

Manufacturing: production and sales

September 2003

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Key figures as at the end of September 2003

Actual estimates

	September 2003	% change between September 2002 and September 2003	% change between August 2003 and September 2003	% change between July 2002 to September 2002 and July 2003 to September 2003	% change between January 2002 to September 2002 and January 2003 to September 2003
Physical volume of manufacturing production index (2000=100)	109,0	-3,6	+2,5	-3,5	-2,1
Total value of sales of manufactured products (R million)	52 933,4	-4,2	+2,4	-2,8	+1,3

Seasonally adjusted estimates

	September 2003	% change between September 2002 and September 2003	% change between August 2003 and September 2003	% change between April 2003 to June 2003 and July 2003 to September 2003
Physical volume of manufacturing production index (2000=100)	105,8	-3,5	+1,3	+0,2
Total value of sales of manufactured products (R million)	51 756,5	-4,0	+1,6	+1,4

Key findings as at the end of September 2003

Manufacturing production increases

Manufacturing production for the third quarter of 2003 reflected a marginal increase of 0,2%, after seasonal adjustment, compared with the second quarter of 2003. Higher production was reported by 14 of the 27 manufacturing divisions. Furthermore, the manufacturing production for September 2003, after seasonal adjustment, reflected an increase of 1,3% compared with August 2003. However, the actual manufacturing production for the first nine months of 2003 reflected a decrease of 2,1% compared with the first nine months of 2002.

The major contributor to the increase of 0,2%, after seasonal adjustment, in the total manufacturing production was the food and food products division (contributing +0,6 of a percentage point to total manufacturing production), followed by the motor vehicles, trailers, parts and accessories (contributing +0,5 of a percentage point) and total machinery and equipment (contributing +0,3 of a percentage point) divisions. However, these increases were partially counteracted by large decreases reported by the basic iron and steel products (contributing -0,7 of a percentage point) and fabricated metal products (contributing -0,3 of a percentage point) divisions (see table A).

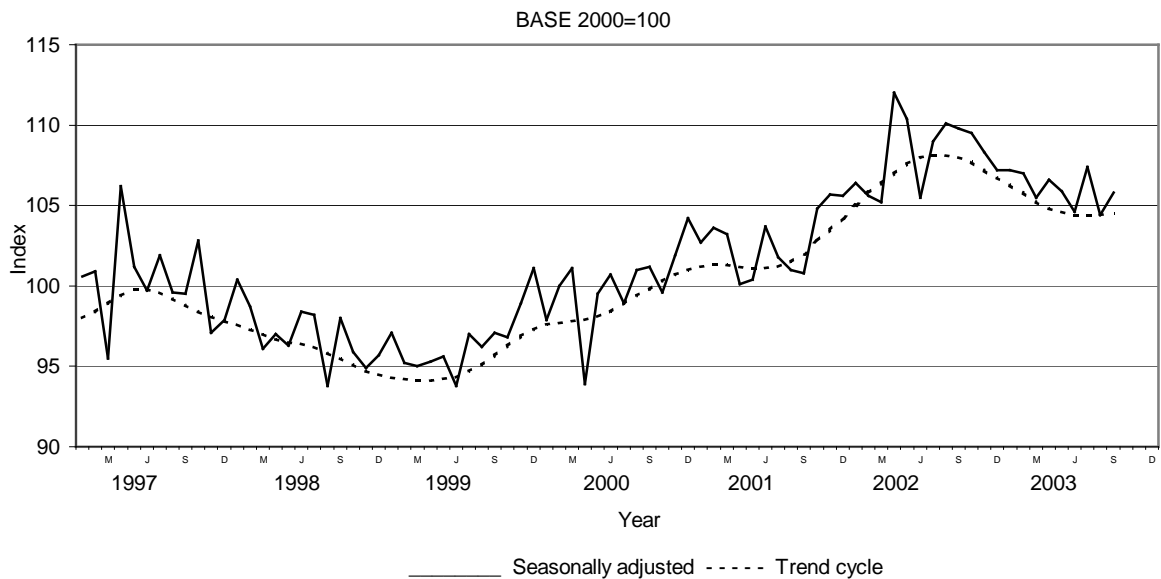
Figure 1 – Index of the physical volume of manufacturing production

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 using the weights according to 1996 Census of Manufacturing	Average seasonally adjusted production index for the three months July 2003 to September 2003	Quarterly percentage change of July 2003 to September 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	105,9	+6,0	+0,6
Beverages	4,6	117,1	+2,0	+0,1
Total textiles	2,9	92,2	-3,5	-0,1
Total wearing apparel	3,6	98,9	+2,7	+0,1
Tanning and dressing of leather	0,4	98,7	+14,4	+0,1
Footwear	0,9	78,3	+11,7	+0,1
Wood and products of wood	1,9	106,2	-2,0	-0,1
Paper and paper products	5,3	98,0	+1,0	+0,1
Total publishing and printing	4,1	99,4	-1,2	-0,1
Coke and refined petroleum products	4,2	106,1	+4,0	+0,2
Basic chemicals	4,5	105,8	-2,1	-0,1
Other chemical products	6,2	105,9	+0,5	+0,0
Rubber products	1,4	100,6	-1,7	-0,0
Plastic products	3,1	119,4	-2,8	-0,1
Glass and glass products	1,0	119,5	+5,1	+0,0
Other non-metallic mineral products	3,5	93,5	-7,0	-0,2
Basic iron and steel products	7,6	100,5	-9,0	-0,7
Basic precious and non-ferrous metal products	3,2	100,0	-0,6	-0,0
Fabricated metal products	7,0	112,4	-3,8	-0,3
Total machinery and equipment	5,8	126,9	+5,3	+0,3
Electrical machinery, apparatus	3,4	106,2	+1,2	+0,0
Radio, television and communication apparatus	1,0	69,3	-18,3	-0,2
Professional equipment	0,5	115,0	-4,6	-0,0
Motor vehicles; trailers; parts and accessories	8,0	113,8	+5,9	+0,5
Other transport equipment	1,0	102,1	+5,1	+0,1
Furniture	1,6	106,8	+4,1	+0,1
Other manufacturing divisions	2,6	92,4	-8,0	-0,2
Total	100,0	105,9	+0,2	+0,2

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 third quarter of 2003 reflected an increase of 1,4% (+R2 106 million), after seasonal adjustment, compared with the second quarter of 2003. Higher manufacturing sales were reported by 16 of the 27 manufacturing divisions during this period (table B). Furthermore, the actual value of sales of manufactured products at current prices for the first nine months of 2003 reflected an increase of 1,3% compared with the first nine months of 2002. However, the actual total value of sales of manufactured products at current prices for the third quarter of 2003 reflected a decrease of 2,8% (-R4 440 million) compared with the third quarter of 2002. Lower manufacturing sales were reported by 16 of the 27 manufacturing divisions (table C).

The increase of 1,4% after seasonal adjustment in the total value of sales of manufactured products at current prices for the third quarter of 2003 compared with the second quarter of 2003 was mainly due to large increases reported by the total machinery and equipment (+5,0% or +R352 million), the motor vehicles, trailers, parts and accessories (+4,6% or +R890 million), and food and food products (+1,9% or +R388 million) divisions (see table B).

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

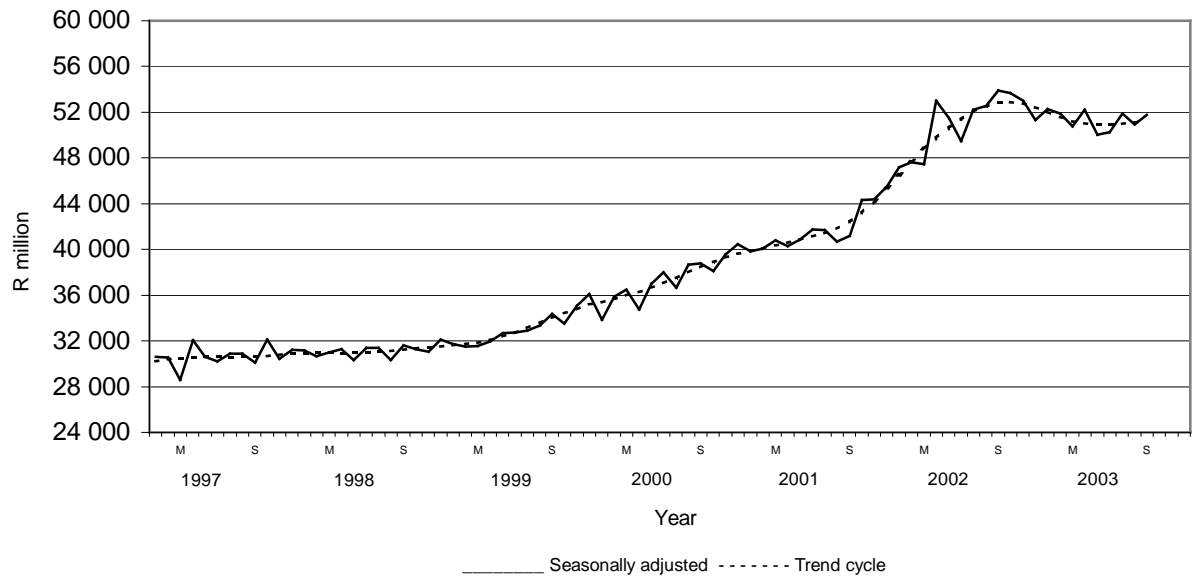
Manufacturing Divisions	Seasonally adjusted sales July 2003 to September 2003	Percentage change between April 2003 to June 2003 and July 2003 to September 2003	Difference in seasonally adjusted sales of manufacturing divisions between April 2003 to June 2003 and July 2003 to September 2003
	R'000		R'000
Food and food products	21 010 794	+1,9	387 854
Beverages	7 584 136	+1,3	100 832
Total textiles	3 022 252	-3,8	-119 511
Total wearing apparel	3 257 538	+4,1	127 137
Tanning and dressing of leather	806 980	+9,3	68 644
Footwear	522 248	+4,9	24 437
Wood and products of wood	3 333 977	-2,4	-80 508
Paper and paper products	7 376 400	+0,6	41 383
Total publishing and printing	3 861 627	+0,7	26 703
Coke and refined petroleum products	9 012 610	-0,2	-14 396
Basic chemicals	7 519 651	+2,7	198 124
Other chemical products	9 134 833	+0,9	77 403
Rubber products	1 666 715	-4,2	-72 216
Plastic products	3 943 156	-0,9	-34 051
Glass and glass products	891 314	+7,5	62 058
Other non-metallic mineral products	3 671 532	-0,1	-4 019
Basic iron and steel products	13 394 986	+0,4	50 270
Basic precious and non-ferrous metal products	4 895 025	+4,7	221 312
Fabricated metal products	8 860 561	-1,7	-154 927
Total machinery and equipment	7 388 310	+5,0	352 371
Electrical machinery, apparatus	4 398 177	+0,8	37 011
Radio, television and communication apparatus	1 047 507	-16,1	-200 649
Professional equipment	501 562	-5,2	-27 651
Motor vehicles; trailers; parts and accessories	20 203 184	+4,6	889 733
Other transport equipment	932 468	-1,8	-17 345
Furniture	1 872 791	-0,1	-1 673
Other manufacturing industries	4 495 185	+3,9	167 367
Total	154 605 520	+1,4	2 105 695

The major contributors to the decrease of 2,8% in the actual value of sales of manufactured products at current prices for the third quarter of 2003 compared with the third quarter of 2002 were the coke and refined petroleum products (-1,9 percentage points or -R3 017 million), basic chemicals (-0,4 of a percentage point or -R670 million) and basic precious and non-ferrous metal products (-0,4 of a percentage point or -R654 million), paper and paper products (-0,3 of a percentage point or -R481 million) and total textile (-0,3 of a percentage point or -R457 million) divisions. However, these decreases were partially counteracted by increases reported by the beverage (+0,4 of a percentage point or +R639 million) and total machinery and equipment (+0,4 of a percentage point or +R628 million) divisions.

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 July 2002 to September 2002	Percentage change between July 2002 to September 2002 and July 2003 to September 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 July 2002 to September 2002 and July 2003 to September 2003
				R' 000
Food and food products	13,1	-1,0	-0,1	-217 066
Beverages	4,1	9,8	0,4	638 713
Total textiles	2,3	-12,5	-0,3	-456 601
Total wearing apparel	2,0	3,8	0,1	124 284
Tanning and dressing of leather	0,5	-9,9	-0,0	-84 131
Footwear	0,4	-6,3	-0,0	-38 774
Wood and products of wood	2,1	3,0	0,1	99 500
Paper and paper products	4,9	-6,1	-0,3	-480 884
Total publishing and printing	2,2	8,9	0,2	317 398
Coke and refined petroleum products	7,6	-24,8	-1,9	-3 017 346
Basic chemicals	5,1	-8,2	-0,4	-669 786
Other chemical products	5,7	0,5	0,0	48 535
Rubber products	1,1	-1,2	-0,0	-20 488
Plastic products	2,5	0,6	0,0	25 641
Glass and glass products	0,6	3,8	0,0	34 183
Other non-metallic mineral products	2,5	-2,2	-0,1	-89 005
Basic iron and steel products	8,3	-0,7	-0,1	-95 702
Basic precious and non-ferrous metal products	3,4	-11,9	-0,4	-653 952
Fabricated metal products	5,8	0,2	0,0	15 484
Total machinery and equipment	4,4	8,9	0,4	628 253
Electrical machinery, apparatus	2,7	2,2	0,1	98 639
Radio, television and communication apparatus	0,7	-9,2	-0,1	-104 070
Professional equipment	0,3	-3,4	-0,0	-17 892
Motor vehicles; trailers; parts and accessories	13,1	-1,3	-0,2	-282 873
Other transport equipment	0,7	-13,4	-0,1	-147 644
Furniture	1,2	2,4	0,0	44 952
Other manufacturing divisions	2,8	-3,1	-0,1	-139 745
Total	100,0	-2,8	-2,8	-4 440 377

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 - Total value of sales of manufactured products at current prices

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Notes

Forthcoming issues	Issue	Expected release date
	October 2003	9 December 2003
	November 2003	13 January 2004
	December 2003	10 February 2004
Purpose of the survey	The monthly Manufacturing Production and Sales survey is a 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.	
Response rates	The response rate for the survey on manufacturing production and sales for August 2003 was 84,3% and for September 2003 it was 80,5 %.	

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	105,5*
M	98,4	98,9	97,9	104,8	107,3	109,6	109,4*
A	100,9	92,3	90,7	89,0	94,6	105,3	100,7*
M	101,7	96,8	95,9	99,9	100,8	110,7	106,0
J	100,9	99,6	94,8	102,1	105,0	106,7	105,6*
J	103,9	99,9	98,3	100,1	102,7	109,9	108,0*
A	101,9	95,6	97,7	102,5	102,6	111,9	106,3
S	104,3	102,3	100,9	104,8	104,0	113,1	109,0 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	102,3	106,0	107,2
F	100,9	98,7	95,2	100,1	103,5	105,8	107,0
M	95,5	96,1	95,1	101,5	103,6	105,6	105,5
A	106,2	97,0	95,2	93,7	99,9	111,7	106,6
M	101,2	96,3	95,6	99,6	100,4	110,4	105,9
J	99,7	98,5	93,9	101,0	104,0	105,7	104,6
J	101,9	98,2	97,0	99,0	101,8	109,0	107,4
A	99,5	93,8	96,2	101,0	100,9	109,8	104,4
S	99,5	98,0	97,1	101,2	100,6	109,6	105,8
O	102,8	95,9	96,8	99,5	104,8	109,5	
N	97,1	94,8	98,8	101,9	105,7	108,3	
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	Actual indices					Seasonally adjusted indices		
		Year 2002	September		1/ September		September	August	September
			2002		2003		2002	2003	
			September	August	September	September	August	September	
Food and food products	10,7	101,6	101,6	95,6	107,7	101,8	97,6	107,8	
Meat, fish, fruit etc.	2,8	113,1	111,3	111,0	113,4	114,0	116,1	116,2	
Dairy products	1,4	100,7	100,5	97,2	101,4	98,5	93,6	99,4	
Grain mill products	2,1	113,6	114,2	106,0	111,5	111,3	105,6	108,4	
Other food products	4,4	88,7	89,8	80,2	104,1	90,4	83,0	104,8	
Beverages	4,6	112,4	115,5	112,5	115,3	112,7	119,9	112,6	
Total textiles	2,9	111,6	115,6	97,9	93,5	110,6	91,5	90,1	
Textiles	1,7	110,4	117,8	92,6	87,7	111,1	84,7	83,4	
Other textile products	1,2	113,3	112,5	105,4	101,6	109,8	101,1	99,6	
Total wearing apparel	3,6	101,9	109,5	104,9	104,9	101,4	97,6	97,4	
Knitted, crocheted articles	0,6	111,2	110,1	100,2	101,5	110,7	97,5	102,6	
Wearing apparel	3,0	100,0	109,4	105,8	105,6	99,6	97,7	96,3	
Tanning and dressing of leather	0,4	96,9	100,0	100,5	89,7	106,6	101,3	95,8	
Footwear	0,9	82,0	91,7	82,1	85,2	82,2	75,4	76,5	
Wood and products of wood	1,9	110,6	116,6	111,3	106,0	113,2	107,3	102,7	
Sawmilling and planing of wood	0,8	108,3	108,8	115,0	120,3	103,6	110,0	114,8	
Products of wood	1,2	112,1	121,8	108,8	96,6	119,5	105,6	94,8	
Paper and paper products	5,3	103,1	120,3	94,0	104,4	114,8	96,7	99,7	
Total publishing and printing	4,1	94,8	100,3	104,7	103,7	94,8	102,3	97,9	
Publishing	1,5	91,3	87,9	104,2	96,0	86,4	102,2	94,6	
Printing, recorded media	2,6	96,8	107,2	105,0	108,1	99,5	102,4	99,8	
Coke and refined petroleum products	4,2	102,5	99,4	105,2	96,1	105,6	104,8	102,3	
Basic chemicals	4,5	119,1	125,5	108,3	103,7	124,4	109,4	103,0	
Other chemical products	6,2	111,5	114,2	103,2	108,5	109,7	104,3	104,5	
Rubber products	1,4	109,9	100,5	99,0	105,7	100,1	98,8	105,9	
Plastic products	3,1	124,3	130,5	121,7	122,6	126,0	119,7	118,5	
Glass and glass products	1,0	118,9	128,0	111,1	128,7	119,6	108,9	120,2	
Other non-metallic mineral products	3,5	104,5	114,2	93,8	97,9	107,3	90,1	91,9	
Basic iron and steel products	7,6	106,0	112,2	104,1	104,8	111,7	99,3	104,1	
Basic precious and non-ferrous metal products	3,2	100,8	100,6	103,7	99,3	101,9	99,7	100,9	
Fabricated metal products	7,0	119,6	131,1	116,1	117,1	124,0	108,2	110,8	
Structural metal products	2,4	116,8	127,5	115,0	109,6	119,0	104,1	102,3	
Other fabricated metal product	4,6	121,1	133,0	116,6	120,9	126,6	110,3	115,1	
Total machinery and equipment	5,8	121,3	130,4	133,8	139,4	121,8	126,1	130,4	
General purpose machinery	2,5	109,3	126,6	110,3	129,6	110,0	106,7	112,0	
Special purpose machinery	2,9	133,4	136,9	155,8	150,4	135,0	145,0	148,5	
Household appliances	0,4	109,4	107,3	121,4	121,1	100,3	111,6	114,1	
Electrical machinery, apparatus	3,4	103,7	100,9	109,4	109,9	98,2	107,1	106,9	
Radio, television and communication apparatus	1,0	76,8	85,4	59,2	80,8	77,2	57,7	73,2	
Professional equipment	0,5	120,8	122,2	111,7	128,4	118,0	110,6	124,1	
Motor vehicles; trailers; parts and accessories	8,0	108,8	106,6	118,8	118,0	102,6	115,3	113,6	
Motor vehicles	4,5	105,5	104,3	114,5	103,4	101,8	108,2	101,9	
Bodies for motor vehicles; trailers and semi-trailers	0,5	102,8	103,4	101,0	91,1	111,3	105,7	99,4	
Parts and accessories	3,0	114,9	110,7	128,4	144,9	102,3	127,6	133,6	
Other transport equipment	1,0	118,2	151,5	89,2	108,3	152,8	98,0	108,1	
Furniture	1,6	107,3	111,2	108,0	104,5	107,5	106,3	102,6	
Other manufacturing divisions	2,6	102,9	108,3	93,3	95,8	102,3	90,8	90,9	
Total	100,0	108,2	113,1	106,3	109,0	109,6	104,4	105,8	

* 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	40 286 441	44 443 867*
F	29 866 793	29 901 544	30 551 283	34 961 840	39 187 078	46 552 386	50 811 316*
M	29 866 272	32 190 538	32 737 212	38 039 203	42 683 525	49 232 865	52 681 625*
A	30 438 604	29 758 879	30 447 208	32 651 220	37 828 090	49 747 946	49 112 612*
M	30 626 091	30 352 835	32 680 898	37 038 716	41 146 142	51 664 008	50 198 782*
J	30 575 542	31 723 893	33 054 424	38 710 074	42 743 527	50 265 064	50 928 744*
J	31 169 707	31 732 667	33 262 293	36 234 329	41 174 318	51 869 128	51 448 792*
A	31 400 042	30 810 619	33 586 437	38 992 758	41 164 534	53 370 193	51 694 505
S	31 344 644	32 896 327	35 703 435	39 916 972	42 295 572	55 277 787	52 933 434 1/
O	35 902 602	34 970 472	37 386 689	41 775 594	48 601 886	58 802 690	
N	33 709 581	34 300 610	38 843 424	43 881 507	49 478 825	59 092 179	
D	28 128 922	29 016 347	32 992 528	37 256 576	42 207 610	47 372 378	
Year	368 283 280	373 568 657	397 608 593	448 106 023	502 499 271	613 533 065	
Seasonally adjusted values							
J	30 493 196	31 048 488	31 397 279	33 836 330	39 712 049	47 169 627	52 297 785
F	30 507 145	30 603 535	31 329 599	35 774 772	40 062 670	47 608 699	51 861 389
M	28 715 788	30 974 337	31 550 111	36 548 535	41 089 107	47 481 275	50 777 595
A	32 088 411	31 474 030	32 278 488	34 676 521	40 193 129	53 027 051	52 216 755
M	30 711 175	30 389 048	32 712 166	36 990 771	41 026 323	51 517 111	50 039 566
J	30 216 514	31 248 534	32 550 842	38 023 070	42 008 920	49 485 943	50 243 504
J	31 161 428	31 843 662	33 490 720	36 542 411	41 498 485	52 229 858	51 906 632
A	30 755 120	30 351 392	33 200 335	38 537 669	40 590 120	52 553 482	50 942 418
S	30 171 095	31 776 590	34 621 433	38 753 984	41 154 022	53 898 585	51 756 469
O	32 169 943	31 386 250	33 749 405	37 985 296	44 287 777	53 664 296	
N	30 307 953	30 783 198	34 811 597	39 433 134	44 322 774	52 980 685	
D	30 844 364	31 474 135	35 826 413	40 346 790	45 418 662	51 321 536	

* 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				
		September	August	September 1/	September	August	September		
		2002		2003		2002		2003	
		2002		2003		2002		2003	
Food and food products	82 673 880	7 219 038	6 938 437	7 010 980	7 261 524	6 953 773	7 044 314		
Meat, fish, fruit etc.	26 328 187	2 320 736	2 210 094	2 276 265	2 318 095	2 241 436	2 269 633		
Dairy products	9 221 497	777 000	793 820	857 661	779 125	783 758	864 510		
Grain mill products	24 465 379	2 145 797	1 889 454	1 941 569	2 169 886	1 894 022	1 955 566		
Other food products	22 658 817	1 975 505	2 045 069	1 935 485	1 994 418	2 034 557	1 954 605		
Beverages	26 913 178	2 298 934	2 355 129	2 565 987	2 263 681	2 440 511	2 530 324		
Total textiles	13 425 652	1 215 284	1 080 769	1 022 108	1 156 463	1 004 581	977 555		
Textiles	8 654 162	787 045	670 699	647 695	743 161	614 275	613 792		
Other textile products	4 771 490	428 239	410 070	374 413	413 302	390 306	363 763		
Total wearing apparel	12 404 596	1 124 730	1 158 517	1 159 898	1 037 146	1 089 816	1 074 327		
Knitted, crocheted articles	2 200 044	188 348	199 141	180 628	188 981	191 556	182 527		
Wearing apparel	10 204 552	936 382	959 376	979 270	848 165	898 260	891 800		
Tanning and dressing of leather	3 310 031	265 840	276 551	231 184	292 749	281 830	256 436		
Footwear	2 185 578	209 711	197 937	197 704	185 294	178 353	175 793		
Wood and products of wood	12 676 226	1 166 481	1 130 082	1 168 558	1 107 649	1 114 880	1 111 978		
Sawmilling and planing of wood	3 496 221	310 634	331 239	340 361	298 287	323 828	328 332		
Products of wood	9 180 005	855 847	798 843	828 197	809 362	791 052	783 646		
Paper and paper products	29 798 377	3 040 672	2 372 760	2 689 459	2 787 892	2 451 694	2 498 055		
Total publishing and printing	13 902 770	1 230 448	1 353 421	1 300 488	1 192 782	1 327 127	1 260 359		
Publishing	5 309 542	449 597	518 979	514 995	436 095	513 335	500 240		
Printing, recorded media	8 593 228	780 851	834 442	785 493	756 687	813 792	760 119		
Coke and refined petroleum products	45 408 316	3 850 056	3 016 320	3 106 015	3 999 588	2 820 402	3 240 677		
Basic chemicals	31 234 852	3 041 002	2 381 147	2 654 856	2 929 565	2 469 164	2 550 232		
Other chemical products	35 440 043	3 110 922	2 974 059	3 124 894	3 028 260	2 988 790	3 067 110		
Rubber products	6 678 589	564 425	560 210	558 667	556 613	556 273	554 997		
Plastic products	15 136 631	1 340 010	1 325 743	1 377 522	1 290 827	1 293 029	1 333 134		
Glass and glass products	3 291 669	326 514	308 669	321 606	298 343	303 144	294 247		
Other non-metallic mineral products	14 496 579	1 333 367	1 246 768	1 290 619	1 266 083	1 160 850	1 230 336		
Basic iron and steel products	48 571 369	4 870 737	4 315 376	4 486 889	4 860 209	4 279 045	4 483 431		
Basic precious and non-ferrous metal products	21 725 348	1 856 616	1 587 742	1 815 974	1 743 227	1 601 674	1 703 229		
Fabricated metal products	34 231 948	3 180 111	3 067 956	3 083 019	3 035 565	2 848 460	2 955 531		
Structural metal products	10 580 226	995 131	994 741	910 962	958 785	894 913	879 331		
Other fabricated metal product	23 651 722	2 184 980	2 073 215	2 172 057	2 076 780	1 953 547	2 076 201		
Total machinery and equipment	26 973 792*	2 352 107	2 539 255	2 684 051	2 188 066	2 456 232	2 530 923		
General purpose machinery	11 502 057	1 111 965	979 167	1 171 369	931 152	979 604	983 772		
Special purpose machinery	12 739 713*	1 037 120	1 294 167	1 254 242	1 062 990	1 232 525	1 299 003		
Household appliances	2 732 022	203 022	265 921	258 440	193 924	244 103	248 148		
Electrical machinery, apparatus	16 926 563	1 421 575	1 542 000	1 492 466	1 364 542	1 508 084	1 437 330		
Radio, television and communication apparatus	4 503 712	466 942	322 326	400 750	425 050	317 514	363 606		
Professional equipment	2 028 861	168 265	160 047	182 005	168 827	155 840	183 302		
Motor vehicles; trailers; parts and accessories	80 135 661	7 033 614	7 122 240	6 571 863	6 870 987	6 992 628	6 446 567		
Motor vehicles	56 136 383	4 850 822	5 033 101	4 491 856	4 792 604	4 902 138	4 464 014		
Bodies for motor vehicles; trailers and semi-trailers	2 115 216	206 091	194 712	201 307	193 058	201 212	189 066		
Parts and accessories	21 884 062	1 976 701	1 894 427	1 878 700	1 885 324	1 889 277	1 793 487		
Other transport equipment	4 370 041	475 981	285 723	346 951	434 338	303 766	311 045		
Furniture	7 339 791	642 906	659 292	624 953	613 324	622 930	599 574		
Other manufacturing divisions	17 749 012	1 471 499	1 416 029	1 463 968	1 539 991	1 422 030	1 542 058		
Total	613 533 065	55 277 787	51 694 505	52 933 434	53 898 585	50 942 418	51 756 469		

* Revised

1/ Preliminary

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

Selected manufacturing subgroups	Actual values			Seasonally adjusted values		
	September	August	September 1/	September	August	September
	2002	2003		2002	2003	
Spinning, weaving and finishing of textiles	332 905	252 723	244 468	342 667	257 425	252 585
Tents, tarpaulins, sails and other canvas goods and automotive textile goods	42 464	46 191	46 070	40 581	48 565	43 923
Other textile articles	91 147	87 678	111 424	83 550	91 381	101 573
Knitted and crocheted fabrics and articles	147 125	122 282	119 008	143 850	128 318	116 852
Wearing apparel	921 839	621 193	643 294	845 423	623 477	592 447
Sawmilling and preserving of timber	22 119	14 843	23 435	20 939	14 807	22 076
Veneer sheets, plywood, laminboard, etc.	35 869	23 416	27 206	33 401	22 996	24 984
Builders' carpentry and joinery	39 313	42 190	43 060	40 232	40 462	44 159
Pulp, paper and paperboard	246 556	236 897	185 258	260 937	219 778	196 955
Corrugated paper and paperboard and containers	378 222	391 559	369 339	371 634	370 880	365 266
Paints, varnishes and coatings	23 515	23 756	24 745	22 098	26 401	23 755
Basic iron and steel products	5 097 481	5 178 555	5 256 001	4 883 650	4 951 425	5 025 488
Steel pipe and tube mills	523 359	309 692	281 653	546 644	294 577	295 914
Basic precious and non-ferrous metal products	1 784 057	1 383 349	1 348 989	1 814 329	1 373 151	1 372 152
Metal structures, parts	1 442 136	915 987	891 512	1 381 238	885 742	849 856
Cutlery, hand tools and general hardware	15 124	18 442	35 764	15 278	24 154	35 896
Metal containers, e.g. cans and tins	70 814	69 142	67 243	70 071	68 219	66 629
Cables, wire products, springs	63 574	77 830	82 951	62 533	80 233	82 024
Metal fasteners	84 365	90 292	90 832	83 258	90 021	89 532
All other metal products	887 418	1 024 719	1 075 894	908 768	1 035 415	1 105 327
Domestic appliances	31 330	28 042	29 651	28 426	27 312	26 806
Electric motors, generators and transformers	541 631	511 139	489 216	527 777	481 299	477 314
Insulated wire and cables	434 131	323 528	315 252	410 173	307 404	296 516
Accumulators, primary cells and primary batteries	5 707	3 487	3 515	6 101	3 849	3 768
Television, radio and communication apparatus	2 102 473	2 210 805	2 252 615	2 139 571	2 178 242	2 294 551
Motor vehicles	2 717 378	3 970 510	3 702 928	2 638 641	3 984 131	3 583 894
Parts and accessories for motor vehicles	581 620	350 514	298 277	569 147	295 494	290 018
Furniture	401 431	203 595	386 558	294 782	199 759	282 920

* Revised

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Additional information

Explanatory notes

- | | | |
|--------------------------------------|----|--|
| Introduction | 1 | Statistics South Africa (Stats SA) conducts a monthly survey of the manufacturing industry covering private manufacturing establishments, 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 (September 2003) have been estimated due to late response. These estimates will be revised in 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 - <ul style="list-style-type: none"> • 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 <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 and major group level. Each statistical unit is classified to an industry which reflects the predominant activity of the establishment . |
| 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 (see 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 (see table D 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 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 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 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 industry** **15** In order to calculate a production index for the total manufacturing industry, the production indices for the major groups are combined as follows:
- 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 of estimates** **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** **25** Stats SA's pre-release policy may be inspected at its Website, 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

Glossary

Enterprise	An enterprise 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.
Establishment	An establishment is defined as an enterprise, 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.
Index of physical volume of manufacturing production	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.
Industry	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).
Intercensal period	Intercensal period is the period between January of the one census year and January of the next census year.
Intermediate consumption	Intermediate consumption includes - <ul style="list-style-type: none"> • purchases and transfers-in of materials; • payments to other establishments for work done; • other direct factory costs; • rent and leasing paid; • head office charges; • royalties, copyright, trade names and patent rights paid; • advertising; • insurance premiums; • services; and • secretarial and administrative fees.
Output	Output is the aggregate value of goods manufactured and work done. <p>Output includes -</p> <ul style="list-style-type: none"> • sales and transfers-out of own manufactures, factory waste and stocks of 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 D - 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	
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 planning 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
TOTAL	100,0	100,0	100,0	106,0

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