

**P3041.2**

**Manufacturing: production and sales**

June 2003

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**Key figures as at the end of June 2003**

<b>Actual estimates</b>		<b>June 2003</b>	<b>% change between June 2002 and June 2003</b>	<b>% change between April 2002 to June 2002 and April 2003 to June 2003</b>	<b>% change between January 2002 to June 2002 and January 2003 to June 2003</b>
volume of manufacturing index of sales of manufactured products (R million)	Physical production (2000=100)	104,4	-2,2	-3,7	-1,7
	Total value of products (R million)	50 539,2	+0,6	-1,2	+3,5

<b>Seasonally adjusted estimates</b>		<b>June 2003</b>	<b>% change between May 2003 and June 2003</b>	<b>% change between January 2003 to March 2003 and April 2003 to June 2003</b>
volume of manufacturing index of sales of manufactured products (R million)	Physical production (2000=100)	103,2	-2,1	-1,3
	Total value of products (R million)	49 673,5	-0,1	-2,2

## **Key findings as at the end of June 2003**

### **MANUFACTURING PRODUCTION DECREASES**

*Manufacturing production for the second quarter of 2003 reflected a decrease of 1,3%, after seasonal adjustment, compared with the first quarter of 2003. Lower production was reported by 18 of the 27 manufacturing divisions. Furthermore, the actual manufacturing production for the first six months of 2003 reflected a decrease of 1,7% compared with the first six months of 2002. The manufacturing production for June 2003, after seasonal adjustment, also reflected a decrease of 2,1% compared with May 2003.*

The major contributor to the decrease of 1,3% after seasonal adjustment in the total manufacturing production were the food and food products division (contributing -0,4 of a percentage point to total manufacturing production), followed by the textile and wearing apparel (each contributing -0,3 of a percentage point), wood and products of wood, 'other' chemical products, basic iron and steel products and 'other' manufacturing industries (each contributing -0,2 of a percentage point) divisions (see table A).

### **SALES OF MANUFACTURED PRODUCTS DECREASE**

*The total value of sales of manufactured products at current prices for the second quarter of 2003 reflected a decrease of 2,2% (-R3 360 million), after seasonal adjustment, compared with the first quarter of 2003. Lower manufacturing sales were reported by 19 of the 27 manufacturing divisions during this period. Furthermore, the actual total value of sales of manufactured products at current prices for the second quarter of 2003 reflected a decrease of 1,2% (-R1 877 million) compared with the second quarter of 2002. Lower manufacturing sales were reported by 10 of the 27 manufacturing divisions.*

The decrease of 2,2% after seasonal adjustment in the total value of sales of manufactured products at current prices for the second quarter of 2003 compared with first quarter of 2003 was mainly due to large decreases reported by the coke and refined petroleum products (-14,3% or -R1 510 million), basic precious and non-ferrous metal products (-6,4% or -R321 million), food and food products (-4,3% or -R911 million) and motor vehicles, trailers, parts and accessories (-2,6% or -R515 million) divisions (see table B).

The major contributors to the decrease of 1,2% in the actual value of sales of manufactured products at current prices for the second quarter of 2003 compared with the second quarter of 2002 were the coke and refined petroleum products (-1,6 percentage points or -R2 422 million), motor vehicles, trailers, parts and accessories (-1,0 percentage point or -R1 540 million), basic precious and non-ferrous metal products (-0,5 of a percentage point or -R820 million) and basic chemicals (-0,3 of a percentage point or -R487 million) divisions. However, these decreases were partially counteracted by a large increase reported by the basic iron and steel products division which contributed 1,1 percentage points or +R1 660 million to the quarterly percentage change in total actual value of sales of manufactured products at current prices for the second quarter of 2003 compared with the second quarter of 2002 (see table C).

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## Notes

<b>Forthcoming issues</b>	<b>Issue</b>	<b>Expected release date</b>
	July 2003	9 September 2003
	August 2003	7 October 2003
	September 2003	11 November 2003
	October 2003	9 November 2003
	November 2003	13 January 2004
	December 2003	10 February 2004

**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

- Introduction**
- 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 historical 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.
  - 2 In accordance with international practice, the indices have to be re-based every five years to a new base year. The indices in this statistical release have been calculated on the basis of 2000=100. Both actual and seasonally adjusted figures are presented.
  - 3 In order to improve timeliness, some information for the current month (June 2003) 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.
- Scope of the survey**
- 4 This survey covers manufacturing establishments conducting activities regarding -
    - the manufacturing, processing, making or packing of products;
    - the slaughtering of animals, including poultry; and
    - installation, assembly, completion, repair and related work.
- Classification**
- 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 and major group level. Each statistical unit is classified to an industry which reflects the predominant activity of the establishment (branch).
- Statistical unit**
- 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 5).

- Weighting** 7 A weight is calculated for every major group according to the value added of the relevant major group compared with the value added of 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 (cf. Table E for the fixed weights which were used for the three periods 1990 to 1992, 1993 to 1995 and 1996 to 2003.).
- Re-basing** 8 In accordance with international practice, the indices have to be re-based every five years to a new base year. The indices in this statistical release have been calculated on the basis of 2000=100. The first results on this basis were published in the December 2002 statistical release. Both actual and seasonally adjusted figures are presented.
- Survey methodology and design** 9 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 survey of manufacturing establishments in the private and public sectors.
- 10 The survey is collected by mail each month from a sample of approximately 2 400 manufacturing establishments.
- 11 The above-mentioned measurement method in paragraph 9 was followed in 36 of the 45 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, bodies for motor vehicles and parts and accessories for motor vehicles 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, bodies for motor vehicles and parts and accessories for motor vehicles and other transport equipment are calculated on the basis of physical quantities. This method based on physical quantities is 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). For publication purposes, the major group tobacco products is included under 'Other' manufacturing industries.
- Sample design** 12 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**

**13** 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.

**14** 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.

**Production index for the total manufacturing**

**15** In order to calculate a production index for the total manufacturing industry, the production indices for the major groups are combined as follows:



## industry

A weight is calculated for every major group according to the value added of the relevant major group compared with the value added of 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.

- Seasonal adjustment** 16 Seasonally adjusted estimates of all major groups 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.
- Trend cycle** 17 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.
- Reliability estimates** of 18 Estimates are subject to sampling and non-sampling errors. Figures for the latest month are preliminary.
- Historical data** 19 More comprehensive detail on the method of calculation and historical data in respect of the production indices according to manufacturing major groups for the period January 1990 to November 2002 is available in statistical release P3041.3 (entitled **Manufacturing statistics: Indices of the physical volume of manufacturing production, Base: 2000=100, January 1990 to November 2002.**
- 20 More comprehensive detail on the method of calculation and historical data in respect of the value of sales for the period January 1990 to September 1999 was published on 8 December 1999 in statistical release P3041.4.
- Related publications** 21 Users may also wish to refer to the following publications which are available from Stats SA -
- P3041.3 - Manufacturing statistics: Indices of the physical volume of manufacturing production, Base: 2000=100, January 1990 to November 2002.

- P3041.4 - Manufacturing statistics: Value of sales (divisions, major groups and subgroups), January 1990 to September 1999.
- Bulletin of Statistics.
- SA Statistics.
- P0441 - Gross Domestic Product.

**Unpublished statistics** 22 In some cases Stats SA can also make available statistics which are not published. The statistics can be made available as a computer printout, diskette or CD. Generally a charge is made for providing unpublished statistics.

**Rounding-off of figures** 23 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.

**Pre-release policy** 24 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.

25 Stats SA's pre-release policy may be inspected at its Website, [www.statssa.gov.za](http://www.statssa.gov.za).

**Symbols and abbreviations**

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

## Technical notes

**Response rates** The response rate for the survey on manufacturing production and sales for June 2003 was 78,9%. The response rates by manufacturing major division are tabulated in table D.

**Table D - Response rates for June 2003**

<b>Manufacturing major divisions</b>	<b>Sample No. of establishments</b>	<b>% response</b>
Food and food products	306	73,9
Beverages	62	85,5
Textile	104	94,2
Total wearing apparel	125	87,2
Tanning and dressing of leather	24	87,5
Footwear	21	81,0
Wood and products of wood	110	53,6
Paper and paper products	92	81,5
Total publishing and printing	86	77,9
Coke and refined petroleum products	28	75,0
Basic chemicals	73	95,9
Other chemical products	106	84,9
Rubber products	21	85,7
Plastic products	92	76,1
Glass and glass products	12	83,3
Other non-metallic mineral products	126	80,2
Basic iron and steel products	39	92,3
Basic precious and non-ferrous metal products	22	77,3
Fabricated metal products	219	79,5
Total machinery and equipment	182	80,2
Electrical machinery, apparatus	77	81,8
Radio, television and communication apparatus	22	68,2
Professional equipment	25	60,0
Motor vehicles; trailers; parts and accessories	118	89,0
Other transport equipment	34	79,4
Furniture	67	65,7
Other manufacturing industries	79	57,0
<b>Total</b>	<b>2 272</b>	<b>78,9</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 2000. 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</li></ul>

factored

- goods;
- repairs;
- installation, erection and assembly;
- sundry trading revenue;
- sales of factored goods minus purchases of factored goods;
- rent and leasing received;
- royalties received;
- difference between opening value and closing value of work in progress, stocks of own manufactures and stocks of factored goods;
- head office charges; and
- other revenue.

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 E - Weights and the average indices of physical volume of manufacturing production according to manufacturing divisions and major groups before re-basing

Manufacturing divisions and major groups	Weights			Average indices for the year 2000 before re-basing
	1990-1992	1993-1995	1996-2003	
	<b>Base 1995 = 100</b>			
Food and food products	10,97	12,33	10,71	99,1
Meat, fish, fruit etc.	2,93	3,20	2,83	111,7
Dairy products	1,40	1,68	1,36	89,4
Grain mill products	2,13	2,80	2,10	91,3
Other food products	4,52	4,65	4,41	97,6
Beverages	4,83	5,26	4,60	92,6
Total textiles	3,33	3,33	2,88	93,5
Textiles	2,09	2,03	1,69	84,6
Other textile products	1,24	1,30	1,19	106,2
Total wearing apparel	3,94	3,81	3,60	82,8
Knitted, crocheted articles	0,67	0,64	0,60	73,9
Wearing apparel	3,27	3,17	3,00	84,5
Tanning and dressing of leather	0,41	0,34	0,41	125,2
Footwear	1,15	1,10	0,93	65,6
Wood and products of wood	1,96	1,81	1,95	119,3
Sawmilling and planing of wood	0,98	0,82	0,77	104,8
Products of wood	0,97	0,99	1,17	128,8
Paper and paper products	4,58	4,73	5,32	105,3
Total publishing and printing	3,57	3,95	4,11	87,8
Publishing	1,15	1,41	1,48	97,8
Printing, recorded media	2,42	2,54	2,63	82,3
Coke and refined petroleum products	6,45	6,41	4,17	104,5
Basic chemicals	4,57	3,19	4,47	132,0
Other chemical products	5,97	6,61	6,17	101,8
Rubber products	1,59	1,52	1,36	98,7
Plastic products	2,58	2,85	3,08	89,7
Glass and glass products	1,15	0,99	1,00	88,5
Other non-metallic mineral products	3,67	3,58	3,50	97,6
Basic iron and steel products	6,90	6,49	7,56	116,3
Basic precious and non-ferrous metal products	2,15	2,19	3,25	175,6
Fabricated metal products	7,53	6,84	7,03	103,4
Structural metal products	2,84	2,04	2,39	90,5
Other fabricated metal products	4,69	4,80	4,65	110,0
Total machinery and equipment	6,31	6,06	5,78	99,7
General purpose machinery	2,58	2,59	2,50	110,6
Special purpose machinery	3,14	2,82	2,89	87,8
Household appliances	0,60	0,65	0,39	117,0
Electrical machinery, apparatus	3,36	3,49	3,45	102,1
Electric motors	0,31	0,37	0,57	106,9
Electricity distribution	0,32	0,46	0,52	135,2
Insulated wire and cables	0,71	0,79	0,77	91,1
Accumulators	0,43	0,47	0,33	82,3
Electric lamps	0,30	0,25	0,22	90,5
Other electrical equipment	1,28	1,15	1,04	99,9
Radio, television and communication apparatus	1,59	1,20	0,97	123,8
Professional equipment	0,41	0,54	0,51	80,9
Motor vehicles; trailers; parts and accessories	6,40	6,77	8,05	119,6
Motor vehicles	3,30	3,62	4,50	114,9
Bodies for motor vehicles; trailers and semi-trailers	0,61	0,52	0,55	63,3
Parts and accessories	2,49	2,62	3,00	137,0
Other transport equipment	1,16	1,10	1,01	118,3
Furniture	1,69	1,62	1,56	98,9
Other manufacturing divisions	1,79	1,88	2,58	111,5
<b>TOTAL</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>106,0</b>

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Table A - Contribution of the production by the different manufacturing divisions to the total manufacturing production (Base 2000=100)

Manufacturing Divisions	Percentage contribution to the total manufacturing production in the base year 2000 (Weights)	Average seasonally adjusted production index for the three months April 2003 to June 2003	Quarterly percentage change (April 2003 to June 2003 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	99,0	-3,5	-0,4
Beverages	4,6	114,7	-0,9	-0,1
Total textiles	2,9	95,0	-11,5	-0,3
Total wearing apparel	3,6	96,3	-8,5	-0,3
Tanning and dressing of leather	0,4	83,6	-3,0	-0,0
Footwear	0,9	68,9	-8,9	-0,1
Wood and products of wood	1,9	107,3	-7,7	-0,2
Paper and paper products	5,3	96,5	-2,7	-0,1
Total publishing and printing	4,1	100,4	+6,0	+0,3
Coke and refined petroleum products	4,2	101,4	+4,2	+0,2
Basic chemicals	4,5	107,8	-1,0	-0,1
Other chemical products	6,2	104,3	-3,4	-0,2
Rubber products	1,4	98,4	-1,1	-0,0
Plastic products	3,1	121,8	+0,5	+0,0
Glass and glass products	1,0	113,6	-3,1	-0,0
Other non-metallic mineral products	3,5	100,5	+0,4	+0,0
Basic iron and steel products	7,6	110,3	-3,1	-0,2
Basic precious and non-ferrous metal products	3,2	100,6	+0,3	+0,0
Fabricated metal products	7,0	116,3	+0,2	+0,0
Total machinery and equipment	5,8	118,7	+6,8	+0,4
Electrical machinery, apparatus	3,4	103,4	+0,4	+0,0
Radio, television and communication apparatus	1,0	84,5	+6,0	+0,1
Professional equipment	0,5	121,6	-7,2	-0,0
Motor vehicles; trailers; parts and accessories	8,0	106,3	-0,7	-0,1
Other transport equipment	1,0	97,9	-3,2	-0,0
Furniture	1,6	99,2	-0,4	-0,0
Other manufacturing divisions	2,6	101,5	-5,7	-0,2
<b>Total</b>	<b>100,0</b>	<b>105,0</b>	<b>-1,3</b>	<b>-1,3</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 2000 = 100							
Month	1997	1998	1999	2000	2001	2002	2003
Actual indices							
J	85,3	85,8	83,6	85,2	89,5	92,7	93,6
F	99,1	97,2	93,7	98,7	102,0	104,5	105,4
M	98,4	98,9	97,9	104,8	107,3	109,6	109,3*
A	100,9	92,3	90,7	89,0	94,6	105,3	100,6*
M	101,7	96,8	95,9	99,9	100,8	110,7	105,7
J	100,9	99,6	94,8	102,1	105,0	106,7	104,4 1/
J	103,9	99,9	98,3	100,1	102,7	109,9	
A	101,9	95,6	97,7	102,5	102,6	111,9	
S	104,3	102,3	100,9	104,8	104,0	113,1	
O	115,2	106,9	107,3	109,8	115,5	120,6	
N	107,9	105,5	109,9	113,6	118,1	121,1	
D	83,5	81,8	86,3	89,5	91,3	92,6	
Year	100,3	96,9	96,4	100,0	102,8	108,2	
Seasonally adjusted indices							
J	100,6	100,4	97,1	97,8	102,4	106,0	107,2
F	100,9	98,7	95,2	100,1	103,5	105,7	106,8
M	95,5	96,1	95,1	101,4	103,5	105,5	105,3
A	106,2	97,0	95,2	93,7	99,8	111,5	106,4
M	101,2	96,3	95,6	99,6	100,3	110,2	105,4
J	99,7	98,5	93,8	100,9	103,8	105,4	103,2
J	101,9	98,2	97,0	98,9	101,9	109,1	
A	99,5	93,8	96,2	100,9	101,1	110,1	
S	99,4	98,0	97,1	101,2	100,8	109,8	
O	102,8	95,9	96,8	99,6	104,8	109,6	
N	97,1	94,9	98,8	101,9	105,8	108,4	
D	97,9	95,7	101,0	104,0	105,6	107,2	

\* Revised

1/ Preliminary

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

Base 2000 = 100

Manufacturing divisions and major groups	Weights	Year 2002	Actual indices			Seasonally adjusted indices			
			June	May	June 1/	June	May	June	
			2002		2003		2002	2003	
Food and food products	10,7	101,6	106,3	101,5	103,5	102,6	101,1	99,7	
Meat, fish, fruit etc.	2,8	113,1	113,1	123,1	116,4	114,8	123,0	117,6	
Dairy products	1,4	100,7	91,5	86,2	86,2	99,2	95,7	93,4	
Grain mill products	2,1	113,6	110,6	109,4	107,0	110,1	105,9	106,6	
Other food products	4,4	88,7	104,4	88,6	98,9	92,2	86,5	87,0	
Beverages	4,6	112,4	103,2	106,5	98,2	112,3	118,2	106,7	
Total textiles	2,9	111,6	113,2	105,2	95,7	108,3	96,3	91,6	
Textiles	1,7	110,4	112,1	103,7	92,1	107,0	94,1	88,0	
Other textile products	1,2	113,3	114,7	107,3	100,9	110,1	99,3	96,8	
Total wearing apparel	3,6	101,9	90,8	93,7	92,4	96,8	93,7	98,0	
Knitted, crocheted articles	0,6	111,2	102,2	107,5	105,1	92,6	91,8	94,6	
Wearing apparel	3,0	100,0	88,5	90,9	89,8	97,6	94,0	98,7	
Tanning and dressing of leather	0,4	96,9	91,5	94,4	90,0	88,4	85,1	86,7	
Footwear	0,9	82,0	68,9	62,1	64,1	68,7	65,1	63,9	
Wood and products of wood	1,9	110,6	108,7	115,5	107,4	105,6	109,7	104,5	
Sawmilling and planing of wood	0,8	108,3	114,7	111,4	103,1	110,3	106,0	99,0	
Products of wood	1,2	112,1	104,8	118,2	110,3	102,5	112,2	108,1	
Paper and paper products	5,3	103,1	106,1	94,9	106,4	101,1	93,9	101,0	
Total publishing and printing	4,1	94,8	95,5	97,5	98,8	96,4	97,8	99,4	
Publishing	1,5	91,3	89,9	94,6	102,5	89,7	96,3	102,1	
Printing, recorded media	2,6	96,8	98,7	99,1	96,7	100,2	98,6	98,0	
Coke and refined petroleum products	4,2	102,5	104,4	98,6	99,9	105,5	100,8	101,1	
Basic chemicals	4,5	119,1	116,7	104,9	107,3	118,1	106,0	108,1	
Other chemical products	6,2	111,5	106,0	101,3	100,7	108,6	104,1	103,4	
Rubber products	1,4	109,9	98,6	109,4	93,2	103,0	98,1	98,0	
Plastic products	3,1	124,3	125,4	129,2	111,3	128,1	126,8	114,2	
Glass and glass products	1,0	118,9	124,8	102,9	115,9	122,2	112,8	113,3	
Other non-metallic mineral products	3,5	104,5	98,3	102,2	108,3	90,8	98,3	100,1	
Basic iron and steel products	7,6	106,0	109,8	118,5	102,8	105,6	118,3	98,9	
Basic precious and non-ferrous metal products	3,2	100,8	104,4	101,9	99,3	103,1	101,5	98,2	
Fabricated metal products	7,0	119,6	112,9	114,5	117,4	111,8	113,4	115,8	
Structural metal products	2,4	116,8	112,0	108,4	116,5	115,6	110,0	119,9	
Other fabricated metal product	4,6	121,1	113,4	117,6	117,8	109,9	115,2	113,6	
Total machinery and equipment	5,8	121,3	122,1	113,8	128,2	115,6	119,1	121,2	
General purpose machinery	2,5	109,3	108,6	102,8	108,3	100,4	103,6	100,8	
Special purpose machinery	2,9	133,4	134,9	125,2	149,5	130,4	135,4	142,9	
Household appliances	0,4	109,4	113,9	99,8	98,5	104,4	97,9	90,8	
Electrical machinery, apparatus	3,4	103,7	107,0	103,7	103,9	102,7	101,7	99,9	
Radio, television and communication apparatus	1,0	76,8	69,9	59,8	101,6	69,3	76,5	101,2	
Professional equipment	0,5	120,8	128,9	121,4	130,9	123,4	120,5	125,5	
Motor vehicles; trailers; parts and accessories	8,0	108,8	104,1	112,5	102,8	103,2	105,8	102,5	
Motor vehicles	4,5	105,5	102,5	104,8	99,7	95,4	100,3	93,4	
Bodies for motor vehicles; trailers and semi-trailers	0,5	102,8	112,6	124,8	118,4	107,2	109,1	112,2	
Parts and accessories	3,0	114,9	105,0	121,7	104,6	114,1	113,5	114,4	
Other transport equipment	1,0	118,2	122,1	97,4	103,7	117,9	97,5	99,1	
Furniture	1,6	107,3	92,8	109,9	95,2	89,8	104,6	92,8	
Other manufacturing divisions	2,6	102,9	98,1	103,9	94,1	98,3	100,8	95,8	
Total	100,0	108,2	106,7	105,7	104,4	105,4	105,4	103,2	

\* Revised

1/ Preliminary

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

Month	1997	1998	1999	2000	2001	2002 *	2003
Actual values							
J	25 254 480	25 913 926	26 362 762	28 647 234	33 988 164	40 272 591	44 438 077 *
F	29 866 793	29 901 544	30 551 283	34 961 840	39 187 078	46 539 563	50 788 697 *
M	29 866 272	32 190 538	32 737 212	38 039 203	42 683 525	49 227 081	52 640 756 *
A	30 438 604	29 758 879	30 447 208	32 651 220	37 828 090	49 732 137	49 149 950 *
M	30 626 091	30 352 835	32 680 898	37 038 716	41 146 142	51 651 087	50 076 010
J	30 575 542	31 723 893	33 054 424	38 710 074	42 743 527	50 259 292	50 539 243 1/
J	31 169 707	31 732 667	33 262 293	36 234 329	41 174 318	51 841 409	
A	31 400 042	30 810 619	33 586 437	38 992 758	41 164 534	53 364 782	
S	31 344 644	32 896 327	35 703 435	39 916 972	42 295 572	55 271 662	
O	35 902 602	34 970 472	37 386 689	41 775 594	48 601 886	58 793 903	
N	33 709 581	34 300 610	38 843 424	43 881 507	49 478 825	59 064 339	
D	28 128 922	29 016 347	32 992 528	37 256 576	42 207 610	47 332 030	
Year	368 283 280	373 568 657	397 608 593	448 106 023	502 499 271	613 349 876	
Seasonally adjusted values							
J	30 492 829	31 048 381	31 400 414	33 843 149	39 725 116	47 137 906	52 275 769
F	30 508 709	30 603 795	31 325 311	35 767 487	40 044 288	47 560 191	51 819 626
M	28 714 855	30 974 330	31 554 548	36 571 494	41 113 180	47 507 132	50 797 942
A	32 086 925	31 467 181	32 257 409	34 641 688	40 099 399	52 855 410	52 114 529
M	30 709 301	30 386 539	32 700 482	36 954 318	40 915 698	51 306 958	49 745 331
J	30 225 044	31 253 861	32 539 884	37 974 385	41 876 266	49 292 675	49 673 541
J	31 160 837	31 844 469	33 492 569	36 576 222	41 694 922	52 597 018	
A	30 752 939	30 347 942	33 210 838	38 543 547	40 660 832	52 694 872	
S	30 167 447	31 774 067	34 626 032	38 730 928	41 182 366	53 900 244	
O	32 172 908	31 393 322	33 759 787	38 008 182	44 297 949	53 671 637	
N	30 310 341	30 790 122	34 828 903	39 475 195	44 360 879	53 006 229	
D	30 843 492	31 476 367	35 836 918	40 375 043	45 440 496	51 307 793	

\* Revised

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		
		2002	June	May	June	1/	June	May	June	
			2002		2003			2002		2003
Food and food products	82 673 880	7 152 385	6 819 457	6 918 193		7 063 669	6 690 997	6 833 014		
Meat, fish, fruit etc.	26 328 187	2 173 027	2 340 903	2 248 954		2 176 754	2 265 959	2 245 949		
Dairy products	9 221 497	686 661	746 928	736 567		732 323	778 433	787 717		
Grain mill products	24 465 379	2 040 874	1 944 015	1 991 516		2 010 877	1 844 112	1 965 020		
Other food products	22 658 817	2 251 823	1 787 611	1 941 156		2 143 715	1 802 493	1 834 328		
Beverages	26 913 178	1 999 599	2 224 642	2 109 677		2 246 220	2 524 163	2 380 397		
Total textiles	13 425 652	1 151 457	1 162 294	1 051 694		1 089 547	1 066 614	995 532		
Textiles	8 654 162	743 069	763 514	670 310		716 124	692 102	647 169		
Other textile products	4 771 490	408 388	398 780	381 384		373 423	374 512	348 363		
Total wearing apparel	12 404 596	901 937	1 045 881	948 015		962 029	1 071 006	1 007 021		
Knitted, crocheted articles	2 200 044	181 038	206 948	201 936		154 354	175 985	171 631		
Wearing apparel	10 204 552	720 899	838 933	746 079		807 675	895 021	835 390		
Tanning and dressing of leather	3 310 031	277 749	266 570	264 659		258 460	238 825	244 944		
Footwear	2 185 578	151 585	155 135	154 367		152 612	154 419	154 913		
Wood and products of wood	12 676 226	1 003 551	1 201 679	1 157 687		990 545	1 146 137	1 146 777		
Sawmilling and planing of wood	3 496 221	297 303	317 095	305 727		287 608	302 807	296 733		
Products of wood	9 180 005	706 248	884 584	851 960		702 937	843 330	850 044		
Paper and paper products	29 798 377	2 534 650	2 424 684	2 656 587		2 392 851	2 380 103	2 514 251		
Total publishing and printing	13 902 770	1 124 307	1 255 433	1 241 573		1 168 101	1 272 326	1 286 510		
Publishing	5 309 542	443 522	471 749	512 621		446 483	488 754	514 978		
Printing, recorded media	8 593 228	680 785	783 684	728 952		721 618	783 572	771 532		
Coke and refined petroleum products	45 408 316	3 782 946	2 860 293	2 897 415		3 738 779	2 890 816	2 895 149		
Basic chemicals	31 234 852	2 455 523	2 414 765	2 226 714		2 566 026	2 434 078	2 319 427		
Other chemical products	35 440 043*	2 804 658	2 920 594	2 868 037		2 915 347	2 983 540	2 988 106		
Rubber products	6 678 589	514 720	601 596	541 901		513 947	565 485	545 054		
Plastic products	15 136 631	1 229 762	1 343 662	1 252 768		1 243 293	1 321 383	1 268 957		
Glass and glass products	3 291 669	260 993	238 630	271 756		267 049	268 424	277 219		
Other non-metallic mineral products	14 496 579	1 132 768	1 316 565	1 239 127		1 065 043	1 240 836	1 165 775		
Basic iron and steel products	48 571 369	4 036 031	4 348 316	4 604 291		3 886 120	4 300 522	4 461 127		
Basic precious and non-ferrous metal products	21 725 348	1 912 347	1 602 449	1 572 351		1 751 151	1 569 702	1 438 535		
Fabricated metal products	34 231 948	2 714 615	2 929 472	3 034 584		2 712 986	2 933 477	3 031 056		
Structural metal products	10 580 226	831 261	908 781	934 675		823 985	897 796	923 219		
Other fabricated metal product	23 651 722	1 883 354	2 020 691	2 099 909		1 889 000	2 035 681	2 107 836		
Total machinery and equipment	26 790 603	2 471 398	2 138 081	2 619 784		2 242 009	2 196 676	2 370 587		
General purpose machinery	11 502 057	1 048 813	952 977	1 065 569		965 072	935 126	987 517		
Special purpose machinery	12 556 524	1 192 150	957 686	1 334 711		1 068 147	1 038 869	1 183 514		
Household appliances	2 732 022	230 435	227 418	219 504		208 790	222 681	199 556		
Electrical machinery, apparatus	16 926 563	1 458 212	1 447 531	1 468 782		1 381 655	1 418 855	1 398 730		
Radio, television and communication apparatus	4 503 712	410 203	340 302	469 611		372 564	411 566	426 268		
Professional equipment	2 028 861	180 587	192 070	175 606		172 336	183 638	168 867		
Motor vehicles; trailers; parts and accessories	80 135 661	6 302 564	6 432 771	6 536 280		5 897 976	6 180 124	6 099 704		
Motor vehicles	56 136 383	4 357 845	4 288 994	4 621 777		3 933 888	4 167 500	4 162 555		
Bodies for motor vehicles; trailers and semi-trailers	2 115 216	170 256	227 988	194 001		172 142	189 775	195 893		
Parts and accessories	21 884 062	1 774 463	1 915 789	1 720 502		1 791 945	1 822 849	1 741 256		
Other transport equipment	4 370 041	376 281	310 809	330 525		341 553	315 128	308 221		
Furniture	7 339 791	541 173	652 282	562 223		561 638	617 586	585 355		
Other manufacturing divisions	17 749 012*	1 377 291	1 430 047	1 365 036		1 339 168	1 368 905	1 362 044		
Total	613 349 876*	50 259 292	50 076 010	50 539 243		49 292 675	49 745 331	49 673 541		

\* Revised

1/ Preliminary

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

Selected manufacturing subgroups	Actual values			Seasonally adjusted values		
	June	May	June 1/	June	May	June
	2002	2003		2002	2003	
Spinning, weaving and finishing of textiles	301 160	366 236	331 418	294 530	345 177	324 465
Tents, tarpaulins, sails and other canvas goods and automotive textile goods	35 748	62 621	60 937	39 437	65 140	67 021
Other textile articles	55 858	83 205	87 775	67 539	92 259	109 029
Knitted and crocheted fabrics and articles	136 955	130 152	134 263	140 213	133 540	136 963
Wearing apparel	809 683	738 697	669 546	838 758	732 840	694 057
Sawmilling and preserving of timber	24 934	30 169	29 735	25 899	30 128	30 843
Veneer sheets, plywood, laminboard, etc.	27 133	28 733	24 894	26 858	27 019	24 437
Builders' carpentry and joinery	45 543	44 987	46 787	45 056	44 809	46 497
Pulp, paper and paperboard	151 350	222 119	268 734	151 035	267 647	271 218
Corrugated paper and paperboard and containers	323 904	347 955	353 701	340 830	363 551	370 702
Paints, varnishes and coatings	20 624	20 116	25 076	22 133	23 081	26 741
Basic iron and steel products	4 870 528	4 586 932	4 613 392	4 782 294	4 591 927	4 511 274
Steel pipe and tube mills	575 018	322 162	311 328	578 212	279 397	310 608
Basic precious and non-ferrous metal products	1 890 498	1 495 186	1 489 152	1 742 439	1 414 750	1 378 853
Metal structures, parts	1 511 196	1 183 647	1 217 992	1 377 072	1 175 783	1 106 006
Cutlery, hand tools and general hardware	29 185	13 758	13 862	32 647	15 620	15 749
Metal containers, e.g. cans and tins	66 473	66 731	63 998	65 738	66 658	63 674
Cables, wire products, springs	63 452	77 645	78 076	59 123	76 041	72 606
Metal fasteners	71 860	112 522	102 874	75 675	119 093	108 201
All other metal products	855 966	855 059	842 323	855 444	865 303	844 597
Domestic appliances	33 822	25 745	23 205	34 006	27 549	23 275
Electric motors, generators and transformers	477 782	586 360	577 299	461 817	587 085	559 961
Insulated wire and cables	387 156	365 604	313 881	379 231	364 215	307 459
Accumulators, primary cells and primary batteries	5 446	4 052	3 830	5 400	3 925	3 843
Television, radio and communication apparatus	2 416 800	2 058 759	2 140 278	2 204 745	1 845 698	1 941 033
Motor vehicles	2 620 086	3 798 171	4 119 154	2 640 760	3 669 793	4 140 906
Parts and accessories for motor vehicles	494 532	330 402	342 213	486 160	323 179	338 560
Furniture	260 598	222 761	226 002	310 954	261 624	275 277

\* 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 April 2002 to June 2002	Percentage change between April 2002 to June 2002 and April 2003 to June 2003	Contribution (percentage points) to the percentage change in the total value of sales of manufactured products 1/	Difference in sales of manufacturing divisions between April 2002 to June 2002 and April 2003 to June 2003
				R'000
Food and food products	13,6	-0,6	-0,1	-120 260
Beverages	3,9	12,7	0,5	748 863
Total textiles	2,3	-7,0	-0,2	-246 224
Total Wearing apparel	2,0	2,4	0,1	71 616
Tanning and dressing of leather	0,6	-13,9	-0,1	-124 440
Footwear	0,3	-3,4	-0,0	-16 982
Wood and products of wood	2,1	6,6	0,1	210 373
Paper and paper products	4,9	-1,7	-0,1	-128 770
Total publishing and printing	2,3	8,8	0,2	301 382
Coke and refined petroleum products	7,6	-21,1	-1,6	-2 422 137
Basic chemicals	5,0	-6,5	-0,3	-486 716
Other chemical products	5,7	1,5	0,1	132 811
Rubber products	1,1	5,0	0,1	80 074
Plastic products	2,4	5,3	0,1	196 089
Glass and glass products	0,5	1,2	0,0	8 855
Other non-metallic mineral products	2,4	3,7	0,1	133 687
Basic iron and steel products	7,7	14,2	1,1	1 659 744
Basic precious and non-ferrous metal products	3,7	-14,8	-0,5	-820 290
Fabricated metal products	5,5	5,3	0,3	440 879
Total machinery and equipment	4,4	0,5	0,0	35 867
Electrical machinery, apparatus	2,8	1,7	0,1	72 448
Radio, television and communication apparatus	0,7	13,1	0,1	140 635
Professional equipment	0,3	4,6	0,0	23 541
Motor vehicles; trailers; parts and accessories	13,6	-7,5	-1,0	-1 539 559
Other transport equipment	0,7	-13,6	-0,1	-140 656
Furniture	1,2	0,1	0,0	1 993
Other manufacturing divisions	2,9	-2,0	-0,1	-90 136
<b>Total</b>	<b>100,0</b>	<b>-1,2</b>	<b>-1,2</b>	<b>-1 877 313</b>

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 April 2003 to June 2003	Percentage change between January 2003 to March 2003 and April 2003 to June 2003	Difference in seasonally adjusted sales of manufacturing divisions between January 2003 to March 2003 and April 2003 to June 2003
	R'000		R'000
Food and food products	20 400 829	-4,3	-911 380
Beverages	7 446 089	+7,8	536 140
Total textiles	3 128 394	-7,7	-259 268
Total Wearing apparel	3 144 835	-7,1	-240 996
Tanning and dressing of leather	726 771	-10,9	-89 128
Footwear	488 146	-16,3	-95 196
Wood and products of wood	3 401 135	-4,3	-151 965
Paper and paper products	7 329 773	-1,0	-75 005
Total publishing and printing	3 821 185	+7,3	260 638
Coke and refined petroleum products	9 065 791	-14,3	-1 510 286
Basic chemicals	7 277 932	-2,2	-164 257
Other chemical products	9 018 602	-0,3	-30 611
Rubber products	1 698 278	+2,7	44 751
Plastic products	3 977 605	-0,1	-5 141
Glass and glass products	824 454	-2,9	-24 599
Other non-metallic mineral products	3 644 846	-1,6	-59 654
Basic iron and steel products	13 293 685	-0,9	-117 805
Basic precious and non-ferrous metal products	4 661 773	-6,4	-321 368
Fabricated metal products	8 998 531	+2,6	224 569
Total machinery and equipment	6 940 301	+1,3	90 591
Electrical machinery, apparatus	4 319 047	+1,7	71 319
Radio, television and communication apparatus	1 287 613	+1,3	16 119
Professional equipment	532 982	-1,2	-6 582
Motor vehicles; trailers; parts and accessories	19 022 276	-2,6	-515 190
Other transport equipment	956 919	-3,1	-31 105
Furniture	1 802 280	-1,1	-20 941
Other manufacturing industries	4 323 329	+0,6	26 416
<b>Total</b>	<b>151 533 401</b>	<b>-2,2</b>	<b>3 359 936</b>