

# Manufacturing: production and sales

August 2002

Co-operation between Statistics South Africa (Stats SA), the citizens of the country, the private sector and government institutions is essential for a successful statistical system. Without continued co-operation and goodwill, the timely release of relevant and reliable official statistics will not be possible.

**Embargo: 13:00**

**Date: 8 October 2002**

Stats SA publishes approximately three hundred different releases each year. It is not economically viable to produce them in more than one of South Africa's eleven official languages. Since the releases are used extensively, not only locally, but also by international economic and social-scientific communities, Stats SA releases are published in English only.

This data in this statistical release adheres to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), which sets out standards on coverage, periodicity and timeliness of data; access by the public; integrity; and quality of the disseminated data.

### Key figures as at the end of August 2002

<b>Actual estimates</b>		<b>August 2002</b>	<b>% change between August 2001 and August 2002</b>	<b>% change between June 2001 to August 2001 and June 2002 to August 2002</b>	<b>% change between January 2001 to August 2001 and January 2002 to August 2002</b>
of	Physical volume of manufacturing production index (1995=100)	117,4	+8,2	+5,5	+5,8
sales	Total value of of manufactured products (R million)	53 146,8	+28,9	+24,0	+22,8

<b>Seasonally adjusted estimates</b>		<b>August 2002</b>	<b>% change between July 2002 and August 2002</b>	<b>% change between March 2002 to May 2002 and June 2002 to August 2002</b>
	Physical volume of manufacturing production index (1995=100)	116,2	+0,4	-1,2
sales	Total value of of manufactured products (R million)	52 476,4	-0,5	+1,5

### Key findings as at the end of August 2002

#### MANUFACTURING PRODUCTION DECREASES

*Manufacturing production for the three months ended August 2002 reflected a decrease of 1,2% after seasonal adjustment compared with the previous three months. Lower production was reported by 20 of the 27 manufacturing divisions. However, the actual manufacturing production for the first eight months of 2002 reflected an increase of 5,8% compared with the first eight months of 2001.*

The major contributors to the decrease of 1,2% after seasonal adjustment in the total manufacturing production were the textile (-0,2 of a percentage point), basic chemicals (-0,2 of a percentage point), 'other' chemical products (-0,2 of a percentage point), 'other' non-metallic mineral products (-0,2 of a percentage point) and 'other' manufacturing industries (-0,2 of a percentage point) divisions. However, these decreases were partially counteracted by a large increase reported by the basic iron and steel products division which contributed +0,9 of a percentage point to the seasonally adjusted quarterly percentage change in total manufacturing production (cf. table A).

## SALES OF MANUFACTURED PRODUCTS INCREASE

*The total value of sales of manufactured products at current prices for the three months ended August 2002 reflected an increase of 1,5% (+R2 287 million) after seasonal adjustment compared with the previous three months. Higher manufacturing sales were reported by 16 of the 27 manufacturing divisions during this period. Furthermore, the actual total value of sales of manufactured products at current prices for the three months ended August 2002 reflected an increase of 24,0% (+R30 037 million) compared with the three months ended August 2001. Higher manufacturing sales were reported by all 27 manufacturing divisions during this period.*

The increase of 1,5% after seasonal adjustment in the total value of sales of manufactured products at current prices for the three months ended August 2002 compared with the previous three months was mainly due to large increases reported by the basic iron and steel products (+10,3% or +R1 150 million), food and food products (+5,6% or +R1 121 million), beverage (+5,6% or +R366 million), machinery and equipment (+3,9% or +R264 million) and coke and refined petroleum products (+3,8% or +R446 million) divisions (cf. table B).

The major contributors to the increase of 24,0% in the actual value of sales of manufactured products at current prices for the three months ended August 2002 compared with the three months ended August 2001 were the motor vehicles, trailers, parts and accessories (+3,7 percentage points or +R4 609 million), food and food products (+3,5 percentage points or +R4 444 million), basic iron and steel products (+2,9 percentage points or +R3 600 million), coke and refined petroleum products (+2,2 percentage points or +R2 730 million), 'other' chemical products (+1,2 percentage points or +R1 508 million), fabricated metal products (+1,2 percentage points or +R1 484 million) and machinery and equipment (+1,2 percentage points or +R1 456 million) divisions (cf. table C).

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# Notes

<b>Forthcoming issues</b>	<b>Issue</b>	<b>Expected release date</b>
	September 2002	12 November 2002
	October 2002	10 December 2002
	November 2002	14 January 2003
	December 2002	11 February 2003

**Purpose of the survey** The monthly Manufacturing Production and Sales Survey is a country-wide sample survey covering a sample of private establishments, public corporations and government establishments operating in the manufacturing industry in the South African economy. The results of this survey are used to calculate physical volume of manufacturing production indices in order to estimate the Gross Domestic Product (GDP) to monitor and develop government policy.

## Additional information

### Explanatory notes

<b>Introduction</b>	<ol style="list-style-type: none"><li>1 Statistics South Africa (Stats SA) conducts a monthly sample survey of the manufacturing industry covering private manufacturing establishments (branches), public corporations and government establishments. This statistical release contains detailed information regarding indices of the physical volume of manufacturing production, the total value of sales of manufactured products and unfilled orders, according to manufacturing divisions and major groups on a monthly basis.</li><li>2 In accordance to international practice, the indices have to be rebased every five years to a new base year. The indices in this statistical release have been calculated on the basis of 1995=100 since November 1997. Both actual and seasonally adjusted figures are presented.</li><li>3 In order to improve timeliness, some information for the current month (August) have been estimated due to late response. These estimates will be revised in the future statistical release(s) as soon as more up-to-date information is available.</li></ol>
<b>Scope of the survey</b>	<ol style="list-style-type: none"><li>4 This survey covers manufacturing establishments conducting activities regarding -<ul style="list-style-type: none"><li>• the manufacturing, processing, making or packing of products;</li><li>• the slaughtering of animals, including poultry; and</li><li>• installation, assembly, completion, repair and related work.</li></ul></li></ol>
<b>Classification</b>	<ol style="list-style-type: none"><li>5 The 1993 edition of the Standard Industrial Classification of all Economic Activities (SIC), Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 International Standard Industrial Classification of all Economic Activities (ISIC) with suitable adaptations for local conditions. Statistics in this publication are presented at SIC division, major group and subgroup level. Each statistical unit is classified to an industry which reflects the predominant activity of the establishment (branch).</li></ol>
<b>Statistical unit</b>	<ol style="list-style-type: none"><li>6 The basic statistical unit for the collection of information is the manufacturing establishment. An establishment is the smallest economic unit that functions as a separate entity. Each statistical unit is classified to an industry (cf. paragraph 6).</li></ol>
<b>Survey methodology and design</b>	<ol style="list-style-type: none"><li>7 The calculation of the monthly production indices is based on the value of products and articles manufactured, after the effect of price changes has been eliminated through deflation by using appropriate sub-indices of the Production Price Index (PPI). The value of the manufactured products is obtained from a monthly sample</li></ol>

survey of manufacturing establishments in the private and public sectors.

- 8 The survey is collected by mail each month from a sample of approximately 2 330 manufacturing establishments.
- 9 The above-mentioned measurement method in paragraph 7 was followed in 38 of the various major groups. On account of certain considerations more appropriate indicators were used for the nine remaining major groups namely grain mill products, tobacco products, coke and refined petroleum products, basic iron and steel products, basic precious and non-ferrous metal products, motor vehicles, trailers, parts and accessories, bodies for motor vehicles, parts and accessories and 'other transport equipment'. The volume indices for the major groups grain mill products, tobacco products, coke and refined petroleum products, basic iron and steel products, basic precious and non-ferrous metal products, motor vehicles, trailers, parts and accessories, bodies for motor vehicles and parts and accessories are calculated on the basis of physical quantities. The major group tobacco products is included under 'Other' manufacturing industries. This method is also applied by other international statistical agencies for petroleum products due to the results being more satisfactory (mainly due to these commodities being relatively homogeneous and the nature of the industry). In the case of "other transport equipment" units such as ships and aircraft are completed over a relatively long period and establishments can often not report charges for work done continuously. The sales and charges for work done are only shown after completion of the product, which is not a true reflection of the real production for the month under consideration. Therefore the index for "other transport equipment" is calculated monthly according to man-hours worked.

#### **Sample design**

- 10 The 1988 Census of Manufacturing provided the sampling frame for the selection of the monthly sample regarding manufacturing production and sales which was implemented as from January 1995. A stratified systematic sample design based on gross output was used. All statistical units were stratified by type of economic activity according to the Standard Industrial Classification of all Economic Activities (SIC) and measure of size, where measure of size was the total manufacturing gross output of the establishment. All large establishments (size category one cases) are completely enumerated. A sample was drawn from medium and small size establishments by systematically selecting establishments with equal probability.

#### **Benchmarking**

- 11 The index of physical volume of manufacturing production as well as the total value of sales of manufactured products should provide an accurate reflection of the trend of activities of the relevant industry. The level of activities as measured by the monthly Manufacturing Production and Sales sample survey is based on information received from a sample of manufacturing establishments which is weighted according to the original sample design in order to represent the population of manufacturing establishments. It is necessary to adjust the level of activities as measured by the monthly sample survey to the level of activities as measured periodically by the Census of Manufacturing. This procedure, whereby the latest results of an economic census are used to compile more accurate level estimates for a certain year, is known as benchmarking. The results, due to benchmarking, were published in statistical releases P3041.3 (entitled Manufacturing statistics: Indices of the physical volume of manufacturing production, Base: 1995=100, January 1990 to September 1999) on 21 December 1999 and P3041.4 (entitled Manufacturing statistics: Value of sales, January 1990 to September 1999) on 8 December 1999.
- 12 The results of the 1991, 1993 and 1996 Censuses of Manufacturing and information obtained from the former TBVC states were used to adjust the level of the manufacturing production indices and the value of sales of manufactured products. The total value of output of the manufacturing major groups (which represents the total value of work done by the establishments in these major groups) as obtained from the manufacturing censuses, was deflated with appropriate sub-indices of the Production Price Index in order to calculate the real output. The latter served as benchmarks to verify or adjust the level of the monthly physical volume of manufacturing production indices. The level adjustments were done on the volume indices for January of the relevant census year (e.g. the 1996 census year covers the period 1 July 1995 to 30 June 1996 and therefore the benchmarking was done using

the index of January 1996 as reference point). The motor vehicle major group is the only exception where the financial year for most of the establishments covered the period 1 January 1995 to 31 December 1995. The benchmarking was done using the physical volume of

manufacturing production index for July 1995 as reference point.

<b>Production index for the total manufacturing industry</b>	<b>13</b>	<p>In order to calculate a production index for the total manufacturing industry, the production indices for the major groups are combined as follows:</p> <p>A weight is calculated for every major group according to the value added of the relevant major group compared with the value added to the total manufacturing industry based on the 1991, 1993 and 1996 Censuses of Manufacturing. Weights between census years are fixed and are based on the results of the most recent Census of Manufacturing. The production indices of all the major groups are multiplied by the applicable weights and aggregated to reflect the total physical volume of manufacturing production index.</p>
<b>Seasonal adjustment</b>	<b>14</b>	<p>Seasonally adjusted estimates of all items are generated each month, using the X-11 Seasonal Adjustment Program developed by US Bureau of the Census Economic Research and Analyses Division, 1968. Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove irregular or non-seasonal influences which may be present in any particular month. Influences that are volatile or unsystematic can still make it difficult to interpret the movement of the series even after adjustment for seasonal variations. This means the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour.</p>
<b>Trend cycle</b>	<b>15</b>	<p>The trend is the long-term pattern or movement of a time series. The X-11 Seasonal Adjustment Program is used for smoothing seasonally adjusted estimates.</p>
<b>Reliability of estimates</b>	<b>16</b>	<p>Estimates are subject to sampling and non-sampling errors. Figures for the latest month are preliminary.</p>
<b>Historical data</b>	<b>17</b>	<p>More comprehensive detail on the method of calculation and historical data in respect of the production indices according to manufacturing major groups and the value of sales for the period January 1990 to September 1999 were published in statistical releases P3041.3 (entitled <b>Manufacturing statistics: Indices of the physical volume of manufacturing production, Base: 1995=100, January 1990 to September 1999</b>) on 21 December 1999 and P3041.4 (entitled <b>Manufacturing statistics: Value of sales, January 1990 to September 1999</b>) on 8 December 1999.</p>
<b>Related publications</b>	<b>18</b>	<p>Users may also wish to refer to the following publications which are available from Stats SA -</p> <ul style="list-style-type: none"><li>• P3041.3 - Manufacturing statistics: Indices of the physical volume of manufacturing production, Base: 1995=100, January 1990 to September 1999.</li><li>• P3041.4 - Manufacturing statistics: Value of sales (divisions, major groups and subgroups), January 1990 to September 1999.</li><li>• Bulletin of Statistics.</li><li>• SA Statistics.</li><li>• P0441 - Gross Domestic Product.</li></ul>

<b>Unpublished statistics</b>	<b>19</b>	In some cases Stats SA can also make available statistics which are not published. The statistics can be made available as: computer printouts, diskette and CD. Generally a charge is made for providing unpublished statistics.																		
<b>Rounding-off of figures</b>	<b>20</b>	The figures in the tables have, where necessary, been rounded off to the nearest final digit shown. There may, therefore, be slight discrepancies between the sums of the constituent items and the totals shown.																		
<b>Pre-release policy</b>	<b>21</b>	Stats SA has adopted the confidential pre-release policy in respect of selected economic indicators and specific government departments. The policy accords with practice among leading statistical agencies. The statistical integrity of the indices and strict observance of the release time has been assured by the following procedure: in respect of this statistical release, an official representative from the Office of the President, the Office of the Deputy President, the Department of Trade and Industry, the Department of Finance and the South African Reserve Bank receive a copy of the release on a strictly confidential basis two hours in advance of the public issue.																		
	<b>22</b>	Stats SA's pre-release policy may be inspected at its Website, <a href="http://www.statssa.gov.za">www.statssa.gov.za</a> .																		
<b>Symbols and abbreviations</b>		<table border="0"> <tr> <td>GDP</td> <td>Gross Domestic Product</td> </tr> <tr> <td>ISIC</td> <td>International Standard Classification of all Economic Activities</td> </tr> <tr> <td>PPI</td> <td>Production Price Index</td> </tr> <tr> <td>SIC</td> <td>Standard Industrial Classification of all Economic Activities</td> </tr> <tr> <td>SNA</td> <td>System of National Accounts</td> </tr> <tr> <td>Stats SA</td> <td>Statistics South Africa</td> </tr> <tr> <td>TBVC states</td> <td>Relates to the former Transkei, Bophuthatswana, Venda and Ciskei states</td> </tr> <tr> <td>1/</td> <td>Preliminary figures</td> </tr> <tr> <td>*</td> <td>Revised figures</td> </tr> </table>	GDP	Gross Domestic Product	ISIC	International Standard Classification of all Economic Activities	PPI	Production Price Index	SIC	Standard Industrial Classification of all Economic Activities	SNA	System of National Accounts	Stats SA	Statistics South Africa	TBVC states	Relates to the former Transkei, Bophuthatswana, Venda and Ciskei states	1/	Preliminary figures	*	Revised figures
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## Technical notes

**Response rates** The response rate for the survey on manufacturing production and sales for August 2002 is 80,4%.  
The response rates by manufacturing major division are tabulated in table D.

**Table D - Response rates for August 2002**

<b>Manufacturing major divisions</b>	<b>Sample No. of establishments</b>	<b>% response</b>
Food and food products	306	81,0
Beverages	65	90,8
Textile	111	91,9
Total wearing apparel	128	89,1
Tanning and dressing of leather	26	92,3
Footwear	21	90,5
Wood and products of wood	123	69,1
Paper and paper products	93	83,9
Total publishing and printing	89	74,2
Coke and refined petroleum products	30	80,0
Basic chemicals	77	87,0
Other chemical products	108	86,1
Rubber products	18	100,0
Plastic products	88	80,7
Glass and glass products	14	71,4
Other non-metallic mineral products	133	72,9
Basic iron and steel products	42	83,3
Basic precious and non-ferrous metal products	23	78,3
Fabricated metal products	230	80,0
Total machinery and equipment	181	76,2
Electrical machinery, apparatus	76	78,9
Radio, television and communication apparatus	23	65,2
Professional equipment	29	65,5
Motor vehicles; trailers; parts and accessories	115	79,1
Other transport equipment	35	94,3
Furniture	60	66,7
Other manufacturing industries	82	76,8
<b>Total</b>	<b>2 326</b>	<b>80,4</b>



## **Glossary**

<b>Enterprise</b>	An enterprise (firm) is a legal entity consisting of one or more establishments. The establishments need not necessarily all be manufacturing establishments, but some may be classifiable as other industries of the economy, such as wholesale trade, retail trade, motor trade and construction.
<b>Establishment</b>	An establishment is defined as an enterprise (firm), or part of an enterprise, that is situated at a single location and in which only a single (non-ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.
<b>Index of physical volume of manufacturing production</b>	The index of physical volume of manufacturing production or a production index is a statistical measure of the change in the volume of production. The production index of a major group is the ratio between the volume of production of a major group in a given period and the volume of production of the same major group in the base period. The base period is 1995. The production in the base period is set at 100.
<b>Industry</b>	An industry consists of a group of establishments engaged in the same or similar kinds of economic activity. Industries are defined in the System of National Accounts (SNA) in the same way as in the Standard Industrial Classification of all Economic Activities, Fifth Edition, Report No. 09-90-02 of January 1993 (SIC).
<b>Intercensal period</b>	Intercensal period is the period between January of the one census year and January of the next census year.
<b>Intermediate consumption</b>	Intermediate consumption includes - <ul style="list-style-type: none"><li>• purchases and transfers-in of materials;</li><li>• payments to other establishments for work done;</li><li>• other direct factory costs;</li><li>• rent and leasing paid;</li><li>• head office charges;</li><li>• royalties, copyright, trade names and patent rights paid;</li><li>• advertising;</li><li>• insurance premiums;</li><li>• services; and</li><li>• secretarial and administrative fees.</li></ul>
<b>Output</b>	Output is the aggregate value of goods manufactured and work done.  Output includes - <ul style="list-style-type: none"><li>• sales and transfers-out of own manufactures, factory waste and stocks of factored goods;</li><li>• repairs;</li><li>• installation, erection and assembly;</li><li>• sundry trading revenue;</li><li>• sales of factored goods minus purchases of factored goods;</li><li>• rent and leasing received;</li><li>• royalties received;</li><li>• difference between opening value and closing value of work in progress, stocks of own manufactures and stocks of factored goods;</li><li>• head office charges; and</li><li>• other revenue.</li></ul>

Output excludes –

- excise and customs duty paid.

**Value added**

Value added is the value of output less intermediate consumption. It represents the value added to the cost of the materials used in the process of production.

**Sales**

Sales are the total value of sales and transfers-out of all own manufactured products/articles and the amounts received for installation, erection or assembly or other services rendered.

**Weight**

The weight of a major group is the ratio of the value added of a major group (i.e. output of a major group minus intermediate consumption) to the total value added of the manufacturing industry. The weight of a major group reflects the importance of the major group in the total manufacturing industry. The weights change over time due to quality changes, changes in relative prices, and changes in preference, etc. New weights need to be calculated from time to time.

Table A - Contribution of the production by the different manufacturing divisions to the total manufacturing production (Base 1995=100)

Manufacturing Divisions	Percentage contribution to the total manufacturing production in the base year 1995 (Weights)	Average seasonally adjusted production index for the three months June 2002 to August 2002	Quarterly percentage change (June 2002 to August 2002 compared with the preceding three months)	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production 1/
Food and food products	10,7	100,2	-1,1	-0,1
Beverages	4,6	105,2	+0,6	+0,0
Total textiles	2,9	101,3	-5,9	-0,2
Total wearing apparel	3,6	84,2	-0,4	-0,0
Tanning and dressing of leather	0,4	126,3	+2,9	+0,0
Footwear	0,9	52,0	+2,4	+0,0
Wood and products of wood	1,9	126,4	-6,9	-0,1
Paper and paper products	5,3	109,1	-1,1	-0,1
Total publishing and printing	4,1	81,9	-3,1	-0,1
Coke and refined petroleum products	4,2	105,0	-2,7	-0,1
Basic chemicals	4,5	158,6	-5,3	-0,2
Other chemical products	6,2	112,5	-2,8	-0,2
Rubber products	1,4	105,5	-3,2	-0,1
Plastic products	3,1	116,3	+4,3	+0,1
Glass and glass products	1,0	105,0	-1,5	-0,0
Other non-metallic mineral products	3,5	93,4	-7,0	-0,2
Basic iron and steel products	7,6	127,6	+12,1	+0,9
Basic precious and non-ferrous metal products	3,2	177,4	-1,7	-0,1
Fabricated metal products	7,0	123,6	-1,0	-0,1
Total machinery and equipment	5,8	122,4	-1,7	-0,1
Electrical machinery, apparatus	3,4	110,7	+2,3	+0,1
Radio, television and communication apparatus	1,0	83,7	-11,7	-0,1
Professional equipment	0,5	100,6	+7,1	+0,0
Motor vehicles; trailers; parts and accessories	8,0	132,5	-1,1	-0,1
Other transport equipment	1,0	118,3	-14,3	-0,1
Furniture	1,6	101,9	-8,4	-0,1
Other manufacturing divisions	2,6	114,4	-6,5	-0,2
<b>Total</b>	<b>100,0</b>	<b>114,6</b>	<b>-1,2</b>	<b>-1,2</b>

1/ The contribution is calculated by multiplying the quarterly percentage change of each manufacturing division with its corresponding weight in the base year, divided by 100.

Table 1 - Indices of the physical volume of manufacturing production: Total

Base 1995 = 100							
Month	1996	1997	1998	1999	2000*	2001*	2002
Actual indices							
J	83,6	89,8	89,6	88,0	90,8	95,6	99,5
F	96,7	103,1	101,1	98,3	104,2	108,3	110,6*
M	102,6	102,5	102,7	102,2	111,0	113,4	116,3*
A	96,4	105,5	96,3	95,2	94,4	100,2	111,7*
M	104,1	106,2	101,1	100,7	105,9	106,9	117,8*
J	102,9	104,9	104,5	100,0	108,3	111,5	113,0*
J	104,7	108,2	104,4	103,6	106,3	109,3	117,0
A	107,8	105,8	99,9	102,7	108,7	108,5	117,4 1/
S	105,2	108,2	106,8	106,1	111,0	109,7	
O	115,8	119,1	111,7	112,6	116,7	122,4	
N	114,4	111,7	109,8	115,6	120,1	124,8	
D	83,7	86,9	85,3	91,3	95,0	97,1	
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Year	101,5	104,3	101,1	101,4	106,0	109,0	
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Seasonally adjusted indices							
J	98,9	105,2	104,1	101,4	103,6	108,9	113,5
F	98,6	105,1	102,7	99,9	105,7	109,8	111,7
M	99,1	99,7	100,1	99,3	107,3	109,3	111,8
A	102,0	110,8	101,1	100,0	99,5	106,0	118,9
M	103,9	105,4	100,3	100,3	105,4	106,4	117,4
J	101,6	103,5	103,1	98,8	106,8	110,2	111,9
J	102,7	106,0	102,4	102,0	104,8	108,0	115,7
A	104,8	103,4	98,2	101,4	107,5	107,4	116,2
S	100,4	103,5	102,5	102,2	107,2	106,1	
O	103,5	106,5	100,6	101,7	106,0	111,1	
N	103,1	100,9	99,2	104,3	108,2	112,1	
D	98,6	101,8	99,9	107,0	110,7	112,7	

\* Revised

1/ Preliminary

Table 2 - Indices of the physical volume of manufacturing production according to manufacturing divisions and major groups

Base 1995 = 100

Manufacturing divisions and major groups	Weights	Actual indices					Seasonally adjusted indices		
		Year	August			August 1/2002	August 2001	July	
			2001	2002				2002	
				2001	2002			2002	2002
Food and food products	10,7	104,3	103,3	96,3	97,3	103,3	100,0	97,7	
Meat, fish, fruit etc.	2,8	120,0	117,3	122,1	123,6	121,4	132,3	128,9	
Dairy products	1,4	92,4	97,7	83,5	91,8	93,8	89,2	87,8	
Grain mill products	2,1	99,8	104,5	102,6	102,9	102,6	101,5	100,8	
Other food products	4,4	100,1	95,4	80,6	79,5	95,0	82,0	79,4	
Beverages	4,6	98,5	89,7	82,7	102,3	98,3	99,2	112,4	
Total textiles	2,9	96,4	100,0	107,8	106,1	96,0	101,7	101,8	
Textiles	1,7	86,3	94,9	96,3	105,2	87,0	89,7	96,1	
Other textile products	1,2	110,8	107,2	124,2	107,3	108,8	118,7	109,8	
Total wearing apparel	3,6	78,9	85,8	82,6	90,7	80,8	83,9	85,2	
Knitted, crocheted articles	0,6	76,5	81,7	85,8	86,5	79,4	85,1	84,2	
Wearing apparel	3,0	79,4	86,6	81,9	91,6	81,1	83,6	85,5	
Tanning and dressing of leather	0,4	114,8	92,7	122,8	131,0	95,7	123,8	137,2	
Footwear	0,9	53,9	57,4	59,4	57,6	52,3	59,0	52,3	
Wood and products of wood	1,9	120,8	119,3	122,7	138,6	115,0	120,7	133,6	
Sawmilling and planing of wood	0,8	101,5	93,5	101,7	122,5	87,5	96,5	115,0	
Products of wood	1,2	133,4	136,3	136,4	149,2	133,1	136,6	145,9	
Paper and paper products	5,3	103,5	99,0	108,6	105,9	100,9	109,1	108,7	
Total publishing and printing	4,1	83,8	84,4	77,1	83,3	83,3	79,5	82,2	
Publishing	1,5	96,2	98,8	80,9	86,1	99,0	87,6	86,2	
Printing, recorded media	2,6	76,8	76,3	75,0	81,8	74,5	75,0	79,9	
Coke and refined petroleum products	4,2	104,6	103,9	105,6	99,2	103,7	106,8	98,9	
Basic chemicals	4,5	140,3	134,0	154,6	150,4	141,8	158,0	159,5	
Other chemical products	6,2	106,1	106,6	114,4	111,8	107,9	113,8	113,1	
Rubber products	1,4	99,3	111,6	119,7	105,9	109,1	113,9	104,2	
Plastic products	3,1	97,0	96,6	118,5	120,5	95,1	115,8	118,6	
Glass and glass products	1,0	98,9	101,9	108,0	106,2	95,1	107,2	99,0	
Other non-metallic mineral products	3,5	97,9	105,1	102,4	101,1	99,7	99,0	95,6	
Basic iron and steel products	7,6	116,2*	119,0	135,9	135,1	116,0	127,5	131,4	
Basic precious and non-ferrous metal products	3,2	171,8	179,5	187,1	185,5	173,7	177,9	179,2	
Fabricated metal products	7,0	111,1*	120,0	126,4	139,3	112,0	124,2	129,1	
Structural metal products	2,4	101,4*	116,5	107,6	120,2	108,2	105,9	110,5	
Other fabricated metal products	4,6	116,1	121,8	136,1	149,1	113,9	133,6	138,6	
Total machinery and equipment	5,8	109,0*	118,7	129,5	130,4	114,7	125,4	126,3	
General purpose machinery	2,5	113,0*	129,0	130,0	124,1	122,3	123,5	117,7	
Special purpose machinery	2,9	104,3	108,5	128,4	140,2	106,8	126,9	137,8	
Household appliances	0,4	118,8	127,9	133,9	98,8	124,3	125,6	96,1	
Electrical machinery, apparatus	3,4	102,7	98,9	112,4	112,8	100,6	111,7	115,3	
Radio, television and communication apparatus	1,0	94,5	89,9	74,6	88,9	87,5	78,5	86,0	
Professional equipment	0,5	83,4	90,1	104,9	107,8	86,5	97,5	103,5	
Motor vehicles; trailers; parts and accessories	8,0	130,1*	108,3	149,3	134,6	108,7	142,1	134,7	
Motor vehicles	4,5	127,6	88,7	132,5	123,8	88,5	125,6	123,1	
Bodies for motor vehicles; trailers and semi-trailers	0,5	66,7	51,0	69,5	71,4	51,7	74,9	73,4	
Parts and accessories	3,0	145,6*	148,2	189,0	162,5	149,3	179,3	163,4	
Other transport equipment	1,0	122,1	131,7	121,2	101,3	136,7	114,2	106,0	
Furniture	1,6	98,2	99,7	108,4	110,2	98,2	110,9	108,9	
Other manufacturing divisions	2,6	110,6	109,5	127,1	121,7	104,1	117,5	116,3	
Total	100,0	109,0	108,5	117,0	117,4	107,4	115,7	116,2	

\* Revised

1/ Preliminary

Table 3 - Value of sales of the manufacturing industry: Total (R'000)

Month	1996	1997	1998	1999	2000	2001*	2002
Actual values							
J	21 803 249	25 254 480	25 913 926	26 407 920	28 656 999	34 048 668	40 363 001*
F	26 328 500	29 866 793	29 901 544	30 601 551	35 032 589	39 242 945	46 661 156*
M	28 188 286	29 866 272	32 190 538	32 784 131	38 106 013	42 745 053	49 401 916*
A	26 231 967	30 438 604	29 758 879	30 497 742	32 716 838	37 880 330	49 827 438*
M	28 293 052	30 626 091	30 352 835	32 731 846	37 110 010	41 201 304	51 768 960*
J	28 261 416	30 575 542	31 723 893	33 108 598	38 779 272	42 804 155	50 289 164*
J	28 378 392	31 169 707	31 732 667	33 319 382	36 303 946	41 260 376	51 895 290
A	29 568 761	31 400 042	30 810 619	33 643 307	39 061 898	41 230 161	53 146 768 1/
S	29 549 724	31 344 644	32 896 327	35 776 740	39 988 077	42 412 455	
O	33 070 022	35 902 602	34 970 472	37 452 163	41 849 266	48 680 168	
N	33 084 713	33 709 581	34 300 610	38 913 647	43 959 297	49 568 579	
D	26 338 721	28 128 922	29 016 347	33 052 001	37 317 870	42 304 959	
Year	339 096 803	368 283 280	373 568 657	398 289 028	448 882 075	503 379 153	
Seasonally adjusted values							
J	26 393 742	30 490 909	31 043 943	31 445 737	33 874 609	39 865 818	47 460 769
F	26 819 293	30 511 673	30 609 213	31 389 217	35 860 781	40 161 070	47 764 157
M	26 889 008	28 704 942	30 947 567	31 537 390	36 461 138	40 875 580	47 216 737
A	27 720 827	32 100 599	31 486 720	32 337 194	34 780 669	40 370 762	53 476 022
M	28 439 630	30 703 315	30 378 222	32 756 189	36 990 523	40 977 602	51 457 836
J	28 034 063	30 219 750	31 254 496	32 611 158	37 991 020	41 903 804	49 240 072
J	28 371 190	31 180 950	31 878 267	33 626 179	36 728 482	41 832 179	52 721 239
A	28 808 165	30 744 928	30 341 132	33 272 996	38 607 748	40 695 848	52 476 402
S	28 367 291	30 166 089	31 778 682	34 683 560	38 813 703	41 258 753	
O	29 573 981	32 170 319	31 381 192	33 810 930	38 131 284	44 510 333	
N	29 745 821	30 333 499	30 812 458	34 905 969	39 583 390	44 460 840	
D	29 271 254	30 823 405	31 459 776	35 874 474	40 447 587	45 504 903	

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1/ Preliminary

Table 4 - Value of sales of manufactured products according to manufacturing divisions and major groups (R'000)

Manufacturing divisions and major groups	Year	Actual values			Seasonally adjusted values		
		August	July	August 1/	August	July	August
		2001	2002		2001	2002	
Food and food products	67 324 864	5 647 587	6 862 948	6 989 351	5 660 422	6 976 083	7 004 627
Meat, fish, fruit etc.	20 191 117	1 719 652	2 228 740	2 322 931	1 723 905	2 303 378	2 337 174
Dairy products	7 941 251	678 159	744 078	779 831	663 287	791 227	765 251
Grain mill products	17 569 435	1 518 502	2 096 824	2 099 127	1 495 355	2 070 392	2 068 284
Other food products	21 623 061	1 731 274	1 793 306	1 787 462	1 777 875	1 811 086	1 833 918
Beverages	23 706 465	1 844 693	1 880 191	2 301 740	1 952 099	2 271 729	2 426 690
Total textiles	11 022 124	984 122	1 179 694	1 160 108	934 930	1 138 768	1 090 322
Textiles	6 965 073	647 114	770 056	817 824	599 471	727 242	754 012
Other textile products	4 057 051	337 008	409 638	342 284	335 459	411 526	336 310
Total wearing apparel	10 957 867	974 109	1 017 362	1 128 983	928 349	1 041 394	1 074 614
Knitted, crocheted articles	1 846 405	159 710	192 224	190 556	156 687	189 284	186 977
Wearing apparel	9 111 462	814 399	825 138	938 427	771 662	852 110	887 637
Tanning and dressing of leather	2 803 508	196 253	275 589	311 438	207 578	287 427	333 142
Footwear	1 974 373	176 514	199 704	203 938	160 576	188 451	185 569
Wood and products of wood	10 173 522*	817 300	1 025 389	1 134 039	789 722	993 945	1 096 657
Sawmilling and planing of wood	2 760 863	222 463	304 813	315 757	214 813	293 666	305 722
Products of wood	7 412 659*	594 837	720 576	818 282	574 909	700 279	790 935
Paper and paper products	25 164 997	2 041 623	2 505 260	2 427 034	2 107 559	2 532 769	2 519 068
Total publishing and printing	12 318 990	1 022 420	1 106 815	1 204 715	1 018 154	1 162 703	1 198 064
Publishing	5 137 601	431 507	414 020	437 914	428 957	441 587	435 419
Printing, recorded media	7 181 389	590 913	692 795	766 801	589 197	721 116	762 645
Coke and refined petroleum products	37 699 329	3 277 304	4 338 887	4 279 780	3 045 941	4 388 371	3 983 872
Basic chemicals	25 202 064	2 020 529	2 541 739	2 565 829	2 068 416	2 581 686	2 626 182
Other chemical products	29 537 288	2 472 388	2 929 037	3 047 006	2 485 135	2 989 760	3 063 044
Rubber products	5 324 083	539 216	607 123	560 767	519 210	593 609	543 153
Plastic products	12 330 216	1 041 617	1 319 929	1 381 792	1 020 579	1 312 534	1 352 081
Glass and glass products	2 841 584	229 843	280 891	281 811	227 836	279 745	278 997
Other non-metallic mineral products	12 216 261	1 120 881	1 248 228	1 263 570	1 040 375	1 218 095	1 170 141
Basic iron and steel products	35 607 441	3 041 636	3 817 613	4 473 444	2 988 087	4 090 689	4 399 237
Basic precious and non-ferrous metal products	17 972 477	1 470 474	1 870 193	1 746 500	1 460 205	1 970 766	1 747 959
Fabricated metal products	27 694 470	2 531 249	2 873 622	3 161 202	2 365 409	2 852 045	2 934 141
Structural metal products	9 132 860	833 700	888 419	1 033 160	773 558	899 680	951 816
Other fabricated metal product	18 561 610	1 697 549	1 985 203	2 128 042	1 591 851	1 952 365	1 982 326
Total machinery and equipment	21 839 183	2 016 351	2 432 128	2 310 745	1 982 784	2 379 246	2 274 364
General purpose machinery	9 421 686	942 773	1 028 104	915 216	903 408	971 490	879 891
Special purpose machinery	10 085 479	854 958	1 166 878	1 219 573	864 480	1 177 807	1 221 531
Household appliances	2 332 018	218 620	237 146	175 956	214 896	229 949	172 942
Electrical machinery, apparatus	13 981 876	1 166 317	1 466 021	1 508 088	1 144 260	1 453 542	1 483 754
Radio, television and communication apparatus	3 634 854	324 815	323 847	371 225	287 303	348 400	324 532
Professional equipment	1 657 936	143 046	169 233	187 918	139 144	170 366	181 963
Motor vehicles; trailers; parts and accessories	65 043 901	3 984 252	7 138 008	6 695 942	4 062 132	6 994 804	6 794 037
Motor vehicles	45 822 893	2 612 899	4 947 508	4 720 519	2 645 115	4 879 452	4 755 458
Bodies for motor vehicles; trailers and semi-trailers	1 620 464	115 961	203 358	176 032	115 655	200 436	176 466
Parts and accessories	17 600 544	1 255 392	1 987 142	1 799 391	1 301 361	1 914 916	1 862 113
Other transport equipment	3 373 967	305 216	315 970	267 564	314 254	311 647	279 216
Furniture	6 227 972	558 288	621 753	660 960	526 742	613 129	621 367
Other manufacturing divisions	15 747 541	1 282 118	1 548 116	1 521 279	1 258 648	1 579 538	1 489 610
Total	503 379 153*	41 230 161	51 895 290	53 146 768	40 695 848	52 721 239	52 476 402

\* Revised

1/ Preliminary

Table 5 - Value of unfilled orders according to selected manufacturing subgroups (R'000)

Selected manufacturing subgroups	Actual values			Seasonally adjusted values		
	August	July	August 1/	August	July	August
	2001	2002		2001	2002	
Spinning, weaving and finishing of textiles	230 836	331 804	336 484	234 551	328 735	341 794
Tents, tarpaulins, sails and other canvas goods and automotive textile goods	32 868	34 476	36 047	33 009	37 320	36 494
Other textile articles	70 433	67 286	80 558	69 457	68 460	78 645
Knitted and crocheted fabrics and articles	106 317	140 674	131 496	114 410	146 653	142 177
Wearing apparel	654 198	783 101	817 212	646 767	801 651	808 805
Sawmilling and preserving of timber	24 068	18 115	11 642	23 801	17 777	11 485
Veneer sheets, plywood, laminboard, etc.	25 805	24 817	23 840	25 923	23 560	23 975
Builders' carpentry and joinery	43 401	46 516	45 947	41 380	45 551	43 736
Pulp, paper and paperboard	306 622	289 612	301 434	281 673	241 242	276 994
Corrugated paper and paper-board and containers	372 966	381 969	380 687	371 215	382 983	375 642
Paints, varnishes and coatings	22 880	17 477	17 240	23 094	19 482	18 043
Basic iron and steel products	3 523 560	4 993 582	5 163 972	3 521 692	4 972 676	5 159 125
Steel pipe and tube mills	174 452	563 233	558 978	174 089	550 069	555 218
Basic precious and non-ferrous metal products	1 863 911	1 866 283	1 763 020	1 818 709	1 799 122	1 716 841
Metal structures, parts	1 534 220	1 525 492	1 597 450	1 454 133	1 424 320	1 505 787
Cutlery, hand tools and general hardware	17 086	12 900	12 553	20 149	14 613	14 998
Metal containers, e.g. cans and tins	81 799	67 954	70 424	82 995	69 600	70 960
Cables, wire products, springs	59 916	63 765	60 858	61 305	60 367	62 650
Metal fasteners	67 744	81 708	84 669	69 174	86 761	86 050
All other metal products	643 307	844 692	871 881	635 973	862 824	872 837
Domestic appliances	30 156	28 781	29 323	29 556	27 448	28 836
Electric motors, generators and transformers	409 503	425 320	475 677	379 998	408 593	437 590
Insulated wire and cables	297 471	409 446	403 906	299 148	387 085	405 359
Accumulators, primary cells and primary batteries	12 284	5 266	5 344	13 085	5 502	5 723
Television, radio and communication apparatus	2 017 642	2 262 994	2 165 374	1 967 728	2 162 671	2 123 032
Motor vehicles	2 354 495	2 479 318	2 554 283	2 460 978	2 601 312	2 676 358
Parts and accessories for motor vehicles	390 788	669 034	615 429	350 509	596 327	551 088
Furniture	290 113	302 925	332 788	283 615	328 360	326 387

\* Revised



Table C - Contribution of the manufacturing divisions to total value of sales of manufactured products

Manufacturing	Percentage contribution to total value of sales of manufactured products June 2001 to August 2001	Percentage change between June 2001 to August 2001 and June 2002 to August 2002	Contribution (percentage points) to the percentage change in the total value of sales of manufactured products 1/	Difference in sales of manufacturing divisions between June 2001 to August 2001 and June 2002 to August 2002
				R'000
Food and food products	13,2	26,8	3,5	4 443 660
Beverages	4,2	16,7	0,7	885 582
Total textiles	2,4	18,1	0,4	535 456
Total Wearing apparel	2,2	12,0	0,3	328 100
Tanning and dressing of leather	0,5	29,8	0,1	198 707
Footwear	0,4	5,2	0,0	27 388
Wood and products of wood	2,1	22,5	0,5	581 437
Paper and paper products	5,0	20,2	1,0	1 258 824
Total publishing and printing	2,4	15,1	0,4	451 941
Coke and refined petroleum products	7,8	27,9	2,2	2 730 144
Basic chemicals	5,0	21,3	1,1	1 327 886
Other chemical products	5,8	20,7	1,2	1 508 009
Rubber products	1,2	12,1	0,1	181 427
Plastic products	2,5	28,7	0,7	879 560
Glass and glass products	0,6	17,7	0,1	123 637
Other non-metallic mineral products	2,6	10,8	0,3	351 663
Basic iron and steel products	7,0	41,3	2,9	3 600 497
Basic precious and non-ferrous metal products	3,5	24,5	0,9	1 075 523
Fabricated metal products	5,8	20,4	1,2	1 483 826
Total machinery and equipment	4,6	25,3	1,2	1 455 792
Electrical machinery, apparatus	2,9	23,4	0,7	838 768
Radio, television and communication apparatus	0,7	22,7	0,2	204 287
Professional equipment	0,3	31,3	0,1	128 290
Motor vehicles; trailers; parts and accessories	12,4	29,7	3,7	4 609 267
Other transport equipment	0,7	4,8	0,0	43 014
Furniture	1,3	13,8	0,2	225 147
Other manufacturing divisions	3,1	14,4	0,4	558 698
Total	100,0	24,0	24,0	30 036 530

1/ The contribution (percentage points) is calculated by multiplying the percentage change of each manufacturing division with the percentage contribution of the same division during corresponding period, divided by 100.

Table B - Contribution of the manufacturing divisions to the total value of seasonally adjusted sales of manufactured products

Manufacturing Divisions	Seasonally adjusted sales June 2002 to August 2002 R'000	Percentage change between March 2002 to May 2002 and June 2002 to August 2002	Difference in seasonally adjusted sales of manufacturing divisions between March 2002 to May 2002 and June 2002 to August 2002 R'000
Food and food products	21 094 170	+5,6	1 121 144
Beverages	6 916 351	+5,6	366 271
Total textiles	3 300 693	-0,9	29 072
Total Wearing apparel	3 075 968	+1,6	47 693
Tanning and dressing of leather	890 369	+8,7	71 242
Footwear	529 348	+2,9	14 856
Wood and products of wood	3 079 865	-3,8	120 746
Paper and paper products	7 493 202	+1,4	101 009
Total publishing and printing	3 535 359	+2,5	87 016
Coke and refined petroleum products	12 161 130	+3,8	445 849
Basic chemicals	7 755 107	-2,4	194 629
Other chemical products	8 967 977	+0,7	62 160
Rubber products	1 635 439	-1,9	31 653
Plastic products	3 918 654	+5,9	216 942
Glass and glass products	826 423	+2,2	18 010
Other non-metallic mineral products	3 400 253	-3,7	130 321
Basic iron and steel products	12 330 080	+10,3	1 150 392
Basic precious and non-ferrous metal products	5 410 006	-0,4	22 454
Fabricated metal products	8 513 180	+2,3	188 227
Total machinery and equipment	6 983 716	+3,9	264 010
Electrical machinery, apparatus	4 317 887	+1,4	59 286
Radio, television and communication apparatus	1 040 451	-3,1	33 223
Professional equipment	516 887	+3,7	18 250
Motor vehicles; trailers; parts and accessories	19 655 892	-5,2	1 071 104
Other transport equipment	900 572	-19,1	212 918
Furniture	1 811 921	-3,5	66 530
Other manufacturing industries	4 376 815	-0,7	32 588
Total	154 437 714	+1,5	2 287 119

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