

# **Manufacturing: Production and sales**

## **March 2005**

**Embargoed until:  
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**Table A - Selected key figures regarding manufacturing production and sales for March 2005**

<b>Estimates</b>	<b>March 2005</b>	<b>% change between March 2004 and March 2005</b>	<b>% change between January to March 2004 and January to March 2005</b>
Physical volume of manufacturing production index (2000=100)	115,4	+1,2	+2,4
Total value of sales of manufactured products (R million)	70 031	+3,0	+4,1

<b>Seasonally adjusted estimates</b>	<b>March 2005</b>	<b>% change between February and March 2005</b>	<b>% change between October to December 2004 and January to March 2005</b>
Physical volume of manufacturing production index (2000=100)	111,1	+0,9	-1,0
Total value of sales of manufactured products (R million)	67 669	+1,3	-0,6

**Key findings regarding manufacturing production and sales for March 2005**

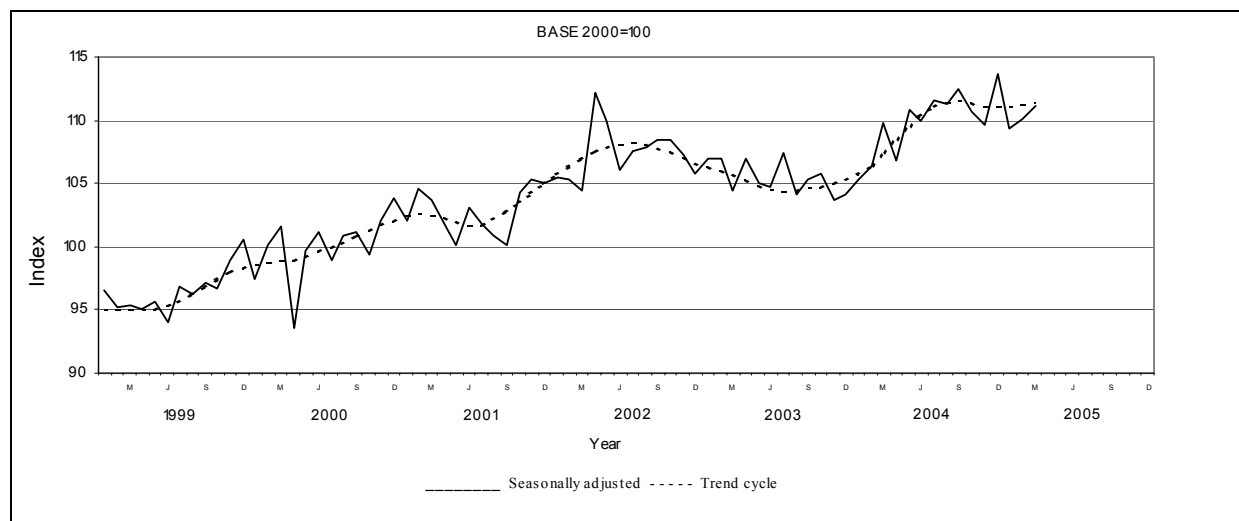
**Manufacturing production decreases**

*The estimated manufacturing production for the first quarter of 2005 decreased by 1,0%, after seasonal adjustment, compared with the fourth quarter of 2004. Lower production was reported by six of the ten manufacturing divisions.*

The major contributor to the seasonally adjusted decrease of 1,0% in total manufacturing production for the first quarter of 2005 compared with the fourth quarter of 2004 was the basic iron and steel, non-ferrous metal products, metal products and machinery division (contributing -0,8 of a percentage point to total manufacturing production), followed by petroleum, chemical products, rubber and plastic products division (contributing -0,4 of a percentage point) and wood and wood products, paper, publishing and printing division (contributing -0,2 of a percentage point). However, these decreases were counteracted by increases reported by the motor vehicles, parts and accessories and other transport equipment division (contributing +0,3 of a percentage point) and food and beverages division (contributing +0,1 of a percentage point) (see table B). The exceptionally high production figures reported for December 2004 contributed to the decrease between the fourth quarter of 2004 and the first quarter of 2005.

Figure 1 shows the seasonally adjusted and trend series for the volume index of manufacturing production between January 1999 and March 2005. The trend series has been rising since mid-2003 to September 2004, declining slightly up to December 2004, levels out in 2005.

**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 October to December 2004	Average seasonally adjusted index for January to March 2005	Quarterly percentage change of index for January to March 2005 compared with the preceding three months	Contribution (percentage points) to the seasonally adjusted quarterly percentage change in total manufacturing production
Food and beverages	16,4	114,8	115,3	+0,4	+0,1
Textiles, clothing, leather and footwear	5,4	99,6	100,2	+0,6	+0,0
Wood and wood products, paper, publishing and printing	11,0	106,3	104,5	-1,7	-0,2
Petroleum, chemical products, rubber and plastic products	22,5	108,3	106,6	-1,6	-0,4
Glass and non-metallic mineral products	3,9	112,4	112,3	-0,1	-0,0
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	117,0	113,0	-3,4	-0,8
Electrical machinery	2,7	96,8	98,1	+1,3	+0,0
Radio, television and communication apparatus and professional equipment	1,3	104,8	97,2	-7,3	-0,1
Motor vehicles, parts and accessories and other transport equipment	8,6	117,9	122,6	+4,0	+0,3
Furniture and other manufacturing divisions	5,8	109,2	107,0	-2,0	-0,1
<b>Total</b>	<b>100,0</b>	<b>111,3</b>	<b>110,2</b>	<b>-1,0</b>	<b>-1,0</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 decrease**

*The estimated total value of sales of manufactured products at current prices for the first quarter of 2005 decreased by 0,6% (-R1 254 million), after seasonal adjustment, compared with the fourth quarter of 2004. Lower manufacturing sales were reported by six of the ten manufacturing divisions during this period (see table C). The value of sales of manufactured products at current prices for the three months ended March 2005 was 4,1% higher than for the three months ended March 2004 (see table D).*

The seasonally adjusted decrease of 0,6% in the total value of sales of manufactured products at current prices for the first quarter of 2005 was mainly due to large decreases reported for petroleum, chemical products, rubber and plastic products (-4,2% or -R1 698 million) and food and beverages (-1,3% or -R514 million) divisions (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 October to December 2004	Seasonally adjusted sales January to March 2005	Percentage change between October to December 2004 and January to March 2005	Difference in seasonally adjusted sales of manufacturing divisions between October to December 2004 and January to March 2005
	R'000	R'000		R'000
Food and beverages	38 617 821	38 103 428	-1,3	-514 393
Textiles, clothing, leather and footwear	10 424 960	10 566 463	+1,4	141 503
Wood and wood products, paper, publishing and printing	17 733 519	17 571 417	-0,9	-162 102
Petroleum, chemical products, rubber and plastic products	40 099 801	38 402 107	-4,2	-1 697 694
Glass and non-metallic mineral products	5 660 025	5 659 379	-0,0	-646
Basic iron and steel, non-ferrous metal products, metal products and machinery	43 093 815	43 736 595	+1,5	642 780
Electrical machinery	5 210 472	4 970 865	-4,6	-239 607
Radio, television and communication apparatus and professional equipment	2 776 630	2 608 683	-6,0	-167 947
Motor vehicles, parts and accessories and other transport equipment	30 015 081	30 458 926	+1,5	443 845
Furniture and other manufacturing divisions	9 027 439	9 327 900	+3,3	300 461
<b>Total</b>	<b>202 659 563</b>	<b>201 405 765</b>	<b>-0,6</b>	<b>-1 253 798</b>

The major contributors to the increase of 4,1% in sales of manufactured products at current prices for the first quarter of 2005 compared with the first quarter of 2004 were basic iron and steel, non-ferrous metal products, metal products and machinery (+1,6 percentage points or +R2 924 million), motor vehicles, parts and accessories and other transport equipment (+1,1 percentage points or +R2 034 million) and food and beverages (+0,7 of a percentage point or +R1 286 million (see table D).

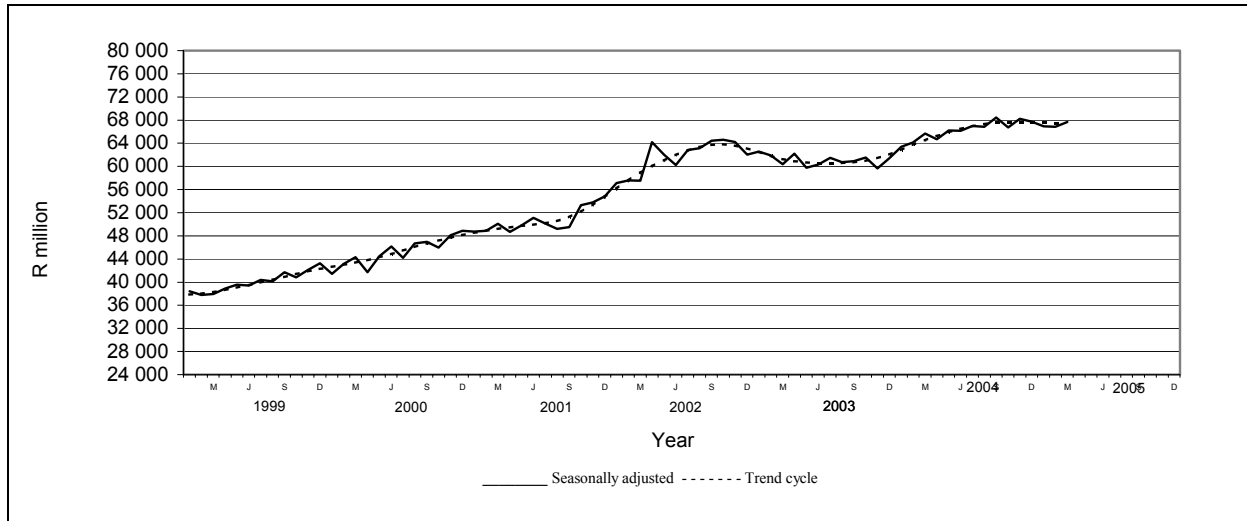
**Table D - Contribution of the manufacturing divisions to total value of sales of manufactured products**

Manufacturing divisions	Percentage contribution to total value of sales of manufactured products January to March 2004	Percentage change between January to March 2004 and January to March 2005	Contribution (percentage points) to the change in the total value of sales of manufactured products 1/	Difference in sales of manufacturing divisions between January to March 2004 and January to March 2005
				R'000
Food and beverages	18,9	+3,7	+0,7	1 285 713
Textiles, clothing, leather and footwear	5,2	+0,4	-0,0	33 887
Wood and wood products, paper, publishing and printing	9,0	+1,0	+0,1	166 123
Petroleum, chemical products, rubber and plastic products	19,6	+1,5	+0,3	551 959
Glass and non-metallic mineral products	2,6	+5,5	+0,1	268 769
Basic iron and steel, non-ferrous metal products, metal products and machinery	21,0	+7,6	+1,6	2 923 778
Electrical machinery	2,5	-0,0	-0,0	-2 043
Radio, television and communication apparatus and professional equipment	1,6	-9,7	-0,2	-288 435
Motor vehicles, parts and accessories and other transport equipment	15,1	+7,3	+1,1	2 034 078
Furniture and other manufacturing divisions	4,3	+6,1	+0,3	489 051
<b>Total</b>	<b>100,0</b>	<b>+4,1</b>	<b>+4,1</b>	<b>7 462 880</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 in 2004, divided by 100.

Figure 2 shows the seasonally adjusted and trend series for sales of manufactured products between January 1999 and March 2005. After peaking in September 2002, the series declined until May 2003, before resuming its upward movement and has been leveling off since December 2004.

**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>
	April 2005	9 June 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	1999	2000	2001	2002	2003	2004	1/ 2005
Indices							
J	83,6	85,2	91,1	93,7	94,4	93,1	96,1
F	93,7	98,7	102,7	103,6	104,3	103,6	106,7
M	97,9	104,8	106,8	108,2	108,4	114,0	115,4
A	90,7	89,0	95,3	104,4	100,0	100,3	
M	95,9	99,9	100,2	110,3	105,6	111,5	
J	94,8	102,1	104,0	106,7	105,3	110,5	
J	98,3	100,1	102,8	108,8	108,7	112,9	
A	97,7	102,5	102,3	109,8	106,4	113,6	
S	100,9	104,8	103,1	111,4	108,6	* 115,9	
O	107,3	109,8	114,9	119,6	116,7	* 122,5	
N	109,9	113,6	117,6	119,8	115,1	* 122,2	
D	86,3	89,5	92,5	92,7	91,4	* 98,9	
Year	96,4	100,0	102,8	107,4	105,4	109,9	
Seasonally adjusted indices							
J	95,6	97,1	102,6	105,8	106,9	105,3	109,3
F	94,5	99,7	104,8	105,6	107,0	106,3	110,1
M	94,4	100,9	103,7	104,4	104,4	109,8	111,1
A	96,7	94,8	101,6	112,0	107,0	106,8	
M	96,3	100,0	100,1	109,9	105,1	110,8	
J	94,1	101,3	103,1	105,9	104,7	110,0	
J	97,3	99,1	101,7	107,6	107,4	111,6	
A	96,8	101,2	100,9	107,8	104,2	111,3	
S	97,1	101,0	100,1	108,3	105,4	112,4	
O	97,2	99,5	104,2	108,4	105,7	110,7	
N	98,1	101,5	105,3	107,4	103,7	109,7	
D	99,7	103,3	105,2	105,8	104,1	113,6	

1/ Preliminary.

\* Revised.

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

Month	1999	2000	2001	2002	2003	2004	2005
J	.	+1,9	+6,9	+2,9	+0,7	-1,4	+3,2
F	.	+5,3	+4,1	+0,9	+0,7	-0,7	+3,0
M	.	+7,0	+1,9	+1,3	+0,2	+5,2	+1,2
A	.	-1,9	+7,1	+9,5	-4,2	+0,3	
M	.	+4,2	+0,3	+10,1	-4,3	+5,6	
J	.	+7,7	+1,9	+2,6	-1,3	+4,9	
J	.	+1,8	+2,7	+5,8	-0,1	+3,9	
A	.	+4,9	-0,2	+7,3	-3,1	+6,8	
S	.	+3,9	-1,6	+8,1	-2,5	+6,7	
O	.	+2,3	+4,6	+4,1	-2,4	+5,0	
N	.	+3,4	+3,5	+1,9	-3,9	+6,2	
D	.	+3,7	+3,4	+0,2	-1,4	+8,2	
Year	.	+3,7	+2,8	+4,5	-1,9	+4,3	

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 2004	Indices			Seasonally adjusted indices		
			March	1/ February	1/ March	March	February	March
			2004	2005		2004	2005	
Food and beverages	16,4	111,5	113,0	109,5	121,1	112,4	119,0	120,8
Textiles, clothing, leather and footwear	5,4	100,0	107,4	102,1	105,6	100,3	101,6	99,0
Wood and wood products, paper, publishing and printing	11,0	103,8	104,7	100,5	108,7	101,0	104,7	105,2
Petroleum, chemical products, rubber and plastic products	22,5	110,5	114,9	102,0	112,7	111,1	105,8	108,8
Glass and non-metallic mineral products	3,9	113,2	117,1	109,7	113,6	117,1	117,9	113,4
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	114,6	122,8	107,2	125,5	113,8	109,1	115,8
Electrical machinery	2,7	98,3	101,4	101,2	104,5	97,9	100,8	100,7
Radio, television and communication apparatus and professional equipment	1,3	109,5	120,2	109,8	107,1	110,9	98,7	98,8
Motor vehicles, parts and accessories and other transport equipment	8,6	115,5	116,0	122,6	123,0	111,1	121,5	118,8
Furniture and other manufacturing divisions	5,8	101,0	102,8	107,7	89,0	106,1	109,0	91,6
Total	100,0	109,9	114,0	106,7	115,4	109,8	110,1	111,1

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

Manufacturing divisions	Weights	Year 2004	Indices			Seasonally adjusted indices		
			March	March	Percentage difference between March 2004 and March 2005	February	March	Percentage difference between February and March 2005
			2004	2005		2005	2005	
Food and beverages	16,4	111,5	113,0	121,1	+7,2	119,0	120,8	+1,5
Textiles, clothing, leather and footwear	5,4	100,0	107,4	105,6	-1,7	101,6	99,0	-2,6
Wood and wood products, paper, publishing and printing	11,0	103,8	104,7	108,7	+3,8	104,7	105,2	+0,5
Petroleum, chemical products, rubber and plastic products	22,5	110,5	114,9	112,7	-1,9	105,8	108,8	+2,8
Glass and non-metallic mineral products	3,9	113,2	117,1	113,6	-3,0	117,9	113,4	-3,8
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	114,6	122,8	125,5	+2,2	109,1	115,8	+6,1
Electrical machinery	2,7	98,3	101,4	104,5	+3,1	100,8	100,7	-0,1
Radio, television and communication apparatus and professional equipment	1,3	109,5	120,2	107,1	-10,9	98,7	98,8	+0,1
Motor vehicles, parts and accessories and other transport equipment	8,6	115,5	116,0	123,0	+6,0	121,5	118,8	-2,2
Furniture and other manufacturing divisions	5,8	101,0	102,8	89,0	-13,4	109,0	91,6	-16,0
Total	100,0	109,9	114,0	115,4	+1,2	110,1	111,1	+0,9

1/ Preliminary.

\* Revised.

**Table 4 – Total of estimated sales of the manufacturing industry (R'000)**

Month	1999	2000	2001	2002	2003	2004	1/ 2005
Value of sales							
J	31 728 425	34 497 091	41 025 607	48 138 526	52 765 592	53 523 613	56 319 448
F	36 780 094	42 065 366	47 630 261	56 200 264	60 485 281	62 603 113	65 221 252
M	39 575 843	46 300 045	52 194 339	59 871 135	62 637 848	67 981 939	70 030 845
A	36 769 193	39 384 857	45 883 170	60 294 761	58 615 159	61 151 048	
M	39 561 905	44 639 157	50 164 812	62 579 978	60 277 805	66 779 109	
J	40 068 157	47 091 414	52 019 977	61 105 492	60 885 020	66 559 330	
J	40 275 610	44 033 012	49 979 263	62 721 938	61 445 221	67 215 037	
A	40 781 001	47 401 498	49 935 125	64 085 893	61 595 356	67 870 063	
S	43 163 552	48 549 234	51 116 793	66 502 646	62 956 064	* 70 965 548	
O	45 331 713	50 693 801	58 606 253	70 929 284	67 574 392	* 73 472 731	
N	47 027 113	53 570 122	59 946 335	71 452 903	66 409 310	* 75 751 192	
D	39 465 357	44 728 188	50 549 896	56 892 701	56 065 409	* 61 847 446	
Year	480 527 963	542 953 785	609 051 831	740 775 521	731 712 457	795 720 169	
Seasonally adjusted values							
J	38 420 936	41 474 860	48 773 193	57 136 763	62 579 716	63 395 567	66 919 116
F	37 818 533	43 180 658	48 895 804	57 586 659	61 920 947	64 110 531	66 817 607
M	37 954 613	44 327 249	50 059 863	57 556 586	60 369 550	65 703 357	67 669 042
A	38 871 688	41 718 875	48 691 340	64 180 463	62 256 060	64 716 026	
M	39 562 178	44 450 542	49 834 494	62 061 302	59 779 725	66 201 718	
J	39 390 665	46 187 756	51 113 338	60 208 098	60 297 735	66 170 539	
J	40 374 575	44 161 229	50 114 020	62 789 506	61 441 478	67 011 003	
A	40 120 578	46 699 678	49 174 791	63 085 661	60 677 821	66 817 338	
S	41 679 662	46 907 732	49 469 682	64 349 194	60 787 492	68 431 633	
O	40 808 909	45 961 021	53 277 505	64 529 314	61 426 577	66 709 968	
N	42 128 416	48 083 908	53 788 944	64 281 986	59 713 708	68 256 194	
D	43 241 847	48 880 212	54 801 195	62 033 447	61 377 254	67 693 401	

1/ Preliminary.

\* Revised.

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

Month	1999	2000	2001	2002	2003	2004	2005
J	..	+8,7	+18,9	+17,3	+9,6	+1,4	+5,2
F	..	+14,4	+13,2	+18,0	+7,6	+3,5	+4,2
M	..	+17,0	+12,7	+14,7	+4,6	+8,5	+3,0
A	..	+7,1	+16,5	+31,4	-2,8	+4,3	
M	..	+12,8	+12,4	+24,7	-3,7	+10,8	
J	..	+17,5	+10,5	+17,5	-0,4	+9,3	
J	..	+9,3	+13,5	+25,5	-2,0	+9,4	
A	..	+16,2	+5,3	+28,3	-3,9	+10,2	
S	..	+12,5	+5,3	+30,1	-5,3	+12,7	
O	..	+11,8	+15,6	+21,0	-4,7	+8,7	
N	..	+13,9	+11,9	+19,2	-7,1	+14,1	
D	..	+13,3	+13,0	+12,5	-1,5	+10,3	
Year	.	+13,0	+12,2	+21,6	-1,2	+8,7	

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 2004	Value of sales						Seasonally adjusted value of sales					
		March *		February 1/		March 1/		March		February		March	
		2004	2004	2005		2004	2005	2004	2005	2004	2005	2004	2005
Food and beverages	150 697 551	12 292 772	12 218 504	13 100 663	12 146 943	12 830 277	12 942 461						
Textiles, clothing, leather and footwear	41 684 404	3 749 413	3 462 112	3 635 695	3 532 187	3 528 347	3 442 822						
Wood and wood products, paper, publishing and printing	70 201 021	5 943 125	5 487 393	6 138 241	5 741 999	5 808 739	5 954 881						
Petroleum, chemical products, rubber and plastic products	156 270 988	12 932 189	12 480 858	13 089 168	12 823 211	12 848 547	12 989 329						
Glass and non-metallic mineral products	22 153 630	1 808 637	1 825 279	1 903 780	1 821 027	1 956 426	1 928 973						
Basic iron and steel, non-ferrous metal products, metal products and machinery	169 783 691	15 263 836	13 649 151	15 859 432	14 212 535	14 244 065	14 731 134						
Electrical machinery	20 602 189	1 753 741	1 655 977	1 772 927	1 666 218	1 667 017	1 690 256						
Radio, television and communication apparatus and professional equipment	11 370 745	1 047 347	995 310	937 318	956 611	878 254	858 721						
Motor vehicles, parts and accessories and other transport equipment	117 883 616	10 274 412	10 287 486	10 776 493	9 534 371	9 993 149	10 069 512						
Furniture and other manufacturing divisions	35 072 334	2 916 467	3 159 182	2 817 128	3 268 255	3 062 785	3 060 952						
<b>Total</b>	<b>795 720 169</b>	<b>67 981 939</b>	<b>65 221 252</b>	<b>70 030 845</b>	<b>65 703 357</b>	<b>66 817 607</b>	<b>67 669 042</b>						

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

Manufacturing divisions	Year 2004	Value of sales				Seasonally adjusted value of sales			
		March		Percentage change between March 2004 and March 2005		February		Percentage change between February and March	
		2004	2005	2004	2005	2005	2005	2005	2005
Food and beverages	150 697 551	12 292 772	13 100 663	+6,6	12 830 277	12 942 461	+0,9		
Textiles, clothing, leather and footwear	41 684 404	3 749 413	3 635 695	-3,0	3 528 347	3 442 822	-2,4		
Wood and wood products, paper, publishing and printing	70 201 021	5 943 125	6 138 241	+3,3	5 808 739	5 954 881	+2,5		
Petroleum, chemical products, rubber and plastic products	156 270 988	12 932 189	13 089 168	+1,2	12 848 547	12 989 329	+1,1		
Glass and non-metallic mineral products	22 153 630	1 808 637	1 903 780	+5,3	1 956 426	1 928 973	-1,4		
Basic iron and steel, non-ferrous metal products, metal products and machinery	169 783 691	15 263 836	15 859 432	+3,9	14 244 065	14 731 134	+3,4		
Electrical machinery	20 602 189	1 753 741	1 772 927	+1,1	1 667 017	1 690 256	+1,4		
Radio, television and communication apparatus and professional equipment	11 370 745	1 047 347	937 318	-10,5	878 254	858 721	-2,2		
Motor vehicles, parts and accessories and other transport equipment	117 883 616	10 274 412	10 776 493	+4,9	9 993 149	10 069 512	+0,8		
Furniture and other manufacturing divisions	35 072 334	2 916 467	2 817 128	-3,4	3 062 785	3 060 952	-0,1		
<b>Total</b>	<b>795 720 169</b>	<b>67 981 939</b>	<b>70 030 845</b>	<b>+3,0</b>	<b>66 817 607</b>	<b>67 669 042</b>	<b>+1,3</b>		

1/ Preliminary.  
\* Revised.

**Table 7 - Percentage change between the current quarter and the corresponding quarter of the previous year in the physical volume of manufacturing production and sales by manufacturing division**

Manufacturing divisions	Weights	Indices (base 2000=100)			Value of sales (R'000)		
		January to March 2004	January to March 2005	Annual percentage change between January to March 2004 and January to March 2005	January to March 2004	January to March 2005	Annual percentage change between January to March 2004 and January to March 2005
Food and beverages	16,4	100,4	108,8	+8,4	34 840 263	36 125 976	+3,7
Textiles, clothing, leather and footwear	5,4	93,4	93,4	-0,0	9 571 107	9 604 994	+0,4
Wood and wood products, paper, publishing and printing	11,0	98,2	100,8	+2,6	16 618 619	16 784 742	+1,0
Petroleum, chemical products, rubber and plastic products	22,5	108,2	105,0	-3,0	36 135 632	36 687 591	+1,5
Glass and non-metallic mineral products	3,9	102,9	103,7	+0,8	4 866 826	5 135 595	+5,5
Basic iron and steel, non-ferrous metal products, metal products and machinery	22,4	110,5	110,1	-0,4	38 669 520	41 593 298	+7,6
Electrical machinery	2,7	91,4	86,9	-4,9	4 679 712	4 677 669	-0,0
Radio, television and communication apparatus and professional equipment	1,3	114,3	100,7	-11,9	2 976 360	2 687 925	-9,7
Motor vehicles, parts and accessories and other transport equipment	8,6	105,8	116,0	+9,6	27 790 600	29 824 678	+7,3
Furniture and other manufacturing divisions	5,8	91,7	96,8	+5,6	7 960 026	8 449 077	+6,1
<b>Total</b>	<b>100,0</b>	<b>103,8</b>	<b>105,5</b>	<b>+1,6</b>	<b>184 108 665</b>	<b>191 571 545</b>	<b>+4,1</b>

## Explanatory notes

- |                              |  |
|------------------------------|--|
| <b>Introduction</b>          | <p>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.</p> <p>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 estimated and seasonally adjusted figures are presented.</p> <p>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.</p> <p>4 As indicated earlier, Stats SA developed a new business register, based on units registered for value-added tax (VAT) and income tax, obtained from the South African Revenue Service (SARS), which replaced the previous business register.</p>   |
| <b>Scope of the survey</b>   | <p>5 This survey covers manufacturing enterprises, i.e. those conducting activities in -</p> <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>  |
| <b>Classification</b>        | <p>6 The 1993 edition of the <i>Standard Industrial Classification of all Economic Activities (SIC)</i>, Fifth Edition, Report No. 09-90-02, was used to classify the statistical units in the survey. The SIC is based on the 1990 <i>International Standard Industrial Classification of all Economic Activities (ISIC)</i> 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.</p>  |
| <b>Statistical unit</b>      | <p>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.</p>   |
| <b>Weighting methodology</b> | <p>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 <a href="http://www.statssa.gov.za/publications/publicationsearch.asp">www.statssa.gov.za/publications/publicationsearch.asp</a>.</p> <p>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 2005 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 2005).</p> |

- Survey methodology and design**
- 10** The survey is conducted monthly. Questionnaires are sent to a sample of 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 2 994 enterprises, which was drawn in September 2004 from a population then of 41 009 manufacturing enterprises. Each manufacturing division is divided into four size groups. The sample is drawn at the SIC three-digit level. All large enterprises (size group one), 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 tobacco, 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. 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.
- Revised figures**
- 18** Revised figures are due to late submission of data to Stats SA, or to respondents reporting revisions or corrections to their figures. Preliminary figures are

indicated in the relevant tables. Data are edited at the enterprise level.

- Related publications**     19     Users may also wish to refer to the following publications available from Stats SA -
- *Bulletin of Statistics* issued quarterly.
  - *SA Statistics* issued annually.
- Rounding of figures**     20     The figures in the tables have, where necessary, been rounded to the nearest digit shown.
- Pre-release policy**     21     Stats SA's pre-release policy may be inspected at its website, [www.statssa.gov.za](http://www.statssa.gov.za).
- Symbols and abbreviations**     22     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

**Technical notes**

Neyman optimal allocation

Before drawing samples in each of the surveys the population of enterprises on the BSF was stratified. Strata were formed using a combination of Standard Industrial Classification variable and the measure of size variable for enterprises. The Neyman optimal allocation formula used to allocate samples to each stratum is given by a formula below.

$$n_h = \frac{N_h S_h}{\sum N_h S_h}$$

where  $N_h$  and  $S_h$  are the stratum population size and the stratum variance, respectively.

Class limits: Manufacturing

Enterprise size	Lower limits	Upper limits
Very small	0	5 000 000
Small	5 000 001	13 000 000
Medium	13 000 001	51 000 000
Large	51 000 001	



## 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; and
- amounts received for services rendered.

Turnover excludes -

- value added tax (VAT);
- export freight charges; and
- 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 - 2005
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**

Stats SA publishes approximately 300 different statistical 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.

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