Electric power generation, transmission \& distribution | 2.3 | 0.14 |
| 35.2-3 | Manufacture of gas; distribution of gaseous fuels through mains; steam \& aircon supply | 6.1 | 0.14 |
| Sector E | Total Water | 0.2 | 0.02 |
| 36 | Water collection, treatment \& supply | -0.1 | 0.00 |
| 37 | Sewerage | -1.1 | -0.03 |
| 38 | Waste collection, treatment \& disposal activities; materials recovery | 1.2 | 0.05 |
| 39 | Remediation activities \& other waste management services | -0.1 | 0.00 |

Source: Office for National Statistics

## Total production

Total production output decreased by $0.4 \%$ in Quarter 1 (Jan to Mar) 2016 compared with Quarter 4 (Oct to Dec) 2015 (Table 4). This decrease was the same as forecasted in the recently published Gross Domestic Product: Preliminary Estimate, Quarter 1 (Jan to Mar) 2016. The quarterly decrease in total production reflected decreases of $2.3 \%$ in mining \& quarrying output and $0.4 \%$ in manufacturing output. Partially offsetting these decreases were increases of $2.3 \%$ in water supply, sewerage \& waste management and $0.4 \%$ in electricity, gas, steam \& air conditioning output.

Total production output decreased by $0.2 \%$ in March 2016 compared with March 2015 (Table 5). There were decreases in 2 of its 4 main sectors. The largest contribution came from manufacturing, which decreased by $1.9 \%$ and contributed -1.3 percentage points to total production. Output in the electricity, gas, steam \& air conditioning sector decreased by $0.6 \%$ and contributed -0.1 percentage points to total production. These decreases were largely offset by increases in mining \& quarrying, which increased by $4.7 \%$ and contributed 0.6 percentage points to total production and in water supply, sewerage \& waste management, which increased by $6.6 \%$ and contributed 0.6 percentage points to total production.

Between February 2016 and March 2016, total production increased by $0.3 \%$ following a fall of $0.2 \%$ in the previous month (Table 6). There were increases in 3 of the 4 main sectors. The largest contribution came from the electricity, gas, steam \& air conditioning sector, which increased by $3.3 \%$ and contributed 0.3 percentage points to total production. There were also increases in manufacturing output, which increased by $0.1 \%$ and contributed 0.1 percentage points to total production and in water supply, sewerage \& waste management output, which increased by $0.2 \%$ with a negligible contribution to total production. The only main sector to decrease was mining \& quarrying, which decreased by $0.4 \%$ and contributed -0.1 percentage points to total production.

## Manufacturing

Manufacturing output decreased by $0.4 \%$ in Quarter 1 (Jan to Mar) 2016 compared with Quarter 4 (Oct to Dec) 2015 , in line with the estimate contained within the recent preliminary estimate of GDP. The sub-sector with the largest contribution to this decrease was the manufacture of coke \& refined petroleum products, which decreased by $12.1 \%$, the largest fall since December 2012 and contributed -0.2 percentage points to total production (Table 4). Anecdotal evidence from the Department for Energy and Climate Change (DECC) suggested a reason for the decrease was that some refineries delayed their usual maintenance period from Quarter 4 (Oct to Dec) 2015 to Quarter 1 (Jan to Mar) 2016.

In contrast, the manufacturing sub-sector with the largest upward contribution to total production in Quarter 1 (Jan to Mar) 2016 was other manufacturing \& repair (for further information on the characteristics of this industry see previous spotlight). This sub-sector increased by $4.9 \%$ with a contribution of 0.3 percentage points to total production. This was the largest quarterly increase in this sector since December 2009, when it increased by $5.5 \%$. The largest contribution to the growth within this sub-sector came from the other manufacturing industry, which increased by $9.3 \%$ and contributed 0.2 percentage points to total production. Evidence suggested increased output and exports over the quarter, especially during the month of January, were contributing factors.

Manufacturing output decreased by $1.9 \%$ between March 2015 and March 2016 contributing -1.3 percentage points to total production. Output decreased in 12 of the 13 manufacturing sub-sectors compared with a year ago (Table 5). The manufacturing sub-sector with the largest downward contribution to total production output was the manufacture of basic metals \& metal products, which decreased by $4.0 \%$ and contributed -0.3 percentage points to total production. This was the ninth consecutive decrease since June 2015. The largest contribution to the fall within this sub-sector came from the manufacture of basic iron \& steel, which decreased by $37.3 \%$ compared with a year ago and contributed -0.3 percentage points to total production. Anecdotal evidence suggested shutdowns within the industry were contributing factors to the decrease.

In contrast, the only manufacturing sub-sector with an upward contribution to total production compared with a year ago was the manufacture of transport equipment. This sub-sector increased by $3.2 \%$, continuing the upward trend since August 2014, and contributed 0.3 percentage points to total production. The largest contribution to the growth within this sub-sector came from the manufacture of motor vehicles, trailers \& semi trailers, which increased by $5.0 \%$ and contributed 0.2 percentage points to total production. Anecdotal evidence suggested increased exports to be a contributing factor.

Manufacturing output increased by $0.1 \%$ between February 2016 and March 2016, having decreased by $0.9 \%$ in the previous month. There were increases in 5 of the 13 manufacturing sub-sectors (Table 6) with the largest upward contribution coming from the manufacture of transport equipment, which increased by $2.7 \%$ and contributed 0.2 percentage points to total production. The largest contribution to the growth within this sub-sector came from the manufacture of motor vehicles, trailers \& semi trailers, which increased by $4.0 \%$ and contributed 0.2 percentage points to total production. Anecdotal evidence suggested increased exports as a contributing factor.

In contrast, the manufacturing sub-sector with the largest downward contribution to total production in March 2016 compared with February 2016 was the manufacture of food products, beverages \& tobacco, which decreased by $1.4 \%$ and contributed -0.2 percentage points to total production. This followed a rise of $0.2 \%$ in the previous month. The largest contribution to the fall within this sub-sector came from the manufacture of other food products, which decreased by $5.0 \%$ and contributed -0.1 percentage points to total production.

## Mining \& quarrying

Mining \& quarrying output decreased by $2.3 \%$ in Quarter 1 (Jan to Mar) 2016, contributing -0.3 percentage points to total production, compared with an estimated fall of $2.2 \%$ contained within the recent preliminary estimate of GDP. The sub-sector with the largest contribution to this quarterly decrease was the extraction of crude petroleum \& natural gas, which decreased by $1.4 \%$ and contributed -0.1 percentage points to total production (Table 4).

Mining \& quarrying output increased by $4.7 \%$ between March 2015 and March 2016 and contributed 0.6 percentage points to total production. The sub-sector with the largest contribution was the extraction of crude petroleum \& natural gas, which increased by $10.9 \%$ and contributed 1.0 percentage points to total production (Table 5). Anecdotal evidence suggested maintenance, due to technical issues in the Buzzard oil field (which feeds into the Forties) in the previous year was a contributing factor to this year's increase in production when compared with the previous year. In addition the change to the investment allowance announced in the summer Budget has also been a contributing factor.

Mining \& quarrying output decreased by $0.4 \%$ in March 2016 compared with February 2016 and contributed -0.1 percentage points to total production. This followed an increase of $3.5 \%$ in the previous month. The sub-sector with the largest downward contribution was other mining \& quarrying, which decreased by $2.6 \%$ with a negligible contribution to total production (Table 6).

## Electricity, gas, steam \& air conditioning

Electricity, gas, steam \& air conditioning output increased by $0.4 \%$ in Quarter 1 (Jan to Mar) 2016 compared with Quarter 4 (Oct to Dec) 2015, having decreased by $2.2 \%$ in the previous quarter (Table 4). This increase was as forecasted within the recent preliminary estimate of GDP. The increase in electricity, gas, steam \& air conditioning output reflected a rise in output in 1 of its 2 sub-sectors, the manufacture of gas $\&$ distribution of gaseous fuels through mains, which increased by $9.3 \%$, having decreased by $5.2 \%$ in the previous quarter and contributed 0.2 percentage points to total production. Anecdotal evidence suggested the increase in the use of gas for the purpose of generating electricity was a contributing factor to the rise.

Electricity, gas, steam \& air conditioning output decreased by $0.6 \%$ in March 2016 compared with March 2015 and contributed -0.1 percentage points to total production (Table 5). This was the fifth consecutive decrease since October 2015, compared with a year ago. This decrease reflected a fall in output in one of its sub-sectors, electric power generation, transmission \& distribution, which decreased by $3.1 \%$ and contributed -0.2 percentage points to total production. Anecdotal evidence suggested an increase in the cost of inputs was a contributing factor.

Electricity, gas, steam \& air conditioning output increased by 3.3\% in March 2016 compared with February 2016 and contributed 0.3 percentage points to total production (Table 6). The increase in electricity, gas, steam \& air conditioning output reflected rises in output in both of its sub-sectors, with each providing a similar contribution to total production. Evidence suggested contributing factors to the growth in the manufacture of gas \& distribution of gaseous fuels through mains were increases in the volume of gas used for the purpose of generating electricity and the slightly lower than average temperature.

## Water \& waste management

Water supply, sewerage \& waste management output increased by 2.3\% in Quarter 1 (Jan to Mar) 2016 compared with Quarter 4 (Oct to Dec) 2015 and contributed 0.2 percentage points to total production (Table 4). This increase was similar to the forecasted increase of $2.0 \%$ contained within the recent preliminary estimate of GDP. The largest contribution to the increase came from waste collection, treatment \& disposal activities, which increased by $4.6 \%$ and contributed 0.2 percentage points to total production. Anecdotal evidence suggested an increase in some of the recycling production activities was a contributing factor.

Water supply, sewerage \& waste management output increased by $6.6 \%$ in March 2016 compared with March 2015 and contributed 0.6 percentage points to total production. This reflected increases in 3 of its 4 sub-sectors' output (Table 5), with the largest contribution coming from waste collection, treatment \& disposal activities, which increased by $10.4 \%$ and contributed 0.4 percentage points to total production.

Water supply, sewerage \& waste management output increased by $0.2 \%$ between February 2016 and March 2016 with a negligible contribution to total production. This increase reflected an increase in only 1 of its 4 subsectors, waste collection, treatment \& disposal activities, which increased by $1.2 \%$ and contributed 0.1 percentage points to total production (Table 6).

## Revisions to loP

Revisions to the Index of Production follow the National Accounts revisions policy. Revisions are caused by a number of factors including, but not limited to revisions to source data due to late responses to the Monthly Business Survey (MBS), actual data replacing forecast data and revisions to seasonal factors that are reestimated every period.

We produce revisions triangles of production and manufacturing growth to provide users with one indication of the reliability of this important indicator. Statistical tests are performed on the average revision to test if it is statistically significantly different from zero. Further information can be found in background note 6 .

In this release of data, periods back to January 2016 were open for revision.

In January 2016, there was an upward revision of 0.4 percentage points to the loP monthly growth rate, from a rise of $0.2 \%$ to $0.6 \%$. This was mainly attributed to an upward revision to the extraction of crude petroleum \& natural gas, from a fall of $6.0 \%$ to a fall of $1.3 \%$, as a result of new data from large oil fields in the North Sea received by DECC.

Further details on the revisions to loP components can be found in the IOP5R tables, located within the dataset section of this release.

## 7 . Industry Spotlight: Manufacture of rubber, plastic \& other non-metallic mineral products

Manufacture of rubber, plastic \& other non-metallic mineral products (sub-sector CG) is one of the 13 sub-sectors within manufacturing and accounts for $8.0 \%$ of total manufacturing output. Around $65 \%$ of the total output in the sub-sector is attributable to the manufacture of rubber \& plastic products (division 22) while the remainder consists of other non-metallic mineral products (division 23) such as manufacture of glass, refectory, clay \& stone products (group 23 Other) and the manufacture of cement, lime, plaster \& articles of concrete (group 23.5-6).

The path of the "manufacturing of rubber, plastic \& other non-metallic mineral products" sub-sector has been more volatile than the path of total manufacturing, with altering periods in which the sub-sector has grown faster and slower than manufacturing (Figure 4). From Quarter 2 (Apr to June) 1997 to Quarter 1 (Jan to Mar) 2008, manufacturing and "manufacture of rubber, plastic products \& other non-metallic products" both grew at compound average growth rates of $0.1 \%$ per quarter. The UK economy's downturn (Quarter 1 (Jan to Mar) 2008 to Quarter 2 (Apr to June) 2009) affected the sector and sub-sector severely, with manufacturing output contracting by $12.3 \%$ while the output of manufacturing of rubber, plastic \& other non-metallic mineral products contracted by $18.2 \%$ over the same period.

Following the downturn (from Quarter 3 (July to Sept) 2009 to Quarter 1 (Jan to Mar) 2016), manufacturing and "manufacturing of rubber, plastic \& other non-metallic mineral products" grew at compound average growth rates of $0.2 \%$ and $0.1 \%$ per quarter respectively. However, in Quarter 1 (Jan to Mar) 2016, the level of output in manufacturing and "manufacturing of rubber, plastic \& other non-metallic mineral products" remained $6.9 \%$ and $14.8 \%$ below their respective levels in Quarter 1 (Jan to Mar) 2008 due to their sharp contraction during the downturn.

Figure 4: Total manufacturing and manufacture of rubber, plastic \& other non-metallic mineral products, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK

> Figure 4: Total manufacturing and manufacture of rubber, plastic \& other non-metallic mineral products, Quarter 1 (Jan to Mar) 1997 to Quarter 1 (Jan to Mar) 2016, UK


- Manufacture of rubber \& plastic products, \& other non-metallic mineral products

Source: Office for National Statistics
Notes:

1. Throughout this release Q1 refers to Quarter 1 (January to March), Q2 refers to Quarter 2 (April to June), Q3 refers to Quarter 3 (July to September) and Q4 refers to Quarter 4 (October to December).

Some of manufacturing of rubber, plastic \& other non-metallic mineral products may be manufactured to be used as inputs into other industries. For example, some of the products produced by manufacture of other non-metallic mineral products are likely to be used in the construction industry (such as glass, clay building materials, bricks, cement, lime and plaster). Figure 5 shows that the 2 series have been tracking each other fairly closely.

Figure 5: Growth in the manufacture of other non-metallic mineral products and construction, quarter-onquarter a year ago, UK 1998 to 2016

> Figure 5: Growth in the manufacture of other non-metallic mineral products and construction, quarter-on-quarter a year ago, UK 1998 to 2016


- Construction - Manufacture of other non-metallic mineral products

Source: Office for National Statistics

## 8. Background notes

## 1. What's new?

Economic Review May 2016 was published on 4 May 2016, providing further commentary on the economy.
We have published weights of industries in the Index of Production to accompany this release.
The loP is constantly being reviewed and improved, a full list of the GDP $(\mathrm{O})$ improvement project articles can be found on the Improvements page of our website.

## Upcoming changes

The Index of Production release for April 2016, to be published on 8 June 2016, will contain revisions back to January 2016.

Due to the recent events affecting the steel industry, we are aiming to review current seasonal adjustment for the industry. This is in line with our continuous improvement programme and we will report on results when available.

## VAT project update

HMRC VAT update April 2016 was published on 4 April 2016. This was the latest in a series of updates on the work to utilise data collected by Her Majesty's Revenue and Customs (HMRC) from Value Added Tax (VAT) returns as an administrative data source for Short-term Output Indicators (STOI) and National Accounts. The project is exploring ways in which HM Revenue and Customs (HMRC) administrative data could be used to quality assure, supplement or replace the current turnover-based ONS surveys. The next article is due to be
published in July 2016, and will reflect on the analysis of the candidate industries and determine how the scope and timetable of the pilot will progress.

## 2. Special events

As explained in our Special Events policy, it is not possible to separate the effects of special events from other changes in the series.

## 3. Understanding the data

## Short guide to the Index of Production

This statistical bulletin gives details of the index of output of the production industries in the UK. Index numbers of output in this statistical bulletin are on the base 2012=100 and are classified to the 2007 Standard Industrial Classification (SIC). The production industries, which accounted for $14.9 \%$ of GDP in 2012, cover mining \& quarrying (Section B), manufacturing (Section C), electricity, gas, steam \& air conditioning (Section D) and water supply \& sewerage (Section E).

## Interpreting the data

The non-seasonally adjusted series contain elements relating to the impact of the standard reporting period, moving holidays and trading day activity. When making comparisons it is recommended that users focus on seasonally adjusted estimates as these have the seasonal effects and systematic calendar related components removed.

Figures for the most recent months are provisional and subject to revision in light of:

- late responses to surveys and administrative sources
- revisions to seasonal adjustment factors which are re-estimated every month and reviewed annually (changes from the latest review are included in this release)


## Definitions and explanations

Definitions found within the main statistical bulletin are listed:

- chained volume measure - an index number from a chain index of quantity; the index number for the reference period of the index may be set equal to 100 or to the estimated monetary value of the item in the reference period
- index number - a measure of the average level of prices, quantities or other measured characteristics relative to their level for a defined reference period or location; it is usually expressed as a percentage
- seasonally adjusted - seasonal adjustment aids interpretation by removing effects associated with the time of the year or the arrangement of the calendar, which could obscure movements of interest
- compound average growth - compound average growth is the rate at which a series would have increased or decreased if it had grown or fallen at a steady rate over a number of periods. This allows the composition of growth in the recent economic recovery to be compared to the long run average


## Use of the data

The loP is an important economic indicator and one of the earliest short-term measures of economic activity. The main output is a seasonally adjusted estimate of total production and broad sector groupings of mining \& quarrying, manufacturing, energy and water supply \& sewerage. The total loP estimate and various breakdowns are widely used in private and public sector institutions, particularly the Bank of England, Her Majesty's Treasury and the Office for Budget Responsibility, to assist in informed policy and decision making.

## 4. Methods

The Index of Production methodology is published on our website within our methodology web pages. These include details on improvements, a sources catalogue detailing methods, data and weights used to compile loP, IoS and GDP(O).

## Composition of the data

The Index of Production uses a variety of different data from sources that are produced on either a quarterly or monthly basis.

Most of the series are derived using current price turnover deflated by a suitable price index. This includes the monthly business survey (MBS) data, our short-term survey of various industries in the economy. It is one of the main data sources used in the compilation of the Index of Production.

Approximately $70 \%$ of the loP estimates are based on data collected through MBS. The remainder are based on data received from external sources. The MBS response rates for data included in this publication are presented in Table 7 for the current month and the 3 months prior. The response rates for the historical periods are updated to reflect the current level of response, incorporating data from late returns. We have included 2 response rates: one percentage for the amount of turnover returned and the other percentage for the amount of questionnaire forms. We have also published MBS historical production industries response rates back to 2010.

Table 7: Monthly business survey (MBS) response rates, March 2016, UK

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
| Pear Percentage |  |  |  |  |
| MBS overall | 2016 | Mar | 85.5 | 73.2 |
|  | 2016 | Feb | 92.3 | 82.5 |
|  | 2016 | Jan | 95.9 | 84.4 |
|  | 2015 | Dec | 96.2 | 84.9 |
| MBS production | 2016 | Mar | 85.1 | 77.2 |
| only |  |  |  |  |
|  | 2016 | Feb | 94.7 | 85.3 |
|  | 2016 | Jan | 97.0 | 87.2 |
|  | 2015 | Dec | 97.1 | 88.0 |

Source: Office for National Statistics

## Seasonal adjustment

The index numbers in this statistical bulletin are all seasonally adjusted in line with international best practice using X-13-ARIMA-SEATS software. This aids interpretation by removing annually recurring fluctuations, for example, due to holidays or other regular seasonal patterns. Unadjusted data are also available.

Seasonal adjustment removes regular variation from a time series. Regular variation includes effects due to month lengths, different activity near particular events such as shopping activity before Christmas, and regular holidays such as the May bank holiday. Some features of the calendar are not regular each year, but are predictable if we have enough data, for example, the number of certain days of the week in a month may have an effect, or the impact of the timing of Easter. As Easter changes between March and April, we can estimate its effect on time series and allocate it between March and April depending on where Easter falls. Estimates of the effects of day of the week and Easter are used respectively to make trading day and Easter adjustments prior to seasonal adjustments.

Although leap years only happen every 4 years, they are predictable and regular and their impact can be estimated. Hence, if there is a leap year effect, it is removed as part of regular seasonal adjustment.

## Deflation

It is common for the value of a group of financial transactions to be measured in several time periods. The values measured will include both the change in the volume sold and the effect of the change of prices over that year. Deflation is the process whereby the effect of price change is removed from a set of values.

All series, unless otherwise quoted, are chained volume measures. Deflators adjust the value series to take out the effect of price change to give the volume series.

## 5. Quality

## Basic quality information

A common pitfall in interpreting data is that expectations of accuracy and reliability in early estimates are often too high. Revisions are an inevitable consequence of the trade off between timeliness and accuracy. Early estimates are based on incomplete data.

Very few statistical revisions arise as a result of "errors" in the popular sense of the word. All estimates, by definition, are subject to statistical "error" but in this context the word refers to the uncertainty inherent in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques, or the incorporation of new information which allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable "errors" such as human or system failures, and such mistakes are made quite clear when they do occur.

## Quality and methodology information report

A quality and methodology information report for this statistical bulletin is available on our website.

## Revision triangles

One indication of the reliability of the key indicators in this bulletin can be obtained by monitoring the size of revisions. Table 8 is based on the revisions which have occurred over the last 5 years. Please note that these indicators only report summary measures for revisions. The revised data may, themselves, be subject to sampling or other sources of error.

Table 8 presents a summary of the differences between the first estimates published between April 2010 and March 2015 and the estimates published 12 months later.

Table 8: Revisions, March 2016, UK

Percentage change
Revisions between first publication and estimates 12 months later
$\left.\begin{array}{lccc}\hline \text { Growth rates } & \begin{array}{c}\text { Value in Average over the last } \\ \text { latest period }\end{array} & \begin{array}{c}\text { Average over the last } 60 \text { months without regard to sign } \\ \text { (average absolute revision) }\end{array} \\ \hline \begin{array}{l}\text { Production }-3 \\ \text { month }\end{array} & -0.4 & -0.14 \\ \begin{array}{l}\text { Manufacturing - } \\ 3 \text { month }\end{array} & -0.4 & -0.12\end{array}\right] 0.28$

Source: Office for National Statistics

Spreadsheets give revisions triangles of estimates for all months from March 1998 through to the current month.
A statistical test has been applied to the average revisions to find out if they are statistically significantly different from zero. An asterisk (*) indicates if a figure has been found to be statistically significant from zero.

The table uses historical data for the most recent 60 months, comparing the estimate at first publication with the estimate as published 12 months later. The numbers which underpin these averages include normal changes due to late data and re-seasonal adjustment, but also significant methodological changes, the most recent being the introduction of the 2007 Standard Industrial Classification in October 2011.

The result, presented in Table 8, suggests that the average revision for our 3 monthly estimates is not statistically significantly different from zero and that there are small downward revisions for our monthly production estimates over 12 months. In other words, the initial estimates for any given period provide a good indication of the later loP estimates once more data have become available.

## 6. Accessing data

The complete run of data in the tables of this statistical bulletin is also available to view and download in electronic format free of charge using the ONS Time Series Data service. Users can download the complete bulletin in a choice of zipped formats, or view and download their own selections of individual series.

We provide an analysis of past revisions in the loP and other statistical bulletins which present time series. Details can be found on our website.

We publish revisions triangles or all the main published key indicators on our website.

## 7. Relevant links

- On 2 December 2015, we published a short story on the British steel industry since the 1970s.
- On 1 September 2015, we published an article on the performance of the UK's motor vehicle manufacturing industry.
- A methodological note on leap year adjustments was published on 29 February 2016, explaining how leap years might affect ONS time series and the methods used to adjust for them as part of seasonal adjustment.


## 8. Customer feedback

We have received some comments from users regarding the Index of Production. These have mainly been in 3 areas and the bullet points detail the action we have taken, or plan to take, to address these concerns:

- users commented that longer time series would be useful so long run time series of data for the main loP industries are available - furthermore, data at 4 decimal places for loP and the main sub-sectors are now available
- users would like more information on data content - from the bulletin published on 11 March 2015, response rates for the monthly business survey data feeding in to loP were included
- users also raised concerns that the loP is not benchmarked to annual data through the supply and use framework - this is being addressed as part of our response to the National Statistics Quality Review of National Accounts

As a reader and user of our statistics we would welcome your feedback on the content of this publication, your views for improvement and on the way you currently use our statistics. If you would like to get in touch or to send your feedback please contact us via email: indexofproduction@ons.gsi.gov.uk

National Statistics

## Output of the Production Industries, <br> March 2016

Page 1 Output by Broad industry groups and Main industrial groupings
Percentage change, latest year on previous year
Percentage change, latest month on same month a year ago
Page 2 Percentage change, latest month on previous month
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Enquiries
$10 P 5$ Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

| Seasonally adjusted 2012 $=100$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 |
| Sectio |  | B+C+D+E | B | C | D | E | 06 | MIG-CD | MIG-CND | MIG-CAG | MIG-IG | MG-NRG |
| Latest weight |  | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |
|  |  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |
| 2011 |  | 102.8 | 112.3 | 101.4 | 100.9 | 100.1 | 116.4 | 102.3 | 104.0 | 98.7 | 100.0 | 109.9 |
| 2012 |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2013 |  | 99.2 | 96.7 | 98.9 | 100.4 | 104.3 | 91.8 | 98.7 | 99.1 | 100.6 | 99.2 | 96.6 |
| 2014 |  | 100.5 | 96.2 | 101.6 | 94.6 | 105.1 | 90.0 | 104.5 | 99.6 | 103.5 | 104.0 | 92.9 |
| 2015 |  | 101.5 | 102.8 | 101.3 | 94.4 | 108.9 | 99.2 | 103.5 | 99.9 | 102.2 | 103.6 | 97.0 |
| 2015 | Q1 | 100.9 | 96.6 | 101.9 | 96.1 | 105.3 | 89.7 | 104.2 | 100.2 | 102.4 | 105.4 | 93.5 |
|  | Q2 | 101.7 | 104.0 | 101.4 | 93.9 | 109.5 | 101.1 | 104.2 | 99.2 | 102.9 | 104.1 | 97.0 |
|  | Q3 | 101.9 | 106.5 | 101.0 | 94.8 | 109.9 | 104.1 | 103.1 | 99.7 | 101.7 | 103.0 | 99.4 |
|  | Q4 | 101.5 | 104.2 | 101.0 | 92.7 | 110.9 | 101.8 | 102.4 | 100.7 | 101.6 | 101.8 | 97.9 |
| 2016 | Q1 | 101.1 | 101.8 | 100.6 | 93.1 | 113.4 | 100.4 | 102.1 | 99.8 | 101.4 | 101.6 | 96.3 |
| 2015 | Jan | 100.5 | 96.9 | 101.5 | 95.6 | 103.7 | 89.8 | 106.3 | 100.0 | 101.2 | 105.2 | 93.4 |
|  | Feb | 100.8 | 94.9 | 101.9 | 97.1 | 105.8 | 87.2 | 102.4 | 99.2 | 103.0 | 105.6 | 93.1 |
|  | Mar | 101.5 | 98.1 | 102.3 | 95.6 | 106.4 | 91.9 | 104.1 | 101.5 | 102.8 | 105.2 | 94.0 |
|  | Apr | 101.6 | 102.0 | 101.8 | 93.0 | 108.7 | 98.1 | 103.8 | 98.7 | 103.7 | 105.2 | 95.4 |
|  | May | 101.8 | 106.4 | 101.0 | 94.7 | 108.9 | 104.6 | 102.2 | 101.0 | 101.5 | 102.7 | 98.9 |
|  | Jun | 101.7 | 103.6 | 101.2 | 94.1 | 111.1 | 100.5 | 106.7 | 97.8 | 103.6 | 104.3 | 96.8 |
|  | Jul | 101.3 | 104.0 | 100.4 | 94.2 | 112.2 | 100.2 | 104.1 | 99.3 | 99.8 | 103.6 | 97.5 |
|  | Aug | 102.1 | 110.4 | 100.7 | 94.6 | 109.1 | 109.3 | 102.5 | 99.0 | 102.2 | 102.7 | 101.6 |
|  | Sep | 102.2 | 105.2 | 101.7 | 95.6 | 108.3 | 102.9 | 102.6 | 100.8 | 103.2 | 102.7 | 99.2 |
|  | Oct | 102.4 | 106.6 | 101.4 | 96.6 | 110.3 | 104.3 | 100.7 | 101.7 | 101.4 | 102.6 | 100.9 |
|  | Nov | 101.6 | 105.0 | 101.0 | 93.4 | 110.2 | 102.7 | 103.1 | 100.0 | 101.1 | 102.4 | 98.8 |
|  | Dec | 100.5 | 100.9 | 100.7 | 88.1 | 112.1 | 98.4 | 103.3 | 100.4 | 102.3 | 100.5 | 94.2 |
| 2016 | Jan | $101.1^{\text { }}$ | $99.6{ }^{\text { }}$ | $101.1^{\text { }}$ | 92.1 | $113.5{ }^{\text { }}$ | $97.1^{\top}$ | $103.7{ }^{\text { }}$ | 99.3 | 102.8 | $102.5{ }^{\text { }}$ | $94.8{ }^{\text { }}$ |
|  | Feb | 100.9 | 103.1 | 100.2 | $92.0{ }^{\top}$ | 「 113.3 | 102.1 | 101.7 | $100.5{ }^{\text { }}$ | $99.9{ }^{\top}$ | 101.3 | 96.7 |
|  | Mar | 101.2 | 102.6 | 100.3 | 95.1 | 113.5 | 102.0 | 101.0 | 99.7 | 101.6 | 100.9 | 97.4 |

Percentage change, latest year on previous year

| 2011 |  | -0.6 | -14.2 | 2.2 | -6.1 | 5.7 | -18.4 | 0.2 | -0.2 | 6.6 | 0.6 | -10.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 |  | -2.8 | -10.9 | -1.4 | -0.9 | -0.1 | -14.1 | -2.2 | -3.8 | 1.3 | - | -9.0 |
| 2013 |  | -0.8 | -3.3 | -1.1 | 0.4 | 4.3 | -8.2 | -1.3 | -0.9 | 0.6 | -0.8 | -3.4 |
| 2014 |  | 1.3 | -0.5 | 2.7 | -5.8 | 0.8 | -2.0 | 5.9 | 0.5 | 2.9 | 4.8 | -3.8 |
| 2015 |  | 1.0 | 6.9 | -0.3 | -0.2 | 3.6 | 10.2 | -1.0 | 0.3 | -1.3 | -0.4 | 4.4 |
| Percentage change, latest month on same month a year ago |  |  |  |  |  |  |  |  |  |  |  |  |
| 2014 | Jan | 1.6 | -1.6 | 2.1 | -5.1 | 9.7 | -5.0 | 1.4 | -2.1 | 1.4 | 7.5 | -4.6 |
|  | Feb | 2.2 | 4.8 | 3.3 | -11.3 | 4.9 | 8.4 | 7.8 | 2.0 | 2.3 | 4.4 | -1.9 |
|  | Mar | 1.7 | 8.2 | 2.3 | -14.7 | 7.8 | 10.4 | 1.2 | 2.0 | 0.6 | 4.7 | -2.6 |
|  | Apr | 2.3 | 3.2 | 4.0 | -13.4 | 5.5 | 2.6 | 3.9 | 2.0 | 2.4 | 7.8 | -5.2 |
|  | May | 1.6 | 3.4 | 2.6 | -7.7 | 1.9 | 1.6 | 3.6 | -1.5 | 3.3 | 6.3 | -2.9 |
|  | Jun | 0.4 | -3.0 | 1.6 | -1.9 | -1.4 | -3.9 | 2.7 | -2.0 | 2.9 | 3.9 | -3.7 |
|  | Jul | 1.3 | -3.3 | 2.8 | 1.4 | -3.4 | -5.6 | 6.6 | -0.8 | 2.9 | 6.8 | -3.3 |
|  | Aug | 1.2 | -5.8 | 3.1 | 2.4 | -4.4 | -9.4 | 5.0 | 2.4 | 2.7 | 4.9 | -4.4 |
|  | Sep | 0.7 | -4.0 | 2.5 | -4.1 | -1.6 | -6.7 | 9.4 | 0.6 | 3.4 | 3.8 | -5.0 |
|  | Oct | 1.0 | -0.2 | 2.1 | -3.0 | -1.8 | -0.6 | 9.0 | 0.7 | 2.7 | 2.0 | -1.3 |
|  | Nov | 1.2 | -1.2 | 3.3 | -8.3 | -1.4 | -3.0 | 8.2 | 2.5 | 4.5 | 3.0 | -4.9 |
|  | Dec | 0.6 | -5.8 | 2.6 | -0.8 | -4.0 | -10.2 | 12.6 | 0.2 | 5.6 | 3.4 | -5.9 |
| 2015 | Jan | 0.9 | 3.7 | 1.3 | -0.5 | -4.5 | 2.7 | 3.2 | 3.9 | -1.4 | 1.6 | 1.1 |
|  | Feb | 0.2 | -5.1 | 0.8 | 6.6 | -2.5 | -10.2 | - | -1.2 | 0.8 | 3.1 | -1.5 |
|  | Mar | 1.2 | 0.1 | 1.1 | 3.6 | 0.9 | -0.9 | 2.8 | 1.6 | - | 1.8 | 0.4 |
|  | Apr | 0.9 | 5.3 | -0.3 | 1.2 | 3.9 | 8.5 | -0.1 | -2.3 | -0.2 | 0.8 | 3.7 |
|  | May | 1.4 | 6.2 | 0.2 | 0.5 | 4.3 | 11.3 | 1.6 | 1.2 | -0.5 | -1.0 | 4.5 |
|  | Jun | 1.5 | 8.9 | -0.1 | -2.2 | 7.0 | 14.3 | 4.5 | -1.1 | -0.6 | 0.7 | 4.6 |
|  | Jul | 0.6 | 9.4 | -1.4 | -3.9 | 8.4 | 13.2 | 0.3 | -0.4 | -3.7 | -0.9 | 4.3 |
|  | Aug | 1.6 | 18.5 | -1.1 | -3.8 | 5.7 | 26.8 | -2.1 | -1.3 | -0.7 | -1.8 | 9.7 |
|  | Sep | 1.3 | 9.2 | -0.5 | 1.7 | 3.8 | 14.2 | -5.0 | 0.7 | -1.2 | -1.7 | 7.0 |
|  | Oct | 1.6 | 8.9 | -0.2 | 2.4 | 4.5 | 13.1 | -5.3 | 2.6 | -2.1 | -1.1 | 7.5 |
|  | Nov | 0.9 | 10.8 | -1.2 | -0.1 | 4.2 | 17.3 | -3.7 | -0.1 | -2.9 | -2.2 | 8.0 |
|  | Dec | -0.2 | 7.8 | -1.7 | -7.3 | 8.3 | 15.2 | -6.8 | 0.4 | -2.9 | -4.0 | 3.3 |
| 2016 | Jan | $0.6{ }^{\top}$ | $2.8{ }^{\top}$ | -0.4 ${ }^{\top}$ | -3.6 | $9.5{ }^{\top}$ | $8.2{ }^{\top}$ | $-2.4{ }^{\top}$ | $-0.7{ }^{\top}$ | 1.5 | $-2.6{ }^{\top}$ | $1.5{ }^{\text { }}$ |
|  | Feb | 0.1 | 8.6 | -1.6 | $-5.3{ }^{\top}$ | 7.0 | 17.0 | -0.6 | 1.3 | -3.0 ${ }^{\top}$ | -4.1 | 3.8 |
|  | Mar | -0.2 | 4.7 | -1.9 | -0.6 | 6.6 | 10.9 | -2.9 | -1.8 | -1.2 | -4.1 | 3.7 |
| 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. |  |  |  |  |  |  |  |

Seasonally adjusted 2012 = 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 | MG-NRG |
| Latest weight | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |

Percentage change, latest month on previous month

| 2014 | Jan | -0.4 | -5.9 | 0.4 | 0.3 | 0.8 | -8.1 | 4.6 | -3.5 | 2.9 | 2.2 | -4.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 1.0 | 7.1 | 0.9 | -5.1 | -0.1 | 11.1 | -0.6 | 4.3 | -0.4 | -1.1 | 2.3 |
|  | Mar | -0.3 | -2.1 | 0.1 | 1.3 | -2.8 | -4.4 | -1.1 | -0.5 | 0.6 | 0.9 | -1.0 |
|  | Apr | 0.4 | -1.1 | 0.9 | -0.5 | -0.9 | -2.6 | 2.6 | 1.2 | 1.1 | 1.0 | -1.6 |
|  | May | -0.3 | 3.5 | -1.3 | 2.4 | -0.2 | 4.0 | -3.2 | -1.2 | -1.8 | -0.6 | 2.8 |
|  | Jun | -0.2 | -5.0 | 0.5 | 2.2 | -0.5 | -6.4 | 1.4 | -0.8 | 2.1 | -0.2 | -2.3 |
|  | Jul | 0.5 | -0.1 | 0.5 | 1.9 | -0.3 | 0.6 | 1.7 | 0.8 | -0.6 | 1.0 | 1.0 |
|  | Aug | -0.2 | -2.0 | 0.1 | 0.4 | -0.2 | -2.6 | 0.9 | 0.6 | -0.7 | - | -0.9 |
|  | Sep | 0.3 | 3.4 | 0.3 | -4.5 | 1.1 | 4.5 | 3.2 | -0.2 | 1.6 | -0.1 | 0.1 |
|  | Oct | -0.1 | 1.7 | -0.7 | 0.4 | 1.2 | 2.3 | -1.5 | -1.0 | -0.9 | -0.7 | 1.2 |
|  | Nov | - | -3.3 | 0.7 | -1.0 | 0.2 | -5.0 | 0.6 | 1.0 | 0.6 | 0.9 | -2.5 |
|  | Dec | -0.1 | -1.2 | 0.2 | 1.6 | -2.2 | -2.4 | 3.6 | -0.2 | 1.2 | - | -0.3 |
| 2015 | Jan | -0.1 | 3.6 | -0.9 | 0.6 | 0.2 | 5.1 | -4.1 | 0.1 | -4.0 | 0.5 | 2.3 |
|  | Feb | 0.3 | -2.1 | 0.3 | 1.7 | 2.1 | -2.8 | -3.7 | -0.8 | 1.8 | 0.4 | -0.2 |
|  | Mar | 0.6 | 3.3 | 0.4 | -1.6 | 0.6 | 5.4 | 1.7 | 2.3 | -0.2 | -0.4 | 0.9 |
|  | Apr | 0.1 | 4.0 | -0.5 | -2.7 | 2.1 | 6.6 | -0.3 | -2.7 | 0.8 | - | 1.6 |
|  | May | 0.2 | 4.3 | -0.8 | 1.8 | 0.2 | 6.7 | -1.5 | 2.3 | -2.1 | -2.4 | 3.6 |
|  | Jun | -0.1 | -2.6 | 0.2 | -0.6 | 2.0 | -3.9 | 4.3 | -3.2 | 2.0 | 1.5 | -2.2 |
|  | Jul | -0.4 | 0.4 | -0.8 | - | 1.0 | -0.3 | -2.4 | 1.5 | -3.7 | -0.6 | 0.7 |
|  | Aug | 0.9 | 6.1 | 0.3 | 0.5 | -2.7 | 9.1 | -1.6 | -0.3 | 2.4 | -0.9 | 4.2 |
|  | Sep | - | -4.7 | 1.0 | 1.0 | -0.7 | -5.8 | 0.1 | 1.8 | 1.0 | - | -2.3 |
|  | Oct | 0.2 | 1.3 | -0.4 | 1.1 | 1.8 | 1.3 | -1.8 | 0.8 | -1.8 | -0.1 | 1.7 |
|  | Nov | -0.8 | -1.5 | -0.3 | -3.3 | -0.1 | -1.5 | 2.4 | -1.7 | -0.2 | -0.2 | -2.1 |
|  | Dec | -1.1 | -3.9 | -0.3 | -5.7 | 1.7 | -4.2 | 0.2 | 0.4 | 1.2 | -1.8 | -4.7 |
| 2016 | Jan | $0.6{ }^{1}$ | -1.3 ${ }^{\prime}$ | 0.5 | $4.6{ }^{\prime}$ | $1.3{ }^{\prime}$ | -1.3 ${ }^{\prime}$ | $0.4{ }^{\prime}$ | -1.0 ${ }^{\prime}$ | 0.4 | $1.9{ }^{\prime}$ | 0.6 |
|  | Feb | -0.2 | 3.5 | -0.9 ${ }^{\top}$ | -0.1 | -0.2 | 5.1 | -1.9 | 1.2 | $-2.8{ }^{\top}$ | -1.1 | 2.0 |
|  | Mar | 0.3 | -0.4 | 0.1 | 3.3 | 0.2 | -0.1 | -0.6 | -0.8 | 1.7 | -0.3 | 0.8 |

Percentage change, latest 3 months on same 3 months a year ago ${ }^{2}$

| 2014 | Jan | 1.4 | 1.2 | 1.3 | -3.3 | 7.3 | -2.1 | -0.5 | 0.4 | -0.3 | 4.3 | -1.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 1.7 | 2.3 | 2.1 | -7.2 | 7.2 | 1.4 | 2.2 | 0.9 | 0.5 | 4.8 | -2.1 |
|  | Mar | 1.8 | 3.7 | 2.6 | -10.5 | 7.4 | 4.4 | 3.4 | 0.6 | 1.4 | 5.5 | -3.0 |
|  | Apr | 2.1 | 5.4 | 3.2 | -13.2 | 6.0 | 7.1 | 4.2 | 2.0 | 1.8 | 5.6 | -3.2 |
|  | May | 1.9 | 4.9 | 3.0 | -12.0 | 5.0 | 4.8 | 2.9 | 0.8 | 2.1 | 6.3 | -3.6 |
|  | Jun | 1.4 | 1.2 | 2.7 | -7.9 | 1.9 | 0.1 | 3.4 | -0.5 | 2.9 | 6.0 | -4.0 |
|  | Jul | 1.1 | -1.0 | 2.3 | -2.8 | -1.0 | -2.6 | 4.3 | -1.4 | 3.0 | 5.7 | -3.3 |
|  | Aug | 1.0 | -4.0 | 2.5 | 0.6 | -3.1 | -6.3 | 4.8 | -0.2 | 2.8 | 5.2 | -3.8 |
|  | Sep | 1.1 | -4.4 | 2.8 | -0.1 | -3.1 | -7.2 | 7.0 | 0.7 | 3.0 | 5.1 | -4.2 |
|  | Oct | 0.9 | -3.3 | 2.6 | -1.6 | -2.6 | -5.6 | 7.8 | 1.2 | 2.9 | 3.5 | -3.6 |
|  | Nov | 1.0 | -1.8 | 2.6 | -5.2 | -1.6 | -3.5 | 8.8 | 1.3 | 3.5 | 2.9 | -3.8 |
|  | Dec | 0.9 | -2.4 | 2.7 | -4.1 | -2.4 | -4.6 | 9.9 | 1.1 | 4.3 | 2.8 | -4.1 |
| 2015 | Jan | 0.9 | -1.2 | 2.4 | -3.3 | -3.3 | -3.6 | 7.9 | 2.2 | 2.9 | 2.7 | -3.3 |
|  | Feb | 0.6 | -2.5 | 1.5 | 1.7 | -3.7 | -6.1 | 5.2 | 0.9 | 1.6 | 2.7 | -2.2 |
|  | Mar | 0.8 | -0.5 | 1.0 | 3.2 | -2.1 | -3.0 | 2.0 | 1.4 | -0.2 | 2.2 |  |
|  | Apr | 0.7 | 0.1 | 0.5 | 3.8 | 0.7 | -1.1 | 0.9 | -0.6 | 0.2 | 1.9 | 0.8 |
|  | May | 1.1 | 3.9 | 0.3 | 1.8 | 3.0 | 6.3 | 1.4 | 0.2 | -0.2 | 0.5 | 2.9 |
|  | Jun | 1.3 | 6.8 | -0.1 | -0.2 | 5.1 | 11.3 | 2.0 | -0.7 | -0.4 | 0.2 | 4.3 |
|  | Jul | 1.2 | 8.1 | -0.4 | -1.9 | 6.5 | 12.9 | 2.1 | -0.1 | -1.6 | -0.4 | 4.5 |
|  | Aug | 1.2 | 12.2 | -0.8 | -3.3 | 7.0 | 18.0 | 0.9 | -1.0 | -1.6 | -0.7 | 6.2 |
|  | Sep | 1.2 | 12.3 | -1.0 | -2.1 | 5.9 | 18.0 | -2.3 | -0.3 | -1.9 | -1.5 | 7.0 |
|  | Oct | 1.5 | 12.1 | -0.6 | , | 4.6 | 17.9 | -4.2 | 0.7 | -1.3 | -1.6 | 8.1 |
|  | Nov | 1.3 | 9.6 | -0.6 | 1.3 | 4.2 | 14.8 | -4.7 | 1.1 | -2.1 | -1.7 | 7.5 |
|  | Dec | 0.8 | 9.2 | -1.0 | -1.7 | 5.7 | 15.2 | -5.3 | 1.0 | -2.6 | -2.5 | 6.3 |
| 2016 | Jan | $0.4{ }^{\top}$ | $7.1{ }^{\text { }}$ | -1.1 | -3.7 | 7.3 | $13.5{ }^{\text { }}$ | -4.3 | -0.1 | -1.5 | -2.9 | $4.2{ }^{\top}$ |
|  | Feb | 0.1 | 6.4 | -1.3 | $-5.4{ }^{\top}$ | $8.3{ }^{\top}$ | 13.4 | -3.4 | $0.4{ }^{\top}$ | $-1.5{ }^{\top}$ | -3.6 ${ }^{\top}$ | 2.9 |
|  | Mar | 0.1 | 5.3 | -1.3 | -3.2 | 7.7 | 12.0 | -2.0 | -0.4 | -0.9 | -3.6 | 3.0 |
| 1 | Any a perce | encies hown in | the inde bles are | and <br> nding. |  |  | es that d earliest in | ew or to hav | revised. ised. | d marked |  |  |
| 2 | Any a estima | encies nding. | these ta | he late |  |  |  |  |  |  |  |  |


|  | 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 | MG-NRG |
| Latest weight | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |

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


105 Output of the Production Industries

| continued | chained volum | - | ded |  | Seasonally adjusted 2012 = 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 | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |
| 2011 | 102.6 | 103.5 | 105.6 | 111.3 | 102.0 | 106.2 |
| 2012 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2013 | 98.3 | 95.5 | 102.2 | 98.1 | 98.9 | 97.3 |
| 2014 | 102.8 | 92.1 | 103.2 | 90.0 | 101.4 | 92.4 |
| 2015 | 102.7 | 89.9 | 103.4 | 91.9 | 106.9 | 93.1 |
| 2015 Q1 | 103.1 | 88.7 | 105.0 | 89.1 | 107.9 | 92.5 |
|  | 101.5 | 92.0 | 103.0 | 83.9 | 106.3 | 92.6 |
|  | 102.8 | 88.8 | 102.6 | 95.3 | 107.0 | 93.5 |
|  | 103.6 | 90.0 | 103.2 | 99.4 | 106.4 | 93.9 |
| 2016 Q1 | 103.0 | 87.4 | 102.9 | 87.4 | 103.9 | 92.2 |
| 2015 Jan $\begin{array}{r}\text { Feb } \\ \text { Mar } \\ \text { Apr } \\ \text { May } \\ \text { Jun }\end{array}$ | 103.4 | 86.1 | 105.9 | 90.0 | 106.8 | 91.5 |
|  | 103.2 | 89.2 | 104.5 | 92.1 | 109.0 | 89.7 |
|  | 102.6 | 90.9 | 104.4 | 85.2 | 107.8 | 96.5 |
|  | 101.4 | 90.2 | 104.1 | 84.0 | 109.4 | 90.8 |
|  | 101.8 | 92.6 | 102.7 | 84.5 | 104.2 | 98.5 |
|  | 101.4 | 93.3 | 102.1 | 83.2 | 105.4 | 88.6 |
| Jul | 101.9 | 91.0 | 101.8 | 94.9 | 106.9 | 93.4 |
| Aug | 102.7 | 85.0 | 102.3 | 94.4 | 106.7 | 92.5 |
| Sep | 103.7 | 90.4 | 103.7 | 96.5 | 107.3 | 94.5 |
| Oct | 103.7 | 91.5 | 102.8 | 101.9 | 106.8 | 96.9 |
| Nov | 103.5 | 89.7 | 104.5 | 101.2 | 107.8 | 91.8 |
| Dec | 103.6 | 88.9 | 102.4 | 95.1 | 104.7 | 93.0 |
| 2016 Jan | $103.4{ }^{\dagger}$ | $92.0{ }^{\dagger}$ | $104.2{ }^{\dagger}$ | $90.4{ }^{\dagger}$ | $104.8{ }^{\dagger}$ | 88.1 |
| Feb | 103.6 | 85.6 | 101.9 | 88.1 | 103.7 | 94.4 |
| Mar | 102.2 | 84.5 | 102.6 | 83.6 | 103.2 | 94.1 |

Percentage change, latest year on previous yea।

| 2011 | 6.5 | -2.5 | -5.6 | 1.4 | -13.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2012 | -1.7 | -3.4 | -5.3 | -10.1 | -5.8 |
| 2013 | 4.6 | -4.5 | -2.2 | -2.0 | -2.7 |
| 2014 | - | -3.6 | 0.9 | -8.3 | -5.1 |
| 2015 | -2.4 | 0.3 | 2.2 | 5.6 | 0.8 |

Percentage change, latest month on same month a year agc


[^0]
## $10 P 5$ Output of the Production Industries <br> Chained volume indices of gross value added ${ }^{1}$

| Seasonally adjusted $2012=100$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |
| 2011 | 104.3 | 97.2 | 99.5 | 90.2 | 98.9 | 95.9 | 106.8 |
| 2012 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2013 | 97.2 | 97.1 | 98.0 | 95.3 | 88.1 | 107.6 | 104.4 |
| 2014 | 109.7 | 99.2 | 101.9 | 92.5 | 92.2 | 110.6 | 109.7 |
| 2015 | 106.8 | 99.3 | 99.1 | 92.7 | 80.0 | 117.9 | 108.5 |
| 2015 Q1 | 107.8 | 102.4 | 98.8 | 93.1 | 83.2 | 115.3 | 110.6 |
| Q2 | 107.0 | 101.0 | 100.3 | 93.4 | 81.4 | 117.6 | 110.0 |
| Q3 | 106.2 | 97.7 | 99.2 | 92.1 | 78.7 | 118.8 | 106.9 |
| Q4 | 106.4 | 96.2 | 97.9 | 92.2 | 76.6 | 120.0 | 106.5 |
| 2016 Q1 | 108.1 | 97.8 | 95.9 | 89.6 | 76.7 | 118.3 | 111.7 |
| 2015 Jan | 107.6 | 102.1 | 99.5 | 91.7 | 82.5 | 114.0 | 109.8 |
| Feb | 107.6 | 103.0 | 97.7 | 93.4 | 84.2 | 116.1 | 109.7 |
| Mar | 108.3 | 102.0 | 99.1 | 94.1 | 83.0 | 115.7 | 112.1 |
| Apr | 108.0 | 102.1 | 99.5 | 94.3 | 84.8 | 116.2 | 111.7 |
| May | 106.2 | 97.7 | 98.0 | 92.4 | 79.6 | 118.5 | 108.4 |
| Jun | 106.7 | 103.2 | 103.5 | 93.5 | 79.7 | 118.0 | 109.9 |
| Jul | 106.9 | 97.2 | 99.1 | 91.0 | 78.1 | 115.9 | 106.9 |
| Aug | 105.0 | 98.9 | 99.3 | 91.2 | 78.6 | 120.8 | 104.7 |
| Sep | 106.5 | 96.9 | 99.2 | 94.3 | 79.3 | 119.8 | 109.0 |
| Oct | 106.7 | 97.1 | 97.7 | 93.3 | 76.5 | 121.3 | 103.0 |
| Nov | 106.2 | 96.2 | 97.2 | 92.3 | 75.9 | 119.5 | 108.3 |
| Dec | 106.4 | 95.4 | 99.0 | 91.1 | 77.4 | 119.2 | 108.2 |
| 2016 Jan | $108.7{ }^{\dagger}$ | $98.3{ }^{\dagger}$ | $98.9{ }^{\dagger}$ | $90.2{ }^{\top}$ | + $76.7^{\dagger}$ | 119.3 | 112.6 |
| Feb | 108.1 | 97.2 | 94.9 | 90.4 | 75.6 | $116.2{ }^{\top}$ | 110.9 |
| Mar | 107.6 | 98.0 | 93.8 | 88.1 | 77.8 | 119.4 | 111.7 |

Percentage change, latest year on previous yea।

|  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2011 | -0.2 | 4.4 | -1.2 | -3.8 | 8.6 | 10.1 | 4.4 |
| 2012 | -4.2 | 2.9 | 0.6 | 10.9 | 1.1 | -6.3 |  |
| 2013 | -2.8 | -2.9 | -2.0 | -4.7 | -11.9 | 4.4 |  |
| 2014 | 12.9 | 2.1 | 4.0 | -3.0 | 4.6 | 2.8 |  |
| 2015 | -2.6 | 0.1 | -2.8 | 0.2 | -13.3 | 6.6 | -1.1 |

Percentage change, latest month on same month a year agc

| 2014 | Jan | 15.8 | 4.1 | -3.1 | -2.5 | 7.7 | 1.2 | 4.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 13.6 | 3.7 | 3.5 | -4.7 | 8.7 | 2.1 | 2.7 |
|  | Mar | 14.2 | -0.6 | -1.6 | -0.4 | 1.1 | 2.5 | 6.2 |
|  | Apr | 18.9 | 1.8 | -0.2 | -2.2 | 8.2 | 4.8 | 6.2 |
|  | May | 14.6 | 4.6 | 1.3 | -7.6 | 12.3 | 1.8 | 6.1 |
|  | Jun | 11.9 | 5.2 | -1.2 | -2.4 | 5.2 | 3.9 | 6.1 |
|  | Jul | 12.7 | 3.8 | 6.0 | -1.2 | 6.0 | 2.2 | 5.2 |
|  | Aug | 13.4 | 4.1 | 3.0 | -6.4 | 4.7 | -0.8 | 7.6 |
|  | Sep | 12.1 | 0.6 | 11.0 | -2.9 | 2.8 | 1.1 | 2.8 |
|  | Oct | 10.6 | -1.3 | 8.8 | -6.1 | 0.5 | 1.1 | 5.2 |
|  | Nov | 8.3 | 0.8 | 7.4 | -0.6 | 0.8 | 3.5 | 8.0 |
|  | Dec | 9.9 | -1.0 | 14.6 | 1.7 | -1.4 | 10.2 | 0.5 |
| 2015 | Jan | 0.1 | 2.5 | -2.3 | -1.2 | -10.6 | 7.0 | 0.3 |
|  | Feb | -0.1 | 3.7 | -1.7 | 2.4 | -10.3 | 7.1 | 1.5 |
|  | Mar | - | 3.8 | -0.6 | -0.1 | -11.6 | 5.2 | 4.1 |
|  | Apr | -2.6 | 3.1 | -2.6 | 1.7 | -9.1 | 4.9 | 2.5 |
|  | May | -2.5 | 0.5 | -0.5 | 2.0 | -15.2 | 9.1 | 0.9 |
|  | Jun | -1.9 | 3.8 | 5.7 | -2.9 | -15.1 | 4.4 | 0.8 |
|  | Jul | -3.2 | -0.6 | -1.6 | -3.0 | -17.1 | 3.8 | -3.0 |
|  | Aug | -5.8 | -2.2 | -1.1 | 1.8 | -13.6 | 11.7 | -7.7 |
|  | Sep | -3.5 | -2.9 | -7.1 | 2.1 | -13.7 | 7.6 | -0.5 |
|  | Oct | -4.0 | -1.6 | -4.7 | 5.2 | -15.8 | 8.5 | -7.1 |
|  | Nov | -3.4 | -4.2 | -5.7 | -1.3 | -14.1 | 5.7 | -3.9 |
|  | Dec | -4.5 | -4.1 | -10.2 | -3.5 | -13.2 | 4.5 | -0.3 |
| 2016 | Jan | $1.0{ }^{\dagger}$ | -3.7 ${ }^{\dagger}$ | $-0.6{ }^{\top}$ | -1.7 ${ }^{\dagger}$ | $-7.1{ }^{\dagger}$ | 4.6 | 2.6 |
|  | Feb | 0.5 | -5.6 | -2.8 | -3.2 | -10.2 | $0.1{ }^{\dagger}$ | $1.1{ }^{\dagger}$ |
|  | Mar | -0.7 | -4.0 | -5.3 | -6.4 | -6.3 | 3.2 | -0.4 |

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

| continued |  |  |  |  | Seasonally adjusted 2012 $=100$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest month on previous month


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


[^1]Chained volume indices of gross value added ${ }^{1}$

| continued |  |  |  |  |  | Seasonally adjusted $2012=100$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

## Percentage change, latest month on previous month

| 2014 | Jan | 6.0 | -0.8 | 5.9 | - | 2.0 | 2.9 | 1.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 0.1 | -0.3 | -2.4 | -1.7 | 1.7 | 1.7 | -1.3 |
|  | Mar | 0.6 | -1.0 | 0.2 | 3.3 | 0.1 | 1.4 | -0.3 |
|  | Apr | 2.3 | 0.8 | 2.5 | -1.6 | -0.8 | 0.7 | 1.2 |
|  | May | -1.6 | -1.8 | -3.6 | -2.3 | 0.6 | -1.9 | -1.5 |
|  | Jun | -0.2 | 2.2 | -0.5 | 6.3 | - | 4.1 | 1.5 |
|  | Jul | 1.5 | -1.6 | 2.8 | -2.6 | 0.4 | -1.3 | 1.1 |
|  | Aug | 1.0 | 3.4 | -0.3 | -4.5 | -3.4 | -3.1 | 3.0 |
|  | Sep | -1.0 | -1.3 | 6.4 | 3.3 | 1.0 | 2.9 | -3.5 |
|  | Oct | 0.6 | -1.1 | -4.1 | -4.0 | -1.2 | 0.4 | 1.3 |
|  | Nov | -1.1 | 1.8 | 0.5 | 5.4 | -2.7 | 1.2 | 1.5 |
|  | Dec | 1.4 | -1.0 | 7.0 | 1.0 | 0.9 | 0.9 | -3.7 |
| 2015 | Jan | -3.5 | 2.7 | -9.7 | -2.9 | -7.5 | - | 1.2 |
|  | Feb | - | 0.8 | -1.9 | 1.8 | 2.0 | 1.8 | -0.1 |
|  | Mar | 0.7 | -0.9 | 1.4 | 0.7 | -1.3 | -0.3 | 2.2 |
|  | Apr | -0.3 | 0.1 | 0.4 | 0.2 | 2.1 | 0.5 | -0.3 |
|  | May | -1.6 | -4.3 | -1.5 | -2.0 | -6.1 | 2.0 | -3.0 |
|  | Jun | 0.4 | 5.6 | 5.7 | 1.2 | 0.1 | -0.4 | 1.4 |
|  | Jul | 0.2 | -5.8 | -4.2 | -2.7 | -2.0 | -1.8 | -2.7 |
|  | Aug | -1.7 | 1.8 | 0.2 | 0.2 | 0.7 | 4.3 | -2.0 |
|  | Sep | 1.4 | -2.0 | -0.1 | 3.5 | 0.9 | -0.9 | 4.1 |
|  | Oct | 0.1 | 0.2 | -1.5 | -1.1 | -3.6 | 1.2 | -5.5 |
|  | Nov | -0.5 | -0.9 | -0.6 | -1.1 | -0.7 | -1.4 | 5.1 |
|  | Dec | 0.2 | -0.9 | 1.8 | -1.2 | 2.0 | -0.3 | -0.1 |
| 2016 | Jan | 2.1 | 3.1 | - | -1.0 | -0.9 | - | 4.1 |
|  | Feb | -0.6 | -1.2 | -4.1 | 0.2 | -1.4 | -2.6 ${ }^{\top}$ | -1.5 ${ }^{\top}$ |
|  | Mar | -0.4 | 0.8 | -1.2 | -2.6 | 2.9 | 2.7 | 0.7 |

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

| 2014 | Jan | 6.8 | 3.4 | -4.7 | -2.5 | -5.2 | 3.1 | 6.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 10.7 | 3.9 | -1.9 | -4.1 | 1.3 | 0.9 | 5.1 |
|  | Mar | 14.5 | 2.4 | -0.5 | -2.5 | 5.7 | 1.9 | 4.5 |
|  | Apr | 15.5 | 1.6 | 0.5 | -2.5 | 5.9 | 3.1 | 5.0 |
|  | May | 15.9 | 1.9 | -0.2 | -3.5 | 7.0 | 3.0 | 6.2 |
|  | Jun | 15.1 | 3.9 | - | -4.1 | 8.5 | 3.5 | 6.1 |
|  | Jul | 13.0 | 4.6 | 2.0 | -3.8 | 7.7 | 2.6 | 5.8 |
|  | Aug | 12.7 | 4.4 | 2.6 | -3.3 | 5.3 | 1.8 | 6.3 |
|  | Sep | 12.7 | 2.8 | 6.7 | -3.5 | 4.5 | 0.9 | 5.2 |
|  | Oct | 12.0 | 1.1 | 7.6 | -5.1 | 2.6 | 0.5 | 5.2 |
|  | Nov | 10.3 | - | 9.1 | -3.2 | 1.4 | 1.9 | 5.3 |
|  | Dec | 9.6 | -0.5 | 10.3 | -1.7 | - | 4.8 | 4.5 |
| 2015 | Jan | 6.0 | 0.8 | 6.4 | - | -3.8 | 6.9 | 2.9 |
|  | Feb | 3.2 | 1.8 | 3.4 | 1.0 | -7.5 | 8.1 | 0.8 |
|  | Mar | - | 3.4 | -1.5 | 0.3 | -10.8 | 6.4 | 2.0 |
|  | Apr | -0.9 | 3.5 | -1.6 | 1.3 | -10.3 | 5.7 | 2.7 |
|  | May | -1.7 | 2.5 | -1.2 | 1.2 | -12.0 | 6.4 | 2.5 |
|  | Jun | -2.3 | 2.5 | 0.8 | 0.2 | -13.1 | 6.1 | 1.4 |
|  | Jul | -2.6 | 1.2 | 1.2 | -1.3 | -15.8 | 5.7 | -0.5 |
|  | Aug | -3.7 | 0.3 | 0.9 | -1.4 | -15.3 | 6.6 | -3.4 |
|  | Sep | -4.2 | -1.9 | -3.4 | 0.3 | -14.8 | 7.7 | -3.8 |
|  | Oct | -4.4 | -2.2 | -4.4 | 3.0 | -14.4 | 9.3 | -5.1 |
|  | Nov | -3.6 | -2.9 | -5.9 | 1.9 | -14.5 | 7.3 | -3.8 |
|  | Dec | -4.0 | -3.3 | -6.9 | - | -14.4 | 6.2 | -3.8 |
| 2016 | Jan | -2.3 ${ }^{\top}$ | -4.0 | -5.7 | $-2.2{ }^{\top}$ | -11.6 | 4.9 | -0.6 |
|  | Feb | -1.0 | -4.5 ${ }^{\top}$ | -4.8 ${ }^{\top}$ | -2.8 | -10.2 ${ }^{\top}$ | $3.0{ }^{\top}$ | $1.1{ }^{\top}$ |
|  | Mar | 0.3 | -4.4 | -2.9 | -3.8 | -7.8 | 2.6 | 1.0 |

[^2]Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

| continued |  |  |  |  | Seasonally adjusted 2012=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 | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest 3 months on previous 3 months


[^3]Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest 3 months on previous 3 months

| 2014 | Jan | 4.4 | 1.1 | 2.1 | -1.9 | 1.4 | -3.1 | 1.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feb | 5.3 | 0.1 | 3.9 | -2.4 | 3.4 | -3.4 | 2.9 |
|  | Mar | 6.6 | -1.0 | 5.1 | -1.1 | 4.3 | 0.5 | 2.4 |
|  | Apr | 5.3 | -1.0 | 2.5 | -0.6 | 3.9 | 3.1 | 0.9 |
|  | May | 3.7 | -1.5 | 1.0 | 0.2 | 1.6 | 3.4 | -0.4 |
|  | Jun | 1.6 | -0.5 | -0.8 | 0.5 | 0.3 | 2.3 | - |
|  | Jul | 0.5 | -0.7 | -1.3 | 0.9 | 0.3 | 1.3 | 0.6 |
|  | Aug | 0.8 | 1.3 | -0.4 | 0.7 | -0.7 | 1.1 | 2.7 |
|  | Sep | 1.2 | 1.0 | 3.2 | -1.4 | -1.4 | -0.4 | 2.4 |
|  | Oct | 1.5 | 1.8 | 4.2 | -3.6 | -2.9 | -0.6 | 2.3 |
|  | Nov | 0.2 | 0.2 | 4.4 | -1.8 | -2.8 | 1.0 | 0.1 |
|  | Dec | - | - | 2.5 | 0.3 | -3.1 | 2.4 | -0.3 |
| 2015 | Jan | -1.2 | 0.8 | 1.0 | 3.4 | -5.0 | 3.0 | -0.9 |
|  | Feb | -1.5 | 1.8 | -1.6 | 1.8 | -5.6 | 2.4 | -1.5 |
|  | Mar | -2.7 | 2.8 | -6.2 | 0.9 | -7.0 | 2.0 | -0.1 |
|  | Apr | -1.5 | 1.7 | -5.3 | 0.7 | -3.1 | 2.0 | 0.8 |
|  | May | -1.2 | -0.8 | -3.6 | 0.4 | -3.3 | 1.8 | 1.3 |
|  | Jun | -0.8 | -1.3 | 1.6 | 0.4 | -2.3 | 2.0 | -0.5 |
|  | Jul | -1.2 | -2.9 | 1.5 | -1.7 | -5.8 | 1.3 | -2.5 |
|  | Aug | -1.2 | -0.9 | 1.8 | -1.8 | -4.5 | 1.2 | -3.2 |
|  | Sep | -0.7 | -3.3 | -1.1 | -1.3 | -3.3 | 1.0 | -2.8 |
|  | Oct | -0.5 | -1.7 | -1.5 | 0.7 | -1.3 | 2.7 | -2.6 |
|  | Nov | 0.2 | -3.0 | -2.6 | 1.5 | -2.0 | 1.6 | -0.4 |
|  | Dec | 0.2 | -1.4 | -1.3 | 0.1 | -2.6 | 1.0 | -0.4 |
| 2016 | Jan | $0.9{ }^{\top}$ | -1.0 | -0.4 | -1.9 ${ }^{\top}$ | $-1.8{ }^{\top}$ | -1.1 | 3.9 |
|  | Feb | 1.2 | $0.2{ }^{\top}$ | -0.4 | -2.9 | -0.8 | $-1.6{ }^{\top}$ | $3.5{ }^{\text { }}$ |
|  | Mar | 1.6 | 1.6 | -2.1 | -2.9 | 0.1 | -1.4 | 4.9 |

[^4]
## Revisions to Output of the Production Industries, March 2016

Page 1 Output by Broad industry groups and Main industrial groupings
Percentage change, latest year on previous year
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

Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$
Seasonally adjusted 2012 $=100$

|  | 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 | MG-NRG |
| Latest weight | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |


| 2011 |  |
| :--- | :--- |
| 2012 |  |
| 2013 |  |
| 2014 |  |
| 2015 |  |
|  |  |
| 2014 | Q4 |
| 2015 | Q1 |
| Q2 |  |
| Q3 |  |
| Q4 |  |


| 2014 | Dec | - | - | - | - | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2016 | Jan | 0.5 | 3.7 | -0.1 | - | 0.1 | 4.6 | -0.1 | - | - | -0.1 | 0 |
|  | Feb | 0.6 | 3.7 | 0.1 | -0.7 | 0.5 | 4.6 | 0.1 | 0.4 | 0.3 | -0.1 | 1.7 |

Percentage change, latest year on previous year
2011
2012
2013
2014
2015
2015
Percentage change, latest month on same month a year ago

| 2013 | Dec | - | - | - | - | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2016 | Jan | 0.5 | 3.8 | -0.1 | - | 0.1 | 5.2 | -0.1 | 0.1 | . | -0.1 | 2.1 |
|  | Feb | 0.6 | 3.9 | 0.2 | -0.8 | 0.5 | 5.3 | 0.2 | 0.4 | 0.4 | -0.1 | 1.7 |
| 1 | Any a perce | cies <br> $w n$ in | index $\mathrm{s} \text { are } \mathrm{c}$ | the <br> g. |  |  | that rliest in | or h o hav | vised. <br> d. | mark |  |  |

Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$
Broad industry groups
Main industrial groupings

|  | 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 | MG-NRG |
| Latest weight | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |

Percentage change, latest month on previous month

| 2013 | Dec | - | - | - | - | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - | - | - | - |  |
| 2015 | Jan | - | - | - | - | - | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - | - | - | - | - |  |
|  | Apr | - | - | - | - | - | - | - | - | - | - |  |
|  | May | - | - | - | - | - | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - | - | - | - | - |  |
|  | Jul | - | - | - | - | - | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - | - | - | - | - | - |  |
|  | Sep | - | - | - | - | - | - | - | - | - | - |  |
|  | Oct | - | - | - | - | - | - | - | - | - | - |  |
|  | Nov | - | - | - | - | - | - | - | - | - | - |  |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2016 | Jan | 0.4 | 3.6 | , | 0.1 | 0.1 | 4.7 | -0.1 | 0.1 | - | -0.1 | 2.1 |
|  | Feb | 0.1 | -0.1 | 0.2 | -0.8 | 0.4 | -0.3 | 0.3 | 0.3 | 0.3 | - | -0.5 |

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


[^5]Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$
Broad industry groups
Main industrial groupings

|  | 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 | MG-NRG |
| Latest weight | 1000.0 | 134.6 | 690.8 | 93.5 | 81.1 | 106.5 | 57.7 | 204.9 | 227.2 | 251.0 | 242.2 |
|  | K222 | K224 | K22A | K248 | K24C | K226 | K24Q | K24R | K24S | K24O | K24T |

Percentage change, latest 3 months on previous 3 months

| 2013 | Dec | - | - | - | - | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - | - | - | - | - |
| 2016 |  | $0.2$ | $1.1$ | - | - | - | $1.4$ | - | - | - | - | 0.6 |
|  | Feb | $0.3$ | 2.3 | - | -0.3 | 0.2 | 2.9 | - | 0.1 | 0.1 | -0.1 | 1.3 |
| 1 | Any perce | encie: own | the ind les are |  |  |  | sthat rliest | or | evised ised. | mark |  |  |

Output of the Production Industries

|  | 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 | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

2011
2012
2013
2014
2015

2014 Q4
2015 Q1
Q1
Q3
Q4

| 2014 | Dec | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2015 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - |  |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - |  |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2016 | Jan | -0.1 | 0.5 | -0.1 | -0.6 | -0.5 | 0.6 |
|  | Feb | 0.5 | 0.5 | 0.2 | -1.1 | -0.8 | 0.6 |

Percentage change, latest year on previous yea।
2011
2012
2012
2014
2015
Percentage change, latest month on same month a year agc

| 2013 | Dec | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - |  |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2016 | Jan | - | 0.6 | -0.2 | -0.6 | -0.6 | 0.7 |
|  | Feb | 0.5 | 0.5 | 0.2 | -1.1 | -0.8 | 0.6 |
| 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
continued

| continued |  |  |  | Seasonally adjusted 2012 $=100$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |


| 2011 |  |
| ---: | :--- |
| 2012 |  |
| 2013 |  |
| 2014 |  |
| 2015 |  |
|  |  |
| 2014 | Q4 |
| 2015 | Q1 |
| Q2 |  |
| Q3 |  |
| Q4 |  |

2014 Dec
2015 Jan

Percentage change, latest year on previous yea।
2011
2012
2014
2015
Percentage change, latest month on same month a year agc


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

|  | Food products, <br> beverages <br> and tobacco | Textiles, wearing <br> apparel and <br> leather products | Wood and <br> paper products <br> and printing | Coke and <br> refined petroleum <br> products | Chemicals <br> and chemical <br> products | Basic <br> pharmaceutical <br> products and <br> preparations |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Section | CA | CB | CC | CD | CE | CF |
| Latest weight | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest month on previous month

| 2013 | Dec | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2016 | Jan | - | 0.6 | -0.2 | -0.6 | -0.5 | 0.6 |
|  | Feb | 0.6 | - | 0.3 | -0.6 | -0.3 |  |

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

| 2013 | Dec | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2016 | Jan | - | 0.2 | -0.1 | -0.2 | -0.2 | 0.2 |
|  | Feb | 0.1 | 0.4 | - | -0.6 | -0.5 | 0.4 |
| 1 | Any perce | $\begin{aligned} & \text { cies b } \\ & \text { vn in t } \end{aligned}$ | num ue to |  | t data <br> e earli | been <br> have |  |


| continued |  |  |  | Seasonally adjusted $2012=100$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest month on previous month

| 2013 | Dec | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - |  |
|  | Feb | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - |
| 2016 | Jan | -0.4 | -0.1 | -0.1 | -0.2 | 0.2 | - | - |
|  | Feb | 0.2 | -0.5 | -0.1 | -0.4 | 0.4 | 0.3 | 1.0 |

Percentage change, latest 3 months on same 3 months a year ago
2013 Dec
2014 Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

2015 Jan
Feb
Feb
Mar
Apr
May
Jun

Jul
Aug
Sep
Oct
Nov
Dec

2016 Jan
Feb
-0.1
$-0.2$
$-0.1$
-0.1
$0.3 \quad 0.2$
0.1
0.3

[^6]Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$

|  | Food products, <br> beverages <br> and tobacco | Textiles, wearing <br> apparel and <br> leather products | Wood and <br> paper products <br> and printing | Coke and <br> refined petroleum <br> products | Chemicals <br> and chemical <br> products | Basic <br> pharmaceutical <br> products and <br> preparations |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Section | CA | CB | CC | CD | CE | CF |
| Latest weight | 109.7 | 22.5 | 51.3 | 19.4 | 38.1 | 60.6 |
|  | K22B | K22P | K22T | K22X | K22Z | K239 |

Percentage change, latest 3 months on previous 3 months

| 2013 | Dec | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - |
| 2016 | Jan | - | 0.2 | -0.1 | -0.1 | -0.2 | 0.2 |
|  | Feb | 0.1 | 0.4 | - | -0.6 | -0.4 | 0.4 |
| 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. |  |  |

Output of the Production Industries
Chained volume indices of gross value added ${ }^{1}$
Seasonally adjusted 2012 $=100$
continued

|  | 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 | 55.6 | 77.6 | 43.0 | 21.1 | 53.6 | 77.3 | 60.9 |
|  | K23B | K23G | K23N | K23P | K23R | K23T | K23Z |

Percentage change, latest 3 months on previous 3 months

| 2013 | Dec | - | - | - | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Jan | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - |
| 2015 | Jan | - | - | - | - | - | - | - |
|  | Feb | - | - | - | - | - | - | - |
|  | Mar | - | - | - | - | - | - | - |
|  | Apr | - | - | - | - | - | - | - |
|  | May | - | - | - | - | - | - | - |
|  | Jun | - | - | - | - | - | - | - |
|  | Jul | - | - | - | - | - | - | - |
|  | Aug | - | - | - | - | - | - | - |
|  | Sep | - | - | - | - | - | - | - |
|  | Oct | - | - | - | - | - | - | - |
|  | Nov | - | - | - | - | - | - | - |
|  | Dec | - | - | - | - | - | - | - |
| 2016 | Jan | -0.2 | - | - | -0.1 | 0.1 | - | - |
|  | Feb | -0.1 | -0.2 | - | -0.3 | 0.3 | 0.1 | 0.3 |
| 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. |  |  |  |

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Twitter: $\quad$ 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 period percentage changes shown in these tables are due to rounding.
    marked 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
    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

[^3]:    1 Any apparent inconsistencies between the index numbers and the $\quad{ }^{\dagger}$ indicates that data are new or have been revised. The period percentage changes shown in these tables are due to rounding.

    $$
    \begin{aligned}
    & \dagger \text { indicates that data are new or have been revised. The } \mathrm{p} \\
    & \text { marked is the earliest in the table to have been revised. }
    \end{aligned}
    $$

[^4]:    1 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.

[^5]:    percentage changes shown in these tables are due to rounding.
    ${ }^{\dagger}$ indicates that data are new or have been revised. The period marked

[^6]:    1 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.
    is the earliest in the table to have been revised.

