

# **Manufacturing: Production and sales**

## **October 2004**

**Embargoed until:  
7 December 2004  
13:00**

**Table A - Selected key figures regarding manufacturing production and sales for October 2004**

<b>Actual estimates</b>	<b>October 2004</b>	<b>% change between October 2003 and October 2004</b>	<b>% change between September and October 2004</b>	<b>% change between August to October 2003 and August to October 2004</b>	<b>% change between January to October 2003 and January to October 2004</b>
Physical volume of manufacturing production index (2000=100)	122,9	+5,3	+6,9	+6,0	+3,5
Total value of sales of manufactured products (R million)	73 010	+11,4	+5,3	+11,2	+7,8

<b>Seasonally adjusted estimates</b>	<b>October 2004</b>	<b>% change between October 2003 and October 2004</b>	<b>% change between September and October 2004</b>	<b>% change between May to July 2004 and August to October 2004</b>
Physical volume of manufacturing production index (2000=100)	111,3	+5,3	-0,7	+1,6
Total value of sales of manufactured products (R million)	66 386	+11,4	-1,0	+2,1

**Key findings regarding manufacturing production and sales for October 2004**

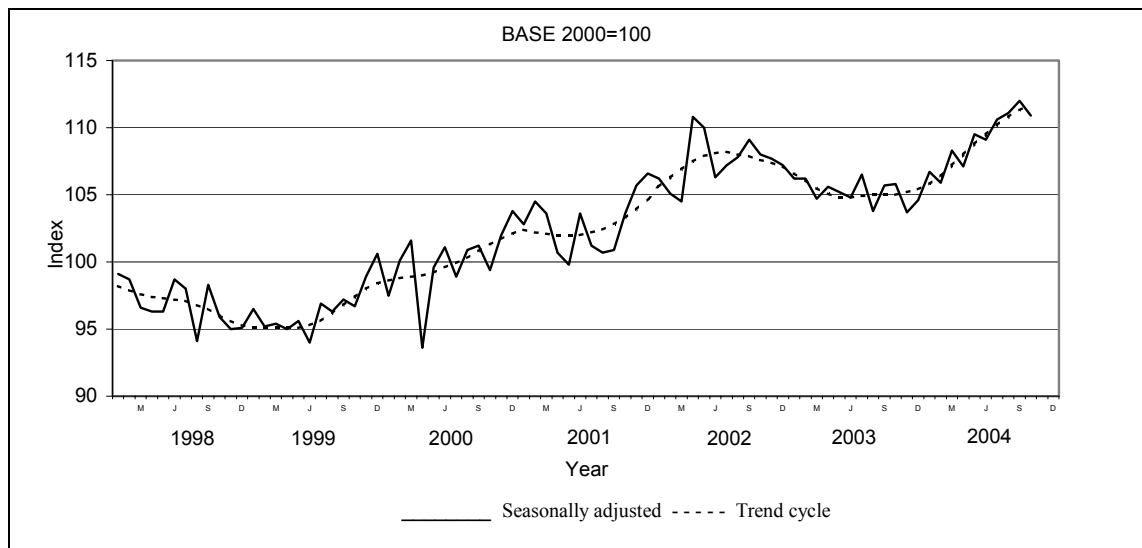
**Manufacturing production increases**

*Manufacturing production for the three months ended October 2004 increased by 1,6%, after seasonal adjustment, compared with the previous three months. Higher production was reported by seven of the ten manufacturing divisions.*

The major contributor to the seasonally adjusted increase of 1,6% in total manufacturing production for the three months ended October 2004 compared with the previous three months was the food and beverages division (contributing +0,5 of a percentage point to total manufacturing production), followed by the motor vehicles, parts and accessories and other transport equipment division and the wood and wood products, paper, publishing and printing division (each contributing +0,4 of a percentage point) and furniture and 'other' manufacturing divisions (contributing +0,3 of a percentage point) (see table B).

Figure 1 shows the seasonally adjusted and trend series for the volume index of manufacturing production between January 1998 and October 2004. The trend series has been rising since mid-2003 and reached a peak at October 2004.

**Figure 1 – Index of the physical volume of manufacturing production**



**Table B - Contribution of manufacturing divisions to total manufacturing production (Base 2000=100)**

Manufacturing divisions	Percentage contribution to the total manufacturing production using the weights according to Large sample survey of the manufacturing industry, 2001	Average seasonally adjusted production index for August 2004 to October 2004	Quarterly percentage change of August to October 2004 compared with the preceding three months	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production 1/
Food and beverages	16,4	115,5	+3,0	+0,5
Textiles, clothing, leather and footwear	5,4	100,3	-1,0	-0,0
Wood and wood products, paper, publishing and printing	11,0	108,5	+4,0	+0,4
Petroleum, chemical products, rubber and plastic products	22,5	111,6	+0,2	+0,1
Glass and non-metallic mineral products	3,9	117,1	+2,2	+0,1
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	112,1	-0,3	-0,1
Electrical machinery	2,7	100,1	+0,8	0,0
Radio, television and communication apparatus and professional equipment	1,3	101,1	-8,8	-0,1
Motor vehicles, parts and accessories and other transport equipment	8,6	120,5	+4,6	+0,4
Furniture and other manufacturing divisions	5,8	104,3	+5,9	+0,3
<b>Total</b>	<b>100,0</b>	<b>111,5</b>	<b>+1,6</b>	<b>+1,6</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.

**Sales of manufactured products increase**

*The total value of sales of manufactured products at current prices for the three months ended October 2004 increased by 2,1% (+R4 013 million), after seasonal adjustment, compared with the previous three months. Higher manufacturing sales were reported by eight of the ten manufacturing divisions during this period (see table C). Furthermore, the actual value of sales of manufactured products at current prices for the three months ended October 2004 was 11,2% higher than for the three months ended October 2003 (see table D). Sales of manufactured products at current prices for the first ten months of 2004 was 7,8% higher than for the first ten months of 2003.*

The seasonally adjusted increase of 2,1% in the total value of sales of manufactured products at current prices for the three months ended October 2004 was mainly due to large increases reported for motor vehicles, parts and accessories and other transport equipment (+5,8% or +R1 633 million), wood and wood products, paper, publishing and printing (+2,2% or +R376 million), basic iron and steel, non-ferrous metal products, metal products and machinery (+2,0% or +R863 million) and food and beverages (+2,0% or +R695 million) (see table C).

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

Manufacturing divisions	Seasonally adjusted sales August to October 2004	Percentage change between May to July 2004 and August to October 2004	Difference in seasonally adjusted sales of manufacturing divisions between July 2004 and August to October 2004
	R'000		R'000
Food and beverages	34 809 456	+2,0	694 915
Textiles, clothing, leather and footwear	8 961 997	-2,9	-263 494
Wood and wood products, paper, publishing and printing	17 254 874	+2,2	376 368
Petroleum, chemical products, rubber and plastic products	40 333 062	+0,2	90 371
Glass and non-metallic mineral products	6 128 648	+3,3	197 195
Basic iron and steel, non-ferrous metal products, metal products and machinery	44 192 845	+2,0	863 264
Electrical machinery	5 328 540	+4,3	219 289
Radio, television and communication apparatus and professional equipment	2 661 700	-2,6	-70 581
Motor vehicles, parts and accessories and other transport equipment	29 981 958	+5,8	1 632 938
Furniture and other manufacturing divisions	9 340 942	+3,0	272 799
<b>Total</b>	<b>198 994 023</b>	<b>+2,1</b>	<b>4 013 066</b>

The major contributors to the increase of 11,2% in sales of manufactured products at current prices for the three months ended October 2004 compared with the three months ended October 2003 were basic iron and steel, non-ferrous metal products, metal products and machinery (+3,0 percentage points or +R5 604 million), motor vehicles, parts and accessories and other transport equipment (+2,5 percentage points or +R4 694 million), food and beverages (+2,0 percentage points or +R3 723 million) and petroleum, chemical products, rubber and plastic products (+2,0 percentage points or +R3 693 million) (see table D).

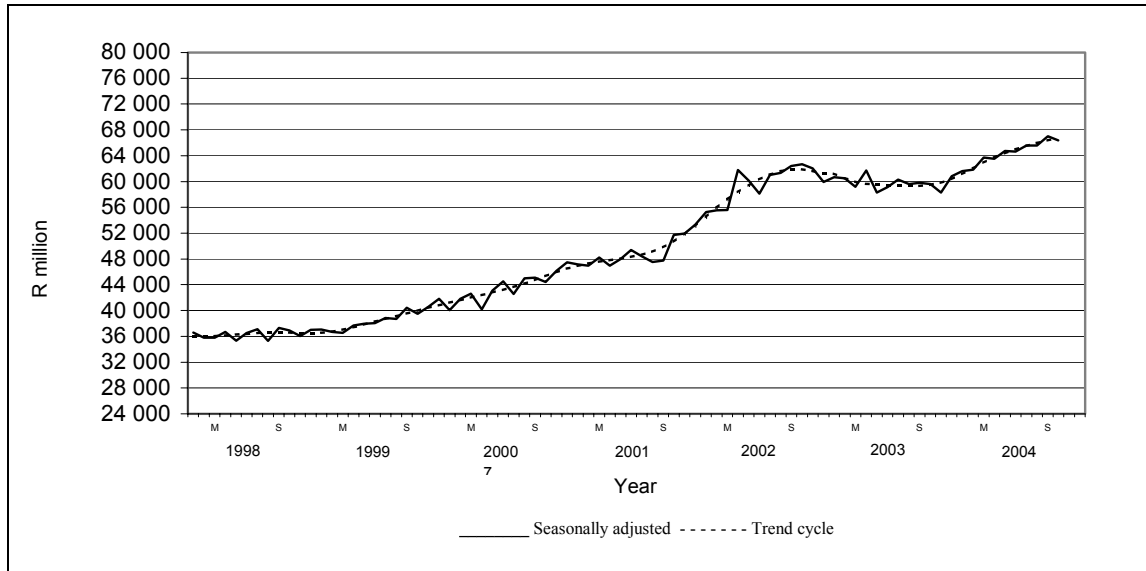
**Table D - Contribution of the manufacturing divisions to total value of sales of manufactured products**

Manufacturing division	Percentage contribution of sales of manufactured products to August 2003	Percentage change between August 2003 and August 2004	Contribution (percentage points) to the percentage change in the total value of manufactured products 1/	Difference in sales of manufacturing divisions between August 2003 and August 2004
				R'000
Food and beverages	16,9	11,8	2,0	3 723 490
Textiles, clothing, leather and footwear	5,1	1,4	0,1	139 088
Wood and wood products, paper, publishing and printing	9,0	5,7	0,5	961 038
Petroleum, chemical products, rubber and plastic products	20,5	9,6	2,0	3 692 781
Glass and non-metallic mineral products	2,9	21,1	0,6	1 166 253
Basic iron and steel, non-ferrous metal products, metal products and machinery	21,8	13,6	3,0	5 603 876
Electrical machinery	2,9	2,3	0,1	124 175
Radio, television and communication apparatus and professional equipment	1,5	-3,9	-0,1	-110 662
Motor vehicles, parts and accessories and other transport equipment	14,5	17,3	2,5	4 693 628
Furniture and other manufacturing divisions	4,8	11,2	0,5	1 001 401
<b>Total</b>	<b>100,0</b>	<b>11,2</b>	<b>11,2</b>	<b>20 995 068</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.

Figure 2 shows the seasonally adjusted and trend series for sales of manufactured products between January 1998 and October 2004. After peaking in September 2002, the series declined until May 2003, before resuming its upward movement.

**Figure 2 - Total value of sales of manufactured products at current prices**



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**Notes**

<b>Forthcoming issues</b>	<b>Issue</b>	<b>Expected release date</b>
	November 2004	11 January 2005
<b>Purpose of the survey</b>	The results of the monthly manufacturing production and sales survey are used to calculate indices of the physical volume of manufacturing production. These indices provide an indicator of the real level of manufacturing activity in the economy. They are used in monitoring the state of the economy and formulation of economic policy. They are also important inputs to estimation of the Gross Domestic Product (GDP).	
<b>Special Data Dissemination Standard of the IMF</b>	The data in this statistical release adhere 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.	



**Detailed tables**

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

Base 2000 = 100

Month	1998	1999	2000	2001	2002	2003	2004
Actual indices							
J	85,8	83,6	85,2	90,8	93,7	94,4	94,1
F	97,2	93,7	98,7	102,7	103,6	104,4	104,1
M	98,9	97,9	104,8	106,8	108,2	108,4	111,8
A	92,3	90,7	89,0	95,3	104,4	99,9	101,6
M	96,9	95,9	99,9	100,2	110,3	105,4	109,9
J	99,6	94,8	102,1	104,0	106,7	105,3	109,4
J	100,0	98,3	100,1	102,8	108,8	108,5	112,5
A	95,6	97,7	102,5	102,3	109,8	106,0	113,2
S	102,3	100,9	104,8	103,1	111,4	108,4	115,0
O	106,9	107,3	109,8	114,9	119,6	116,7	122,9 1/
N	105,5	109,9	113,6	117,6	119,8	115,0	
D	81,8	86,3	89,5	92,5	92,7	91,4	
Year	96,9	96,4	100,0	102,8	107,4	105,3	
Seasonally adjusted indices							
J	99,0	96,5	97,5	103,0	106,3	107,3	106,7
F	98,7	95,2	100,1	104,6	105,2	106,2	105,9
M	96,7	95,5	101,7	103,6	104,5	104,7	108,3
A	96,3	95,0	93,7	100,7	110,8	105,6	107,1
M	96,3	95,6	99,5	99,9	110,0	105,2	109,6
J	98,7	94,0	101,1	103,6	106,3	104,8	109,1
J	98,0	96,9	98,9	101,0	107,0	106,6	110,7
A	94,1	96,3	100,9	100,5	107,7	103,9	111,2
S	98,2	97,2	101,2	100,6	108,8	105,6	112,1
O	95,9	96,7	99,4	104,0	108,4	105,7	111,3
N	95,0	98,8	102,0	105,7	107,7	103,7	
D	95,0	100,5	103,7	106,6	107,2	104,6	

1/ Preliminary.

**Table 2 - Percentage change in the actual index of the physical volume of manufacturing production: Total**

Month	1998	1999	2000	2001	2002	2003	2004
J	.	-2,6	+1,9	+6,6	+3,2	+0,7	-0,3
F	.	-3,6	+5,3	+4,1	+0,9	+0,8	-0,3
M	.	-1,0	+7,0	+1,9	+1,3	+0,2	+3,1
A	.	-1,7	-1,9	+7,1	+9,5	-4,3	+1,7
M	.	-1,0	+4,2	+0,3	+10,1	-4,4	+4,3
J	.	-4,8	+7,7	+1,9	+2,6	-1,3	+3,9
J	.	-1,7	+1,8	+2,7	+5,8	-0,3	+3,7
A	.	+2,2	+4,9	-0,2	+7,3	-3,5	+6,8
S	.	-1,4	+3,9	-1,6	+8,1	-2,7	+6,1
O	.	+0,4	+2,3	+4,6	+4,1	-2,4	+5,3
N	.	+4,2	+3,4	+3,5	+1,9	-4,0	
D	.	+5,5	+3,7	+3,4	+0,2	-1,4	
Year	.	-0,5	+3,7	+2,8	+4,5	-2,0	

The percentage change is the change in the index of the physical volume of manufacturing production of the relevant year compared with the index of physical volume of manufacturing production of the previous year expressed as a percentage.

**Table 3 - Indices of the physical volume of manufacturing production by manufacturing division**

Base 2000 = 100

Manufacturing divisions	Weights	Year	Actual indices			Seasonally adjusted indices			
			2003	October	September	October 1/	October	September	October
				2003	2004		2003	2004	
Food and beverages	16,4	103,6	114,0	117,1	123,7	105,6	114,7	114,8	
Textiles, clothing, leather and footwear	5,4	95,7	118,7	104,3	122,0	99,1	100,4	101,9	
Wood and wood products, paper, publishing and printing	11,0	100,5	109,3	113,4	121,6	100,7	109,1	112,1	
Petroleum, chemical products, rubber and plastic products	22,5	106,6	115,0	110,0	118,7	106,7	111,7	110,1	
Glass and non-metallic mineral products	3,9	104,5	122,7	126,8	128,7	108,8	119,1	114,2	
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	111,5	120,1	117,3	119,4	112,2	113,4	111,8	
Electrical machinery	2,7	102,7	110,3	102,1	110,6	99,2	99,6	100,3	
Radio, television and communication apparatus and professional equipment	1,3	101,2	109,0	106,4	104,9	103,0	101,7	98,8	
Motor vehicles, parts and accessories and other transport equipment	8,6	108,1	123,7	132,2	135,1	106,8	123,8	116,8	
Furniture and other manufacturing divisions	5,8	97,8	119,4	107,3	141,9	92,8	103,4	109,6	
Total	100,0	105,3	116,7	115,0	122,9	105,7	112,1	111,3	

1/ Preliminary.

**Table 4 - Total sales of manufacturing industry (R'000)**

Month	1998	1999	2000	2001	2002	2003	2004
Actual values							
J	30 576 822	31 165 950	33 906 711	40 233 251	47 375 894	51 643 823	52 541 243
F	35 498 013	36 217 248	41 487 385	46 701 165	55 226 455	59 099 962	60 406 324
M	38 210 216	38 782 180	45 391 460	51 045 548	58 657 750	61 384 235	65 908 558
A	35 326 061	36 079 564	38 606 833	44 861 167	59 046 008	58 115 074	60 010 965
M	35 971 768	38 617 164	43 799 078	48 988 234	61 240 265	58 700 877	65 290 063
J	37 522 754	39 201 945	46 031 926	50 924 770	59 827 100	59 613 288	64 828 015
J	37 828 313	39 493 231	43 083 506	48 906 488	61 523 700	60 397 962	65 823 059
A	36 464 484	39 882 170	46 347 295	48 882 758	63 111 998	60 566 563	66 600 738
S	39 084 148	42 233 261	47 362 496	50 070 717	65 371 794	61 812 044	69 321 988
O	41 638 502	44 392 235	49 571 166	57 505 396	69 692 230	65 558 708	73 009 657 1/
N	40 834 784	45 966 203	52 246 640	58 662 310	69 910 936	64 569 771	
D	33 832 128	38 693 441	43 806 233	49 356 948	55 577 013	55 647 226	
Year	442 787 993	470 724 592	531 640 729	596 138 752	726 561 143	717 109 533	
Seasonally adjusted values							
J	37 084 399	37 546 686	40 522 070	47 524 241	55 827 375	60 687 733	61 590 623
F	36 360 981	37 110 653	42 437 310	47 837 259	56 471 916	60 481 893	61 867 431
M	36 540 120	37 167 438	43 423 708	48 953 609	56 373 276	59 175 398	63 702 531
A	37 293 671	38 163 171	40 915 074	47 631 708	62 923 908	61 687 628	63 520 649
M	36 057 550	38 629 888	43 639 150	48 692 255	60 770 099	58 286 516	64 753 286
J	36 898 557	38 517 805	45 158 634	50 099 257	59 066 837	59 162 790	64 652 677
J	37 814 813	39 580 911	43 205 716	49 011 858	61 504 810	60 324 148	65 574 994
A	35 861 427	39 292 103	45 684 699	48 155 647	62 070 182	59 632 465	65 571 256
S	37 743 929	40 876 116	45 846 048	48 542 069	63 325 779	59 788 629	67 036 412
O	37 292 697	39 989 712	44 970 782	52 318 019	63 416 863	59 608 983	66 386 355
N	36 681 782	41 301 248	47 022 662	52 747 074	63 117 039	58 320 401	
D	37 187 161	42 450 257	47 934 456	53 576 133	60 783 736	60 816 410	

1/ Preliminary.

**Table 5 - Percentage change in the actual value of sales of the manufacturing industry: Total**

Month	1998	1999	2000	2001	2002	2003	2004
J	..	+1,9	+8,8	+18,7	+17,8	+9,0	+1,7
F	..	+2,0	+14,6	+12,6	+18,3	+7,0	+2,2
M	..	+1,5	+17,0	+12,5	+14,9	+4,6	+7,4
A	..	+2,1	+7,0	+16,2	+31,6	-1,6	+3,3
M	..	+7,4	+13,4	+11,8	+25,0	-4,1	+11,2
J	..	+4,5	+17,4	+10,6	+17,5	-0,4	+8,7
J	..	+4,4	+9,1	+13,5	+25,8	-1,8	+9,0
A	..	+9,4	+16,2	+5,5	+29,1	-4,0	+10,0
S	..	+8,1	+12,1	+5,7	+30,6	-5,4	+12,1
O	..	+6,6	+11,7	+16,0	+21,2	-5,9	+11,4
N	..	+12,6	+13,7	+12,3	+19,2	-7,6	
D	..	+14,4	+13,2	+12,7	+12,6	+0,1	
Year	.	+6,3	+12,9	+12,1	+21,9	-1,3	

The percentage change is the change in the sales of the manufacturing industry of the relevant year compared with the sales of the previous year expressed as a percentage.

**Table 6 - Sales of manufactured products by manufacturing division (R'000)**

Manufacturing divisions	Year	Actual values									Seasonally adjusted values										
		2003	October			September			October 1/			2003	October			September			October		
			2003			2004			2004				2003			2004			2004		
			2003	2003	2003	2003	2003	2003	2003	2003	2003		2003	2003	2003	2003	2003	2003	2003	2003	2003
Food and beverages	124 771 847	10 920 095	11 688 223	12 230 839	10 362 549	11 623 342	11 601 567														
Textiles, clothing, leather and footwear	35 505 661	3 493 099	3 144 864	3 554 264	2 952 039	3 021 821	3 000 804														
Wood and wood products, paper, publishing and printing	65 416 117	5 795 966	6 127 082	6 333 590	5 379 137	5 779 852	5 866 418														
Petroleum, chemical products, rubber and plastic products	148 180 564	13 694 542	13 713 993	14 891 066	12 230 353	13 503 619	13 355 314														
Glass and non-metallic mineral products	20 136 354	1 949 941	2 193 451	2 329 790	1 696 372	2 051 237	2 030 106														
Basic iron and steel, non-ferrous metal products, metal products and machinery	154 879 658	13 995 823	15 880 226	15 728 301	13 057 465	14 976 286	14 700 092														
Electrical machinery	20 906 441	1 867 034	1 799 237	1 954 319	1 729 463	1 754 582	1 811 098														
Radio, television and communication apparatus and professional equipment	11 116 190	1 011 164	943 606	930 691	984 434	900 406	897 392														
Motor vehicles, parts and accessories and other transport equipment	102 514 318	9 474 011	10 649 258	11 303 823	8 360 273	10 286 105	9 952 897														
Furniture and other manufacturing divisions	33 682 383	3 357 033	3 182 048	3 752 974	2 856 899	3 139 162	3 170 667														
<b>Total</b>	<b>717 109 533</b>	<b>65 558 708</b>	<b>69 321 988</b>	<b>73 009 657</b>	<b>59 608 983</b>	<b>67 036 412</b>	<b>66 386 355</b>														

1/ Preliminary.

## Explanatory notes

- Introduction**
- 1 Statistics South Africa (Stats SA) conducts a monthly survey of the manufacturing industry, covering manufacturing enterprises. This statistical release contains the results of a sample drawn from the new business register, with significantly enhanced coverage of South African businesses (see 4 below). The release contains monthly indices of the physical volume of manufacturing production and monthly value of sales of manufactured products by division within manufacturing.
  - 2 In accordance with international practice, the indices are re-based every five years to a new base year. The base period of the index is 2000. Both actual and seasonally adjusted figures are presented.
  - 3 As is usual, information for the latest month has had to be estimated for respondents who have not reported by the cut-off date for production of results. These estimates will be revised in future statistical releases when their reported information becomes available.
  - 4 As indicated earlier, Stats SA developed a new business register, based on the value-added tax (VAT) database obtained from the South African Revenue Service (SARS), which replaced the previous business register. All enterprises are legally bound to register for VAT when their turnover for a period of twelve months equals or exceeds R300 000. Enterprises that conform to these criteria are included in the new business register, and hence were given a chance of selection in the new sample for the survey.
- Scope of the survey**
- 5 This survey covers manufacturing enterprises, i.e. those conducting activities in -
    - the manufacturing, processing, making or packing of products;
    - the slaughtering of animals, including poultry; and
    - installation, assembly, completion, repair and related work.
- Classification**
- 6 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 (two digit) level. Each enterprise is classified to an industry which reflects its predominant activity.
- Statistical unit**
- 7 The statistical unit for which information is compiled and published is the enterprise, defined as a legal unit or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.
- Weighting methodology**
- 8 For those strata not completely enumerated, the weights to produce estimates are the inverse ratio of the sampling fraction, modified to take account of non-response in the survey. Stratum estimates are calculated and then aggregated with the completely enumerated stratum to form division estimates. These procedures, which are in line with international best practice, are described in more detail on the Stats SA website at [www.statssa.gov.za/publications/publicationsearch.asp](http://www.statssa.gov.za/publications/publicationsearch.asp).
  - 9 For indices, a weight is calculated for every division according to the value added of the division relative to the total value added of the manufacturing industry as a whole, based on the results of the most recent census of manufacturing or large sample of the manufacturing industry. For the period 1996 to 2000 the weights are based on the 1996 Census of Manufacturing and for the period 2001 to 2004 the weights are based on the 2001 large sample survey of the manufacturing industry. Weights between census years are fixed. The production indices of all divisions are multiplied by the applicable weights and aggregated to produce the index for the total physical volume of manufacturing production (see table E for the fixed weights which were used for the two periods 1996 to 2000 and 2001 to 2004).

- Survey methodology and design**
- 10** The survey is conducted by mail on a monthly basis. Questionnaires are sent to a sample of just over 3 000 enterprises. Completed questionnaires are required to be returned to Stats SA within 10 days after the end of the reference month. Fax and telephone reminders are used to follow up non-respondents.
- 11** The value of sales of manufactured products is obtained monthly from the sample of just over 3 000 enterprises, which was drawn in January 2003 from a population then of approximately 31 000 manufacturing enterprises. Each manufacturing division is divided into four size groups. The sample is drawn at the SIC two-digit level. All large enterprises (size group one), which comprise about one-third of the enterprises in the current sample, are completely enumerated. Simple random sampling is applied for size group two (medium sized) enterprises, and for size groups three and four (small) enterprises. The total value of sales of manufactured products of large enterprises (size group one) in a division is added to the weighted totals of size groups two, three and four of that division to reflect the total value of sales of the division.
- 12** The calculation of the monthly production indices is based on the value of sales of products and articles manufactured, after the effect of price changes has been eliminated through deflation using appropriate indices of the Production Price Index (PPI). For six of the ten SIC divisions in manufacturing, the value of production is calculated from the value of sales and stocks of manufactured products obtained from the monthly survey of manufacturing enterprises.
- 13** More direct indicators are used for the production of 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 these major groups are calculated on the basis of physical quantities. This method is used by the national statistical agencies of many other countries for petroleum products as the results are considered more satisfactory (mainly because these commodities are relatively homogeneous).
- Seasonal adjustment**
- 14** Seasonally adjusted estimates of all divisions are generated each month, using the X-11 Seasonal Adjustment Program developed by the US Bureau of the Census, 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. Therefore the month-to-month movements of seasonally adjusted estimates may not be reliable indicators of trend behaviour.
- Trend cycle**
- 15** 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 to estimates of the underlying trend cycle.
- Reliability of estimates**
- 16** Data presented in this publication are based on information obtained from a sample and are, therefore, subject to sampling variability; that is, they may differ from the figures that would have been produced if the data had been obtained from all enterprises in the manufacturing industry in South Africa. Estimates are subject to sampling and non-sampling errors.
- 17** Inaccuracies may occur because of imperfections in reporting by enterprises and errors made in the collection and processing of the data. Inaccuracies of this kind are referred to as non-sampling errors. Every effort is made to minimise non-sampling errors by careful design of questionnaires, testing them in pilot studies, editing reported data and implementing efficient operating procedures. Fluctuations may occur in consecutive months as a result of seasonal and economic factors.

<b>Revised figures</b>	<b>18</b>	Revised figures are due to respondents reporting revisions or corrections to their figures and late submission of their data to Stats SA. Figures for the latest month are preliminary. Data are edited at the enterprise level.																		
<b>Related publications</b>	<b>19</b>	<p>Users may also wish to refer to the following publications available from Stats SA -</p> <ul style="list-style-type: none"> <li>• <i>Bulletin of Statistics</i> issued quarterly.</li> <li>• <i>SA Statistics</i> issued annually.</li> </ul>																		
<b>Rounding of figures</b>	<b>20</b>	The figures in the tables have, where necessary, been rounded to the nearest digit shown.																		
<b>Pre-release policy</b>	<b>21</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>	<b>22</b>	<table border="0"> <tr> <td>GDP</td> <td>Gross Domestic Product</td> </tr> <tr> <td>ISIC</td> <td>International Standard Industrial Classification</td> </tr> <tr> <td>m</td> <td>Million</td> </tr> <tr> <td>SIC</td> <td>Standard Industrial Classification of all Economic Activities</td> </tr> <tr> <td>SARS</td> <td>South African Revenue Service</td> </tr> <tr> <td>Stats SA</td> <td>Statistics South Africa</td> </tr> <tr> <td>VAT</td> <td>Value added tax</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 Industrial Classification	m	Million	SIC	Standard Industrial Classification of all Economic Activities	SARS	South African Revenue Service	Stats SA	Statistics South Africa	VAT	Value added tax	1/	Preliminary figures	*	Revised figures
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## Glossary

<b>Enterprise</b>	The enterprise is a legal entity or a combination of legal units that includes and directly controls all functions necessary to carry out its production activities.
<b>Index of physical volume of manufacturing production</b>	The index of physical volume of manufacturing production, also known as a production index, is a statistical measure of the change in the volume of production. The production index of a division is the ratio between the volume of production of a division in a given period and the volume of production of the same division in the base period. The base period is 2000. The production in the base period is set at 100.
<b>Industry</b>	An industry is made up of enterprises engaged in the same or similar kinds of economic activity. Industries are defined in the <i>System of National Accounts (SNA)</i> in the same way as in the <i>Standard Industrial Classification of all Economic Activities, Fifth Edition, Report No. 09-90-02 of January 1993 (SIC)</i> .
<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 and 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.
<b>Value added</b>	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.
<b>Sales</b>	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.
<b>Statistical unit</b>	A statistical unit is a unit about which statistics are tabulated, compiled or published. The statistical units are derived from and linked to the South African Revenue Service (SARS) administrative data.



For the purpose of this publication, the statistical unit in the monthly Manufacturing: Production and Sales survey is the enterprise.

**Turnover**

Turnover refers to -

- the value of sales and transfers out of all own manufactured products/articles;
- amounts received for work done;
- amounts received for services rendered.

Turnover excludes -

- value added tax (VAT);
- export freight charges;
- excise duty.

**Weight**

The weight of a division of manufacturing in the overall index for manufacturing is the ratio of the value added of the division (i.e. output of a division minus intermediate consumption) to the total value added of the manufacturing industry. The weight reflects the importance of the division in the total. The ratios change over time due to changes in the relative performance of industries, due to factors such as quality changes, changes in relative prices, and changes in customer preferences. New weights need to be calculated from time to time.

**Table E – Weights according to manufacturing divisions**

Manufacturing divisions	Weights according to the 1996 Census of Manufacturing 1996 - 2000	Weights according to the 2001 large sample survey of the manufacturing industry 2001 - 2004
Food and beverages	15,3	16,4
Textiles, clothing, leather and footwear	7,8	5,4
Wood and wood products; paper; publishing and printing	11,4	11,0
Petroleum, chemical products, rubber and plastic products	19,3	22,5
Glass and non-metallic mineral products	4,5	3,9
Basic iron and steel, non-ferrous metal products; metal products and machinery	23,6	22,4
Electrical machinery	3,4	2,7
Radio, television and communication apparatus; professional equipment	1,5	1,3
Motor vehicles, parts and accessories and other transport equipment	9,1	8,6
Furniture and other manufacturing divisions	4,1	5,8
Total	100,0	100,0

### General information

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