



# **Manufacturing Production Australia**

## **Metal Products**

**December 1993 - February 1994**

**Catalogue No. 8367.0**

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**MANUFACTURING PRODUCTION, AUSTRALIA**  
**METAL PRODUCTS**  
**DECEMBER 1993 - FEBRUARY 1994**

**IAN CASTLES**  
**Australian Statistician**

**AUSTRALIAN BUREAU OF STATISTICS**

**CATALOGUE NO. 8367.0**

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### INQUIRIES

- *For further information about statistics in this publication and the availability of related unpublished statistics, contact Rod Smith on Melbourne (03) 615 7635 or any ABS Office.*
  - *for information about other ABS statistics and services please refer to the back page of this publication.*
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**TABLE 1. FERROUS METALS**  
(<sup>1</sup>000 tonnes)

Period	Basic iron, spiegeleisen and sponge iron(671.01)			Iron and steel in ingots or other primary forms(a)(672.40)			Blooms and slabs			
	Original	Seasonally adjusted(c)	Trend(d)	Original	Seasonally adjusted(c)	Trend(d)	From continuous casting (672.03)	From rolling and forging(b)(672.04)		
								Original	Seasonally adjusted(c)	Trend(d)
1990-91	5,600	..	..	6,219	..	..	4,620	2,521	..	..
1991-92	6,394	..	..	6,338	..	..	5,205	2,485	..	..
1992-93	6,445	..	..	6,806	..	..	6,218	2,246	..	..
1992 — December	500	476	502	542	535	550	494	160	157	191
1993 — January	531	525	516	582	565	566	545	179	186	185
February	466	526	537	525	592	585	493	161	184	179
March	526	554	561	585	589	603	550	174	168	172
April	550	578	580	562	598	615	533	171	174	164
May	587	631	589	639	672	618	636	150	158	154
June	568	614	r 587	613	641	613	613	143	146	144
July	572	540	577	604	565	606	604	133	123	136
August	588	552	r 566	613	573	603	613	138	126	132
September	574	550	r 558	625	597	604	625	139	130	r 130
October	613	577	558	654	628	610	654	137	130	r 129
November	600	566	r 566	638	645	r 620	638	137	151	r 129
December	591	559	576	638	620	628	638	126	124	128
1994 — January	582	575	587	613	607	634	613	92	97	128
February	556	628	596	590	651	637	590	129	147	127
1992-93: July to Feb.	4,214	..	..	4,407	..	..	3,887	1,608	..	..
1993-94: July to Feb.	4,678	..	..	4,974	..	..	4,974	1,031	..	..

(a) Includes ingots, puddled bars, pilings, blocks or lumps and steel in the molten state. There is a break in the series as statistics after July 1991 exclude a small proportion of total production, due to the withdrawal of consent for the ABS to release the information. (b) From rolling and forging of iron and steel (primary mills output). (c) See paragraph 5, Explanatory Notes. (d) See paragraph 6 to 8, Explanatory Notes.

**TABLE 2. STEEL WIRE AND WIRE PRODUCTS**  
(tonnes)

Period	Ferrous welded wire fabric(a) (693.54.55)	Nails, tacks, drawing pins etc(b) (694.10)	Steel wool (697.73)
1990-91	253,789	19,951	1,233
1991-92	254,302	20,361	1,129
1992-93	272,600	20,762	1,192
1991— March qtr	56,240	4,424	307
June qtr	53,246	4,052	324
September qtr	65,051	4,891	327
December qtr	62,980	5,465	279
1992— March qtr	60,127	5,112	281
June qtr	66,144	4,893	242
September qtr	66,794	5,259	304
December qtr	66,796	5,254	299
1993— March qtr	65,858	5,020	273
June qtr	73,152	5,229	316
September qtr	72,796	6,034	301
December qtr	71,966	5,835	314
1992-93: July to Dec.	133,590	10,513	603
1993-94: July to Dec.	144,762	11,869	614

(a) Includes welded reinforcing steel mesh. (b) Includes staples (except in strips for office, upholstery or packaging), spiked clamps, studs and spikes. Excludes with heads of copper.

TABLE 3. IRON AND STEEL PIPES AND TUBES  
(tonnes)

Period	<i>Tube or pipe fittings, of iron or steel</i>		
	<i>Cast iron tubes, pipes and hollow profiles (679.11)</i>	<i>Non-malleable Cast Iron (679.51)</i>	<i>Other (679.57,58,61)</i>
1990-91	71,397	7,550	3,971
1991-92	70,335	6,465	3,950
1992-93	r 67,149	r 5,976	3,968
1992 —			
December	4,668	423	302
1993 —			
January	1,620	241	198
February	r 5,474	r 516	336
March	6,451	585	373
April	4,221	398	327
May	6,575	509	332
June	7,304	515	439
July	7,186	481	348
August	6,246	398	330
September	7,602	572	376
October	r 5,538	564	315
November	r 6,677	457	350
December	5,138	335	327
1994 —			
January	1,744	38	182
February	5,994	183	352
1992-93: July to Feb.	42,598	3,969	2,497
1993-94: July to Feb.	46,125	3,028	2,580

TABLE 4. NON-FERROUS ROLLED EXTRUDED AND DRAWN PRODUCTS  
(tonnes)

Period	<i>Copper and alloy</i>						
	<i>Aluminium and alloy</i>		<i>Bars, rods sections</i>		<i>Wire rod and profiles</i>		<i>Lead and alloy(d)</i> (685.23)
	<i>Bars, rods and profiles(a)</i> (684.21)	<i>Other(b)</i> (684.24,28)	<i>Brass</i> (682.31,32)	<i>Other</i> (682.38,39)	<i>profiles</i> (682.37)	<i>Wire(c)</i> (682.43)	
1990-91	92,473	194,213	17,738	n.p.	n.p.	20,067	3,217
1991-92	95,224	201,166	20,750	n.p.	n.p.	13,695	2,955
1992-93	103,448	r 213,841	20,384	n.p.	n.p.	9,417	3,512
1992 —							
December	7,505	r 17,588	1,607	n.p.	n.p.	836	307
1993 —							
January	5,385	14,194	505	n.p.	n.p.	290	143
February	8,829	17,447	2,048	n.p.	n.p.	868	309
March	10,992	19,539	2,049	n.p.	n.p.	629	325
April	8,559	17,788	1,585	n.p.	n.p.	839	331
May	9,509	19,221	1,787	n.p.	n.p.	1,028	401
June	8,150	18,946	1,683	n.p.	n.p.	1,015	309
July	8,851	19,332		11,825		2,320	371
August	9,236	18,289		11,639		2,319	375
September	r 10,615	r 18,549		13,318		2,709	293
October	r 9,778	r 17,446		11,153		2,388	162
November	r 11,180	r 18,080		12,576		2,354	206
December	8,779	18,912	1,475	n.p.		2,033	243
1994 —							
January	6,282	16,778	630	n.p.		1,365	95
February	9,662	18,399	1,947	n.p.		2,670	163
1992-93: July to Feb.	66,238	138,347	13,280	n.p.	n.p.	5,906	2,146
1993-94: July to Feb.	74,383	145,785	n.p.	n.p.		18,158	1,908

(a) Includes wire rod. (b) Includes foil of a thickness (excluding any backing) not exceeding 0.20mm. (c) Excludes if stranded, braided or insulated. (d) Includes un-coated lead. Excludes foil.



TABLE 5. NON-FERROUS REFINED METALS(a)

Period	Copper(b)	Lead(c)	Tin(b)	Zinc(b)	Silver	Gold(d)
	'000 tonnes	'000 tonnes	tonnes	'000 tonnes	tonnes	kg
1990-91	237	220	321	321	408	255,318
1991-92	276	215	248	325	382	281,835
1992-93	312	225	258	332	355	288,188
1991—						
March qtr	47	42	77	79	86	57,304
June qtr	65	59	71	84	108	67,937
September qtr	68	61	51	79	94	66,568
December qtr	72	58	69	82	100	69,831
1992—						
March qtr	66	32	61	76	66	73,073
June qtr	71	64	67	88	122	72,363
September qtr	84	59	75	87	95	75,608
December qtr	82	56	37	82	87	69,505
1993—						
March qtr	71	47	73	76	80	69,676
June qtr	75	62	73	88	93	73,399
September qtr	84	51	13	73	85	77,738
December qtr	79	61	63	53	87	71,258
1992-93: July to Dec.	166	115	112	169	182	145,113
1993-94: July to Dec.	163	112	76	126	172	148,996

(a) Comprises production by establishments classified to either the Manufacturing or Mining Sectors. Source: ABARE. (b) Primary origin only.

(c) Includes lead content of lead from primary sources. (d) From primary and secondary sources.

## EXPLANATORY NOTES

### Introduction

This publication is one of a series of ten containing monthly and quarterly production statistics. The titles of the other publications of this series are shown in paragraph 10.

### Classification

2. Data contained in these publications are mostly based on monthly or quarterly collections conducted by the Australian Bureau of Statistics (ABS). Most items are identified by the commodity codes used in the Australian Standard Commodity Classification (ASCC), which was developed by the ABS to facilitate greater comparability of manufacturing production commodity statistics with import and export commodity statistics.

### Scope and coverage

3. Manufacturing commodity statistics collected by the ABS exclude details relating to single establishment manufacturing enterprises with fewer than four persons employed and production of establishments predominantly engaged in non-manufacturing activities but which may carry on, in a minor way, some manufacturing. However, except for a few commodities, the effect on production levels and movements is marginal.

4. Annual figures shown in this publication are derived by aggregating monthly/quarterly production and relate to production during the year ended 30 June. They may differ from annual manufacturing census data which relate to the census year and, in the case of businesses unable to report on a June year basis, include details in respect of substitute accounting periods.

### Seasonal adjustment and trend estimates

5. This publication contains seasonally adjusted statistics of several items. In the seasonal adjustment, account has been taken not only of normal seasonal factors, but also, where appropriate, of 'working-day' effects (arising from the varying numbers of Sundays, Mondays, Tuesdays, etc. in the month) and the influence of Easter and Australia Day which may, in successive years, affect figures for different months. However, care should be exercised in interpreting the figures for those months in which Christmas/New Year and Easter holidays fall as some manufacturers vary holiday shutdowns in the light of prevailing demand for their products. Details of the methods used in seasonally adjusting these and other series are available on request.

6. The smoothing of seasonally adjusted series to create trend estimates is a means of reducing the impact of the irregular component of the series. The trend estimates have been derived by applying a 13-term Henderson weighted moving average to the seasonally adjusted series.

7. While this smoothing technique enables estimates of trend to be produced for the latest month, it does result in revisions to the estimates for the most recent months as data for subsequent months become available. Generally subsequent revisions become smaller and after 3 months have little impact on the series. There will also be revisions as a result of revisions to the original estimates and annual reviews of seasonal and 'working day' factors.

8. Because of the highly irregular nature of some production series it is not possible to discern with reasonable confidence the current direction of the trend at the end of these series. For such highly irregular series the ABS does not provide the last two trend estimates.

9. Users may wish to refer to the ABS Information Papers *A Guide to Smoothing Time Series — Estimates of 'Trend'* (1316.0) and *Time Series Decomposition — An Overview* (1317.0) for more detailed information on smoothing of seasonally adjusted time series data.

### Related publications

10. Other ABS publications which may be of interest are:

*Manufacturing Production, Australia, Preliminary* (8301.0) — issued monthly

*Manufacturing Production, Australia, Household Appliances and Electrical Equipment* (8357.0) — issued quarterly

*Manufacturing Production, Australia, Clothing and Footwear* (8358.0) — issued quarterly

*Manufacturing Production, Australia, Food, Drink, Tobacco, Stock and Poultry Food* (8359.0) — issued quarterly

*Manufacturing Production, Australia, Fibres, Yarns, Fabrics, Bedding and Floor Coverings* (8360.0) — issued quarterly

*Manufacturing Production, Australia, Building Materials and Fittings* (8361.0) — issued quarterly

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*Manufacturing Production, Australia, Transport Equipment* (8363.0) — issued quarterly

*Manufacturing Production, Australia, Energy Products* (8368.0) — issued quarterly

*Manufacturing Production, Australia, Wood and Wood Products* (8369.0) — issued quarterly

*Manufacturing Production, Australia: Principal Commodities Produced, 1989-90* (8365.0).

Unpublished production data is also available from the ABS Sydney office. Please contact Colin Nicholson on (02) 268 4282.

11. Current publications produced by the ABS are listed in the *Catalogue of Publications and Products, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The *Catalogue* and *Publications Advice* are available for any ABS office.

### Symbols and other usages

- |      |  |
|------|--|
| n.p. | not available for separate publication (but included in totals where applicable)                     |
| n.a. | not available  |
| ..   | not applicable   |
| r    | revised since previous issue   |
| —    | nil or rounded to zero   |
| —    | break in continuity of series (where a line is shown between consecutive figures in the same column) |





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