



INTERNATIONAL
IRON AND
STEEL
INSTITUTE

2004 Edition

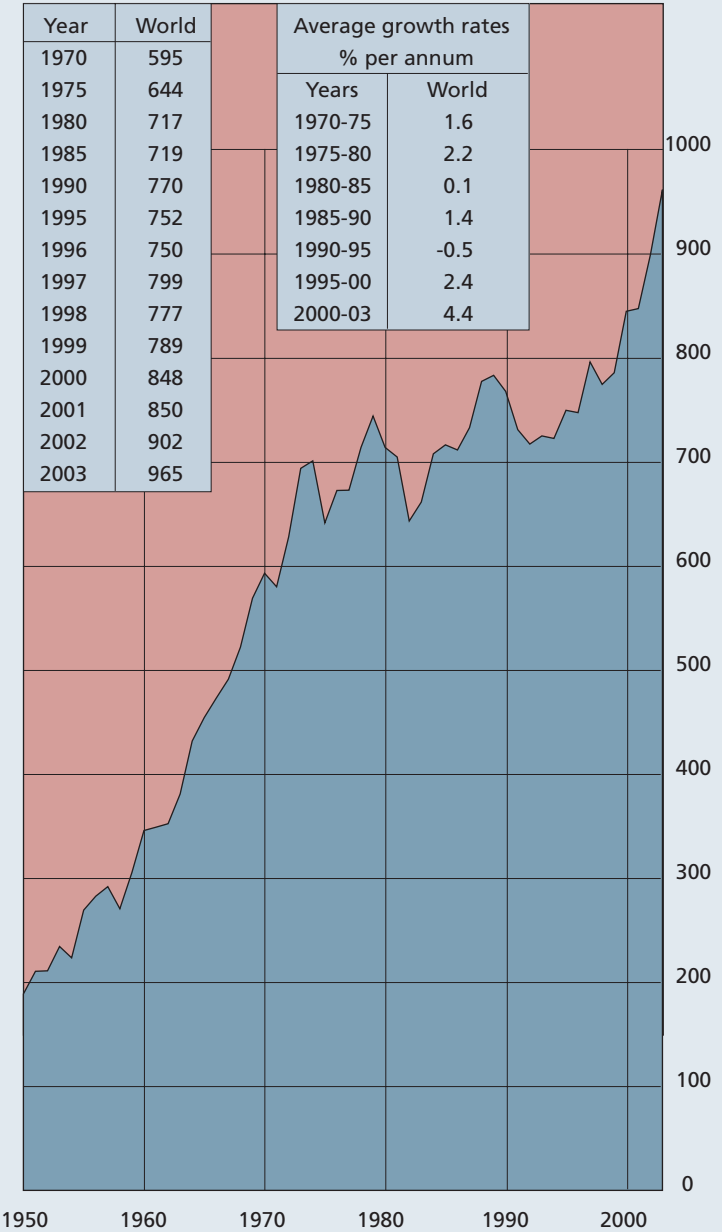
World Steel in Figures

Contents

	Page
World Crude Steel Production, 1950 - 2003	1
The Largest Steel-Producing Companies, 2002 and 2003	2
The Major Steel-Producing Countries, 2002 and 2003	3
Monthly Crude Steel Production, 64 Reporting Countries, 2000 - 2003	4,5
Crude Steel Production by Process, 2003	6
Continuously-Cast Steel Output, 2001 - 2003	7
Steel Production and Consumption: Geographical Distribution, 1993	8
Steel Production and Consumption: Geographical Distribution, 2003	9
World Steel Trade by Area, 2002	10
The Major Importers and Exporters of Steel, 2002	11
World Steel Exports, Analysis by Product, 1998 - 2002	12
World Trade in Steel Products, 1975 - 2002	13
World Volume of Trade, 1990 - 2002	13
Iron Ore, 2002	14
World Iron Ore Trade by Area, 2002	15
Scrap: Consumption, Trade, and Apparent Domestic Supply, 2002	16
Pig Iron, 2002 and 2003	17
Production of Direct Reduced Iron, 1997 - 2003	18
Employment in the Steel Industry, 1975 - 2003	19
Crude Steel Production per Employee	20
Apparent Steel Consumption, 1997 - 2003	21

World crude steel production, 1950 to 2003

million metric tonnes



The largest steel producing companies, 2002 and 2003

million metric tonnes crude steel output

2003		2002			2003		2002		
1	42.8	1	44.0	Arcelor	41	5.3	42	5.1	CSN
2	35.3	2	34.8	LNM Group (1)	42	5.3	47	4.8	Baotou
3	31.3	3	29.8	Nippon Steel	43	5.2	45	4.9	Hualin
4	30.2	4	28.9	JFE (2)	44	5.2	41	5.1	Salzgitter
5	28.9	5	28.1	POSCO	45	5.1	56	3.9	Jinan
6	19.9	6	19.5	Shanghai Baosteel	46	5.0	67	3.6	Sugang
7	19.1	7	16.8	Corus Group	47	5.0	53	4.5	Techint
8	17.9	11	14.4	US Steel	48	4.9	51	4.6	Erdemir Group
9	16.1	8	16.4	ThyssenKrupp (3)	49	4.9	61	3.9	Chelyabinsk (Mechel)
10	15.8	13	12.4	Nucor	50	4.8	46	4.9	CST
11	15.7	10	15.0	Riva Acciao	51	4.7	49	4.7	Stelco
12	13.9	-	-	EvrzHolding	52	4.6	50	4.6	USIMINAS
13	13.5	19	10.3	ISG (4)	53	4.6	69	3.4	Anyang
14	12.8	14	11.8	Sumitomo	54	4.6	55	4.2	Rautaruukki
15	12.4	16	11.4	SAIL	55	4.4	58	3.9	Zaporizhstahl
16	12.3	15	11.5	Gerdau	56	4.3	57	3.9	TISCO
17	11.5	17	11.0	Magnitogorsk	57	4.2	76	2.9	Laiwu
18	10.8	18	10.5	China Steel	58	4.2	54	4.4	Dofasco
19	10.2	20	10.1	Anshan	59	4.1	60	3.9	COSIPA
20	9.9	21	9.6	Severstal	60	3.9	68	3.6	Hadeed
21	8.9	22	8.6	Novolipetsk	61	3.9	59	3.9	SSAB
22	8.4	24	7.6	Wuhan	62	3.9	63	3.8	Nisshin Steel
23	8.2	23	8.2	Shougang	63	3.8	65	3.7	Lucchini
24	7.8	25	7.3	INI Steel	64	3.7	80	2.8	Celsa
25	7.3	28	6.6	Kobe Steel	65	3.7	64	3.8	Tokyo Steel
26	7.2	26	7.3	Imidro	66	3.5	66	3.7	SIDOR
27	7.2	31	6.2	Benxi	67	3.5	72	3.2	Alchevsk
28	7.1	27	6.9	Krivorozstal	68	3.4	77	2.9	Nosta
29	6.7	30	6.3	ISCOR (1)	69	3.4	70	3.3	RINL
30	6.5	29	6.4	BlueScope	70	3.4	75	3.0	EZZ
31	6.5	32	6.1	Mariupol (Ilyich)	71	3.3	71	3.2	Nangang
32	6.1	33	5.9	Polskie Huty Stali	72	3.2	74	3.1	Taiyuan
33	6.1	43	5.1	Tangshan	73	3.2	82	2.8	Petrovka
34	6.1	36	5.4	Maanshan	74	3.1	78	2.9	Lion Group
35	6.1	52	4.5	Handan	75	3.1	84	2.7	Tianjin Tiantie
36	5.8	34	5.8	voestalpine	76	2.9	85	2.7	Ipsco
37	5.6	37	5.3	HKM (3)	77	2.9	79	2.9	AHMSA
38	5.4	39	5.3	AK Steel	78	2.9	90	2.4	Kyoei
39	5.3	44	5.0	Panzhihua	79	2.9	94	2.2	Shaoguan
40	5.3	48	4.7	Azovstal	80	2.8	83	2.8	Dongkuk

(1) - ISCOR included in LNM Group.

(2) - 2002 figure comprises Kawasaki and NKK.

(3) - 50% of HKM included in ThyssenKrupp.

(4) - includes Bethlehem Steel in both years shown.

The major steel-producing countries, 2002 and 2003

million metric tonnes crude steel production

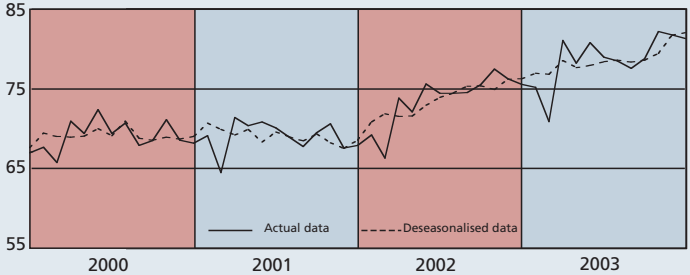
Country	2003		2002	
	Rank	Tonnage	Rank	Tonnage
China	1	220.1	1	182.2
Japan	2	110.5	2	107.7
United States	3	90.4	3	91.6
Russia	4	62.7	4	59.8
South Korea	5	46.3	5	45.4
FR Germany	6	44.8	6	45.0
Ukraine	7	36.9	7	34.1
India	8	31.8	9	28.8
Brazil	9	31.1	8	29.6
Italy	10	26.7	10	26.1
France	11	19.8	11	20.3
Taiwan, China	12	18.8	12	18.2
Turkey	13	18.3	13	16.5
Spain	14	16.5	14	16.4
Canada	15	15.9	15	16.0
Mexico	16	15.2	16	14.0
United Kingdom	17	13.3	17	11.7
Belgium	18	11.1	18	11.3
South Africa	19	9.5	19	9.1
Poland	20	9.1	20	8.4
Iran	21	7.9	22	7.3
Australia	22	7.5	21	7.5
Czech Republic	23	6.8	23	6.5
Netherlands	24	6.6	25	6.1
Austria	25	6.3	24	6.2
Sweden	26	5.7	26	5.8
Romania	27	5.7	27	5.5
Argentina	28	5.0	30	4.4
Kazakhstan	29	4.9	28	4.8
Malaysia (e)	30	4.8	29	4.7
Finland	31	4.8	34	4.0
Slovakia	32	4.6	32	4.3
Egypt	33	4.4	31	4.3
Saudi Arabia	34	3.9	35	3.6
Venezuela	35	3.9	33	4.2
Indonesia (e)	36	2.8	38	2.5
Luxembourg	37	2.7	36	2.7
Thailand (e)	38	2.6	37	2.5
Hungary	39	2.0	39	2.1
Others		23.1		22.6
World		964.8		903.6

Monthly crude steel production

2000 to 2003

million metric tonnes

Total 64 reporting countries



European Union (15)



The 64 Reporting Countries

Argentina; Australia; Austria; Belgium; Brazil; Bulgaria; Byelorussia; Canada; Chile; China; Colombia; Croatia; Cuba; Czech Republic; Denmark; Dominican Republic; Ecuador; Egypt; El Salvador; Finland; France; FR Germany; Greece; Guatemala; Hungary; India; Iran; Ireland; Italy; Japan; Kazakhstan; Libya; Luxembourg; Mexico; Moldova; Netherlands; New Zealand; Norway; Paraguay; Peru; Poland; Portugal; Qatar; Romania; Russia; Saudi Arabia; Serbia and Montenegro; Slovak Republic; Slovenia; South Africa; South Korea; Spain; Sweden; Taiwan, China; Trinidad and Tobago; Tunisia; Turkey; Ukraine; United Kingdom; United States; Uruguay; Uzbekistan; Venezuela; and Zimbabwe.

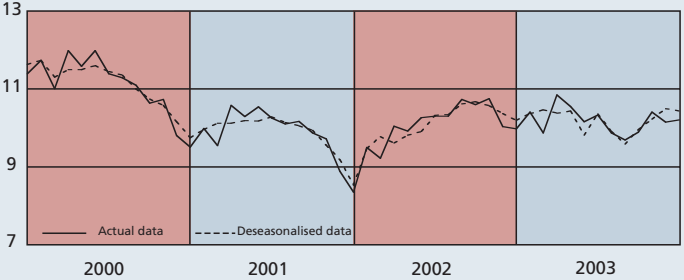
In 2003 these 64 countries accounted for approximately 98% of world crude steel production.

Monthly crude steel production

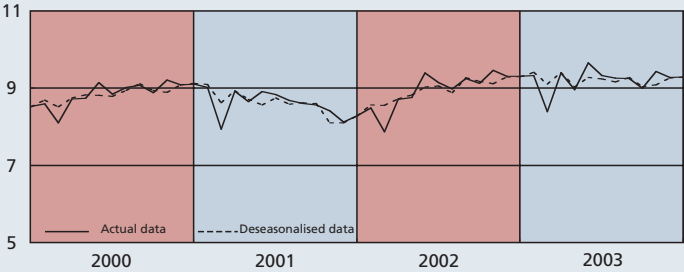
2000 to 2003

million metric tonnes

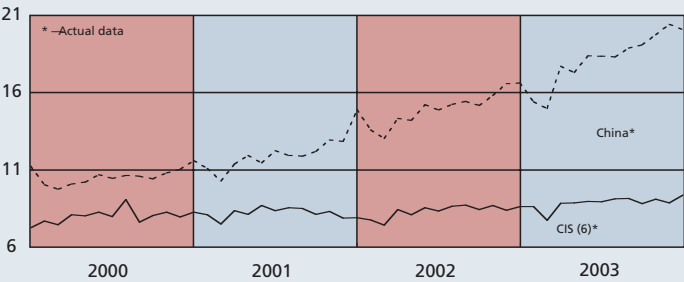
NAFTA



Japan



CIS (6) and China



Crude Steel Production by Process, 2003

	Production million metric tonnes	Oxygen %	Electric %	Open Hearth %	Other %	Total %
Austria	6.3	91.1	8.9	-	-	100.0
Belgium	11.1	74.6	25.4	-	-	100.0
Finland	4.8	71.5	28.5	-	-	100.0
France	19.8	60.7	39.3	-	-	100.0
FR Germany	44.8	70.0	30.0	-	-	100.0
Italy	26.7	37.0	63.0	-	-	100.0
Luxembourg	2.7	-	100.0	-	-	100.0
Netherlands	6.6	98.2	1.8	-	-	100.0
Spain	16.5	22.7	77.3	-	-	100.0
Sweden	5.7	68.1	31.9	-	-	100.0
United Kingdom	13.3	80.1	19.9	-	-	100.0
Other EU	2.4	-	100.0	-	-	100.0
European Union (15)	160.5	59.5	40.5	-	-	100.0
Czech Republic	6.8	93.2	6.8	-	-	100.0
Hungary	2.0	82.6	17.4	-	-	100.0
Poland	9.1	69.3	30.7	-	-	100.0
Romania	5.7	79.8	20.2	-	-	100.0
Slovakia	4.6	93.2	6.8	-	-	100.0
Turkey	18.3	31.4	68.6	-	-	100.0
Others	5.2	39.0	61.0	-	0.1	100.0
Other Europe	51.6	59.9	40.1	-	0.0	100.0
Russia	62.7	61.4	14.9	23.7	-	100.0
Ukraine	36.9	48.6	5.4	45.9	-	100.0
Other former USSR	8.4	58.6	33.4	8.0	-	100.0
former USSR	108.0	56.8	13.1	30.1	-	100.0
Canada	15.9	59.7	40.3	-	-	100.0
Mexico	15.2	30.2	69.8	-	-	100.0
United States	90.4	51.1	48.9	-	-	100.0
NAFTA	121.5	49.6	50.4	-	-	100.0
Argentina	5.0	50.5	49.5	-	-	100.0
Brazil	31.1	78.8	21.2	-	-	100.0
Chile	1.4	78.2	21.8	-	-	100.0
Venezuela	3.9	-	100.0	-	-	100.0
Others	2.7	21.5	78.5	-	-	100.0
Central and South America	44.2	65.0	35.0	-	-	100.0
Egypt	4.4	26.1	73.9	-	-	100.0
South Africa	9.5	53.6	46.4	-	-	100.0
Other Africa	2.3	48.5	51.5	-	-	100.0
Africa	16.2	45.4	54.6	-	-	100.0
Iran	7.9	28.8	71.2	-	-	100.0
Saudi Arabia	3.9	-	100.0	-	-	100.0
Other Middle East	1.3	-	100.0	-	-	100.0
Middle East	13.1	17.2	82.8	-	-	100.0
China (e)	220.1	83.2	16.7	0.0	0.0	100.0
India	31.8	48.7	45.6	5.7	-	100.0
Japan	110.5	73.6	26.4	-	-	100.0
South Korea	46.3	55.2	44.8	-	-	100.0
Taiwan, China	18.8	56.8	42.3	-	0.8	100.0
Other Asia	11.9	-	100.0	-	-	100.0
Asia	439.5	72.0	27.5	0.4	0.1	100.0
Australia	7.5	82.2	17.8	-	-	100.0
New Zealand	0.9	73.0	27.0	-	-	100.0
World	963.1	63.3	33.1	3.6	0.0	100.0

Continuously-Cast Steel Output, 2001 to 2003

	million metric tonnes			% crude steel output		
	2001	2002	2003	2001	2002	2003
Austria	5.7	6.0	6.0	96.4	96.9	96.4
Belgium	10.7	11.3	11.1	99.8	99.8	99.8
Finland	3.9	4.0	4.7	99.4	99.5	99.5
France	18.3	19.5	19.0	94.7	96.5	96.3
FR Germany	43.0	43.4	43.1	96.0	96.4	96.2
Italy	25.5	25.1	25.7	96.0	96.3	96.3
Luxembourg	2.6	2.7	2.7	97.2	98.6	99.5
Netherlands	5.9	6.0	6.5	97.8	98.0	98.2
Spain	15.9	15.9	15.9	96.5	96.8	96.8
Sweden	4.9	5.1	5.1	89.1	88.8	89.2
United Kingdom	13.0	11.2	12.8	96.2	95.8	96.2
Other EU	2.9	3.1	2.4	99.2	99.2	99.2
European Union (15)	152.4	153.3	155.1	96.2	96.6	96.6
Czech Republic	5.5	5.8	6.1	87.1	89.0	90.3
Hungary	2.0	2.0	2.0	100.0	99.7	100.0
Poland	5.2	6.0	6.5	59.0	71.7	71.7
Romania	3.8	4.6	4.7	77.4	83.6	81.8
Slovakia	4.0	4.3	4.6	99.4	99.5	99.6
Turkey	15.0	16.5	18.3	99.9	100.0	100.0
Others	3.1	2.9	3.5	64.6	60.3	69.7
Other Europe	38.5	42.0	45.6	84.1	87.7	88.7
Russia	30.0	32.5	34.1	50.9	54.3	54.3
Ukraine	6.6	6.6	7.4	19.8	19.5	20.0
Other former USSR	3.4	2.9	3.4	41.7	37.7	41.3
former USSR	39.9	42.1	44.9	39.9	41.4	41.6
Canada	14.9	15.6	15.5	97.6	97.7	97.8
Mexico	13.1	13.7	15.0	98.6	97.7	99.0
United States	87.3	89.1	87.8	96.9	97.2	97.0
NAFTA	115.3	118.4	118.3	97.2	97.4	97.4
Argentina	4.0	4.3	4.9	97.9	98.0	98.1
Brazil	24.5	27.4	28.6	91.6	92.6	91.9
Venezuela	3.8	4.2	3.9	100.0	100.0	100.0
Other Latin America	3.2	3.3	3.5	85.0	86.0	86.3
Central and South America	35.5	39.2	41.0	92.5	93.3	92.8
Egypt	3.7	4.2	4.3	97.4	97.7	97.8
South Africa	8.7	9.0	9.4	98.2	98.4	98.6
Other Africa	1.1	1.1	1.1	87.9	91.2	87.8
Africa	13.4	14.3	14.7	97.0	97.6	97.5
Iran	6.9	7.3	7.9	100.0	100.0	100.0
Saudi Arabia	3.4	3.6	3.9	100.0	100.0	100.0
Other Middle East	1.2	1.3	1.3	100.0	100.0	100.0
Middle East	11.5	12.2	13.1	100.0	100.0	100.0
China (e)	128.6	166.1	200.7	85.2	91.2	91.2
India	17.3	18.8	20.8	63.3	65.2	65.3
Japan	100.3	105.3	108.0	97.5	97.8	97.7
South Korea	43.2	44.8	45.6	98.5	98.6	98.5
Taiwan, China	17.2	18.1	18.7	99.5	99.4	99.4
Other Asia	9.9	10.6	11.2	100.0	100.0	100.0
Asia	316.5	363.7	404.9	89.9	92.6	92.3
Australia	7.0	7.5	7.5	99.4	99.4	99.3
New Zealand	0.8	0.8	0.9	100.0	100.0	100.0
World	730.9	793.4	846.1	86.3	88.2	88.0

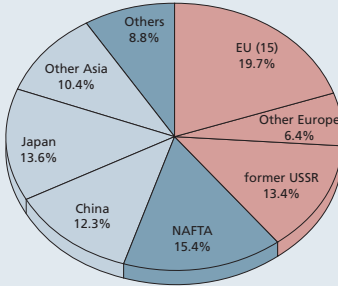
Steel production and consumption: geographical distribution, 1993

World Total: 730 million metric tonnes crude steel

Production

Others comprise:

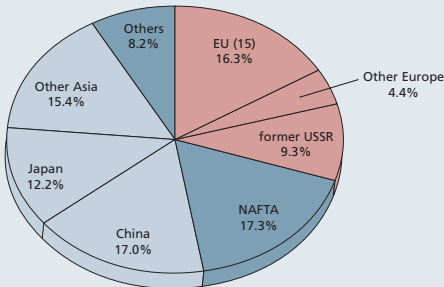
Africa	1.9%	Central and South America	4.7%
Middle East	0.9%	Australia and New Zealand	1.2%



Consumption (crude steel equivalent)

Others comprise:

Africa	2.1%	Central and South America	3.2%
Middle East	2.1%	Australia and New Zealand	0.9%



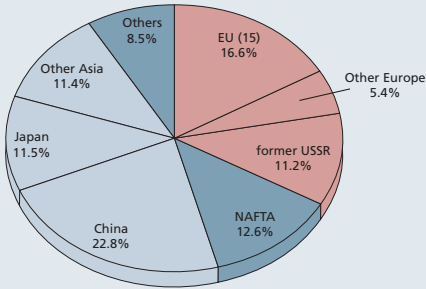
Steel production and consumption: geographical distribution, 2003

World Total: 965 million metric tonnes crude steel

Production

Others comprise:

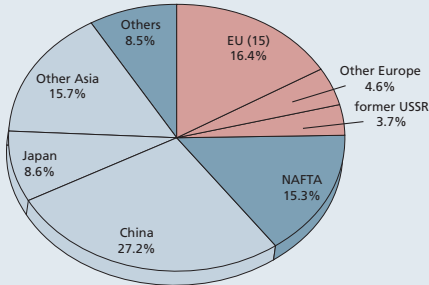
Africa	1.7%	Central and South America	4.6%
Middle East	1.4%	Australia and New Zealand	0.9%



Consumption (crude steel equivalent)

Others comprise:


Africa	1.8%	Central and South America	3.3%
Middle East	2.6%	Australia and New Zealand	0.9%



World steel trade by area, 2002

million metric tonnes

Exporting Region \ Destination	European Union (15)	Other Europe	former USSR	North America	Latin America	Africa & Middle East	China	Japan	Other Asia	Oceania	Total Imports	of which: extra-regional imports*
European Union (15)	78.4	11.6	7.0	0.2	1.4	1.6	0.7	0.5	1.2	0.2	102.8	24.4
Other Europe	14.0	4.2	7.3	0.0	0.1	0.1	0.0	0.1	0.1	0.0	25.8	21.7
former USSR	0.8	4.4	4.5	0.0	0.0	0.0	0.0	0.1	0.0	-	9.9	5.4
North America	5.5	2.7	2.4	7.0	10.3	1.0	1.2	1.7	5.4	0.8	38.0	31.0
Latin America	1.9	0.5	1.7	1.7	5.0	0.2	0.0	1.3	0.6	0.0	12.9	7.9
Africa	2.7	1.0	5.1	0.1	2.6	0.8	0.1	0.4	0.4	0.0	13.2	12.3
Middle East	2.3	3.1	5.8	1.8	0.0	2.2	0.2	1.0	0.8	0.0	17.4	15.2
China	1.1	0.9	7.8	0.1	0.5	0.6	-	6.4	11.7	0.2	29.3	29.3
Japan	0.1	0.0	0.0	0.0	0.0	0.0	0.1	-	3.0	0.0	3.2	3.2
Other Asia	2.7	2.2	15.6	0.2	3.3	1.5	4.1	23.0	20.9	0.6	74.2	53.3
Oceania	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.7	0.5	0.3	1.9	1.6
Total Exports	109.7	30.7	57.2	11.3	23.2	8.1	6.5	35.2	44.5	2.2	328.6	205.4
of which: extra-regional exports*	31.3	26.6	52.7	4.3	18.2	5.1	6.5	35.2	23.7	1.9	205.4	
Net Exports (exports-imports)	6.9	4.9	47.3	-26.8	10.3	-22.5	-22.8	32.0	-29.7	0.3		

* - excluding intra-regional trade marked 

The major importers and exporters of steel, 2002

million metric tonnes

Rank	Total Exports		Rank	Total Imports	
1	Japan	35.2	1	United States	30.2
2	Russia	27.7	2	China	29.3
3	Ukraine	25.9	3	Germany	17.8
4	Germany	24.7	4	Italy	16.6
5	Belgium-Luxembourg	20.3	5	France	15.8
6	France	17.6	6	South Korea	14.1
7	South Korea	12.9	7	Belgium-Luxembourg	10.9
8	Brazil	11.7	8	Taiwan, China	10.9
9	Italy	11.4	9	Spain	10.4
10	Turkey	11.0	10	Thailand	9.8
11	Taiwan, China	8.8	11	United Kingdom	8.9
12	Netherlands	7.2	12	Hong Kong	7.9
13	China	6.6	13	Canada	7.7
14	United Kingdom	6.6	14	Turkey	6.6
15	Spain	6.3	15	Mexico	5.8
16	Canada	5.6	16	Netherlands	5.5
17	United States	5.5	17	Iran	5.1
18	Austria	5.0	18	Viet Nam	4.7
19	Mexico	4.7	19	Malaysia	4.3
20	Czech Republic	4.6	20	Indonesia	3.4

Rank	Net Exports (exports-imports)		Rank	Net Imports (imports-exports)	
1	Japan	31.9	1	United States	24.6
2	Russia	25.5	2	China	22.6
3	Ukraine	25.2	3	Thailand	8.2
4	Brazil	10.9	4	Hong Kong	5.4
5	Belgium-Luxembourg	9.4	5	Italy	5.2
6	Germany	6.9	6	Viet Nam	4.6
7	Turkey	4.3	7	Iran	4.5
8	South Africa	3.7	8	Spain	4.1
9	Kazakhstan	3.0	9	United Arab Emirates	2.9
10	Slovakia	2.6	10	Portugal	2.5
11	Austria	2.4	11	Indonesia	2.4
12	Romania	2.4	12	Singapore	2.4
13	Argentina	2.2	13	Malaysia	2.3
14	Venezuela	2.0	14	United Kingdom	2.2
15	France	1.8	15	Egypt	2.1

World steel exports, analysis by product

1998 to 2002

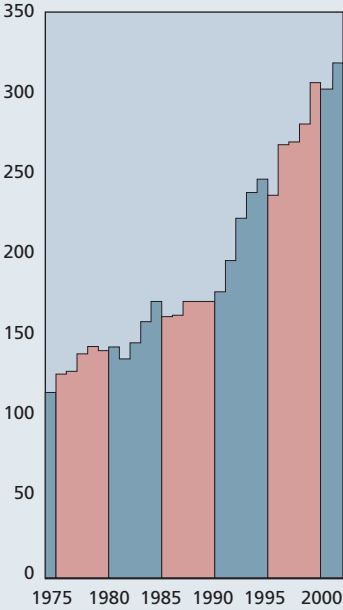
million metric tonnes

Product	1998	1999	2000	2001	2002
Ingots and semi-finished material	35.0	44.9	48.1	47.3	48.7
Railway track material	2.6	2.8	2.1	2.5	2.5
Angles, shapes and sections	17.3	16.1	18.5	17.8	16.8
Concrete re-inforcing bars	10.4	11.0	11.1	13.2	11.0
Bars and rods, hot-rolled	10.2	8.7	9.0	9.3	8.3
Wire rod	14.5	15.5	16.8	16.3	17.2
Drawn wire	4.2	4.4	4.2	4.2	4.5
Other bars and rods	3.2	3.1	3.6	3.8	3.6
Hot-rolled strip	2.6	2.7	3.1	3.4	3.4
Cold-rolled strip	2.9	3.0	3.5	3.2	3.4
Hot-rolled sheets and coils	44.1	45.8	49.1	43.7	48.8
Plates	17.0	15.8	17.0	17.7	18.2
Cold-rolled sheets and coils	25.9	26.9	29.1	26.9	28.6
Electrical sheet and strip	2.0	2.1	2.6	2.6	2.7
Tinmill products	5.6	5.8	6.4	6.0	6.2
Galvanised sheet	17.9	19.1	21.9	20.5	23.0
Other coated sheet	5.5	5.4	6.4	6.2	6.7
Steel tubes and fittings	21.8	18.8	21.5	23.8	24.2
Wheels (forged and rolled) and axles	0.3	0.7	0.3	0.3	0.3
Castings	0.4	0.4	0.5	0.5	0.5
Forgings	0.4	0.4	1.5	0.8	0.8
Other	0.0	0.0	0.0	0.0	0.0
Total	243.8	253.4	276.4	270.0	279.4

Exports in World Steel in Figures include intra-EU trade and trade between countries of the former CMEA, and are based on a broad definition of the steel industry and its products, including ingots, semi-finished products, hot-rolled and cold-finished products, tubes, wire, and unworked castings and forgings. In a change to previous editions of World Steel in Figures, the above data comprise the exports of 42 countries, which represents approximately 87 per cent of total world trade in 2002.

World trade in steel products, 1975 to 2002

million metric tonnes finished steel

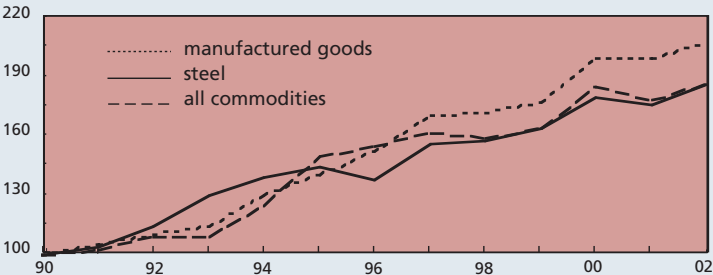


Year	Exports	Production	Exports %
1975	114.7	506.9	22.6
1976	126.1	533.7	23.6
1977	127.9	536.5	23.8
1978	138.6	571.7	24.2
1979	143.1	598.7	23.9
1980	140.6	578.7	24.3
1981	142.8	574.3	24.9
1982	135.5	528.7	25.6
1983	145.3	546.5	26.6
1984	158.8	588.4	27.0
1985	171.0	599.0	28.5
1986	161.7	597.4	27.1
1987	162.3	615.5	26.4
1988	171.1	656.8	26.1
1989	171.2	664.4	25.8
1990	171.0	654.0	26.2
1991	177.1	634.7	27.9
1992	196.1	632.7	31.0
1993	222.5	639.4	34.8
1994	238.6	631.1	37.8
1995	246.6	658.6	37.4
1996	236.4	660.0	35.8
1997	267.8	701.4	38.2
1998	269.5	685.2	39.3
1999	280.8	697.0	40.3
2000	306.3	750.6	40.8
2001	301.0	752.6	40.0
2002	318.5	802.2	39.7

Exports are of finished and semi-finished steel products. Production of finished steel, where not available from national sources, is calculated from crude steel production, taking into account the continuous casting ratio.

World volume of trade 1990 to 2002

Quantum indices 1990 = 100



Iron ore, 2002

million metric tonnes actual weight


	Fe Content (1)	Production	- Exports	+ Imports =	Apparent Consumption
Austria	(32)	1.9	0.0	5.4	7.3
Belgium-Luxembourg	..	-	0.3	11.8	11.5
France	(33)	-	0.1	19.1	19.0
FR Germany	(28)	-	0.0	44.3	44.3
Italy	..	-	-	14.8	14.8
Netherlands	..	-	0.0	5.7	5.7
Spain	(48)	-	0.0	6.1	6.1
Sweden	(63)	20.3	12.6	0.3	7.9
United Kingdom	(27)	-	0.0	13.1	13.1
Other EU	..	-	0.9	5.6	4.8
European Union (15)		22.2	14.0	126.4	134.6
former CSFR		0.3	0.1	11.7	11.9
Norway	(65)	0.5	0.7	0.2	0.0
Poland		-	-	7.4	7.4
Other Europe	..	4.8	0.2	13.5	18.0
Europe		27.7	15.0	159.2	171.9
former USSR	(60)	158.7	37.2	14.3	135.8
Canada	(63)	30.8	26.6	6.9	11.1
Mexico	(65)	18.4	0.5	2.8	20.7
United States	(60)	51.5	6.9	12.6	57.2
NAFTA		100.7	34.0	22.2	88.9
Brazil	(66)	239.4	170.0	0.0	69.4
Chile	(61)	6.5	6.1	-	0.4
Peru	(60)	5.0	4.6	0.0	0.4
Venezuela	(64)	20.9	6.7	0.0	14.2
Other America	..	0.6	-	8.6	9.2
Central and South America		272.4	187.4	8.6	93.6
Mauritania	(65)	10.6	10.6	-	0.0
South Africa	(65)	36.5	24.5	0.6	12.5
Other Africa	..	4.9	3.0	5.6	7.5
Africa		52.1	38.2	6.2	20.0
Middle East		11.3	2.1	12.8	22.0
China	(28)	231.4	0.0	111.7	343.2
India	(61)	86.4	46.6	0.3	40.1
Japan	(57)	-	0.3	129.1	128.8
South Korea	..	0.0	0.0	42.2	42.2
Other Asia	..	1.9	4.0	29.2	27.0
Asia		319.8	51.0	312.5	581.3
Australia	(65)	187.2	171.0	0.9	17.2
New Zealand and Other Oceania	..	1.7	0.9	0.0	0.8
World		1131.6	536.7	536.7	1131.6

(1) of domestic production: percentage Fe of total weight.

World iron ore trade by area, 2002

million metric tonnes actual weight

Exporting Region Destination	Exporting Region								Total Imports	of which: extra-regional imports*
	European Union (15)	Other Europe	former USSR	NAFTA	Central and South America	Africa & Middle East	Asia	Oceania		
European Union (15)	8.5	0.9	4.8	15.1	60.6	19.9	0.5	16.2	126.4	117.9
Other Europe	1.7	0.1	17.7	1.0	8.6	1.7	0.8	1.1	32.8	32.7
former USSR	-	-	14.3	-	-	-	-	-	14.3	0.0
NAFTA	0.1	0.0	0.0	12.4	6.3	0.0	0.0	0.6	19.4	7.0
Central and South America	0.0	-	-	0.8	10.5	-	0.0	-	11.4	0.8
Africa and Middle East	3.2	-	-	0.5	11.4	1.6	2.3	-	18.9	17.3
China	0.1	-	0.5	0.8	33.7	10.5	23.2	42.8	111.7	88.5
Japan	0.0	-	-	0.6	29.4	4.7	19.2	75.2	129.1	109.9
Other Asia	0.4	-	-	1.5	27.1	1.8	4.9	36.0	71.7	66.8
Oceania	0.0	-	-	0.6	0.3	-	0.0	0.0	0.9	0.9
Total Exports	14.0	1.0	37.2	33.5	187.9	40.3	51.0	171.9	536.7	441.9
of which: extra-regional exports*	5.5	0.9	22.9	21.1	177.4	38.7	3.6	171.9	441.9	
Net Exports (exports-imports)	-112.4	-31.8	22.9	14.0	176.5	21.3	-20.7	170.9		

* - excluding intra-regional trade marked 

Scrap: consumption, trade, and apparent domestic supply, 2002

million metric tonnes

	Consumption	- Imports	+ Exports	Apparent = Domestic Supply
Austria	2.2	0.9	1.1	2.4
Belgium-Luxembourg	7.7	5.6	2.0	4.2
Finland	1.6	0.5	0.4	1.5
France	10.1	2.8	4.7	11.9
FR Germany	19.1	3.8	6.9	22.2
Italy	19.8	4.0	0.2	15.9
Netherlands	1.4	1.4	3.1	3.1
Spain	13.8	5.5	0.1	8.4
Sweden	2.8	0.4	0.7	3.1
United Kingdom	4.2	0.1	5.6	9.7
Other EU	3.5	1.7	1.6	3.3
European Union (15)	86.1	26.8	26.2	85.5
Bulgaria	1.0	0.0	0.4	1.3
Czech Republic	2.7	-	-	2.7
Hungary	0.8	-	0.5	1.3
Poland	4.4	-	1.6	5.9
Romania	2.0	-	1.9	3.9
Slovakia	1.4	-	-	1.4
Turkey	14.0	5.0	-	8.9
Others	2.9	0.7	0.6	2.8
Other Europe	29.1	5.7	4.9	28.2
former U.S.S.R.	44.9	0.1	9.6	54.4
Canada	8.4	1.4	2.1	9.2
Mexico	10.0	1.8	0.2	8.4
United States	53.0	3.1	9.0	58.8
NAFTA	71.4	6.3	11.3	76.4
Argentina	1.6	-	-	1.6
Brazil	7.3	-	-	7.3
Venezuela	1.4	-	-	1.4
Other Central and South America	0.4	-	-	0.4
Central and South America	12.1	-	-	12.1
South Africa	1.9	-	0.5	2.3
China	40.0	7.9	0.0	32.2
Japan	43.4	0.2	6.0	49.2
South Korea	24.0	7.2	0.1	16.9
Taiwan, China	9.7	2.8	0.1	7.1
Other Asia	17.3	6.6	0.7	11.3
Asia	134.4	24.7	6.9	116.6
Australia	2.8	0.0	0.7	3.4
World	382.6	63.6	60.1	379.0

Pig iron, 2002 and 2003

million metric tonnes

	Production 2003	Production 2002	- Exports 2002	+ Imports 2002	Apparent = Consumption 2002
Austria	4.7	4.7	0.0	0.0	4.7
Belgium-Luxembourg	7.8	8.0	0.2	0.3	8.1
Finland	3.1	2.8	0.0	0.1	2.9
France	13.0	13.5	0.0	0.2	13.7
FR Germany	29.5	29.4	0.1	0.2	29.6
Italy	10.1	9.8	0.1	1.1	10.8
Netherlands	5.8	5.4	0.0	0.1	5.5
Portugal	-	-	0.0	0.0	0.0
Spain	3.6	4.0	0.0	0.4	4.4
Sweden	3.7	3.7	0.0	0.0	3.7
United Kingdom	10.2	8.6	0.0	0.1	8.7
European Union (15)	91.6	89.8	0.3	2.7	92.2
Bulgaria	1.1	1.1	0.0	0.0	1.1
Czech Republic	5.2	4.8	0.0	-	4.8
Hungary	1.3	1.3	0.1	-	1.3
Poland	5.6	5.3	0.0	-	5.3
Romania	4.1	4.0	0.0	-	4.0
Slovakia	3.9	3.5	-	-	3.5
Turkey	5.7	5.0	0.0	-	5.0
Others	0.8	0.7	0.0	0.0	0.7
Other Europe	27.8	25.7	0.2	0.1	25.6
Kazakhstan	4.1	4.0	-	-	4.0
Russia	48.3	46.3	4.0	0.0	42.2
Ukraine	29.6	27.6	0.5	-	27.1
Other former USSR	-	-	-	-	0.0
former USSR	82.0	77.9	4.6	0.0	73.3
Canada	8.5	8.7	0.1	0.1	8.6
Mexico	4.2	4.0	0.0	1.1	5.1
United States	39.1	40.2	0.0	4.6	44.8
NAFTA	51.8	52.9	0.1	5.8	58.5
Argentina	2.4	2.2	-	-	2.2
Brazil	32.0	29.6	4.4	-	25.2
Chile	1.0	1.0	-	-	1.0
Venezuela	-	-	-	-	0.0
Other Latin America	0.6	0.6	-	-	0.6
Central and South America	36.0	33.4	4.4	-	29.0
Egypt	1.7	1.7	-	-	1.7
South Africa	6.2	5.8	0.4	-	5.4
Other Africa	1.2	1.2	-	-	1.2
Africa	9.1	8.7	0.4	-	8.3
Iran	2.2	2.2	-	-	2.2
China	202.3	170.7	0.4	0.7	171.0
India	26.6	24.3	0.3	0.0	24.0
Japan	82.1	81.0	0.7	0.2	80.5
South Korea	27.3	26.6	-	-	26.6
Taiwan, China	10.3	10.2	0.1	1.0	11.1
Other Asia	1.4	1.4	0.0	0.5	1.9
Asia	349.9	314.2	1.5	2.4	315.1
Australia	6.1	6.1	0.0	0.0	6.1
New Zealand	0.7	0.6	0.0	0.0	0.6
World	657.3	611.6	11.6	10.9	610.9

Direct reduced iron production, 1998 - 2003

million metric tonnes

	1998	1999	2000	2001	2002	2003
FR Germany	0.5	0.4	0.5	0.2	0.5	0.6
Sweden	0.1	0.1	0.1	0.1	0.1	0.1
European Union (15)	0.6	0.5	0.6	0.3	0.7	0.7
Russia	1.7	1.9	1.9	2.5	2.9	2.9
Canada	1.2	0.9	1.1	0.0	0.2	0.5
Mexico	5.6	6.1	5.6	3.7	4.7	5.5
United States	1.6	1.7	1.6	0.1	0.5	0.2
NAFTA	8.4	8.7	8.3	3.8	5.4	6.2
Argentina	1.5	1.0	1.4	1.3	1.5	1.7
Brazil	0.3	0.4	0.4	0.3	0.4	0.4
Peru	0.1	0.0	0.1	0.1	0.0	0.1
Trinidad and Tobago	1.0	1.4	1.5	2.0	2.3	2.2
Venezuela	5.4	5.1	6.4	5.5	6.8	6.6
Central and South America	8.4	7.9	9.8	9.2	11.0	11.0
Egypt	1.6	1.7	2.1	2.4	2.5	2.9
Libya	1.0	1.3	1.5	1.1	1.2	1.3
Nigeria	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	1.1	1.3	1.5	1.6	1.7	1.5
Africa	3.7	4.2	5.1	5.0	5.4	5.7
Iran	3.5	4.0	4.5	5.0	5.3	5.0
Qatar	0.7	0.7	0.6	0.7	0.8	0.8
Saudi Arabia	2.3	2.3	3.1	2.9	3.3	3.3
Middle East	6.5	7.0	8.2	8.6	9.3	9.1
China	0.1	0.1	0.1	0.1	0.2	0.3
India	5.1	5.3	5.5	5.7	5.7	7.1
Indonesia	1.6	1.7	1.7	1.5	1.4	1.2
Malaysia	0.9	1.0	1.2	1.0	1.1	1.6
Myanmar	0.0	0.0	0.0	0.0	0.0	0.0
Asia	7.7	8.1	8.6	8.4	8.5	10.2
Australia	0.0	0.3	0.3	1.4	1.0	2.0
World	37.0	38.7	42.9	39.2	44.2	47.9

Employment in the steel industry

1980 - 2003

thousand at end of year

	1980	1985	1990	1995	2000	2001	2002	2003
Austria	39	34	21	13	12	12	12	12
Belgium	45	35	26	24	20	21	19	18
Denmark	2	2	1	1	1	1	1	1
Finland	15	10	10	9	9	9	9	9
France	105	76	46	39	37	37	37	37
FR Germany (1)	197	151	125	93	77	76	74	72
Greece	4	4	3	3	2	2	2	2
Ireland	1	1	1	0	0			
Italy	100	67	56	42	39	38	37	39
Luxembourg	15	13	9	6	4	4	4	4
Netherlands	21	19	17	13	12	11	11	11
Portugal	7	6	4	3	2	1	1	1
Spain	81	54	36	25	22	22	23	23
Sweden	48	31	26	21	20	19	19	19
United Kingdom	112	59	51	38	27	26	21	22
European Union	792	561	434	330	284	280	270	269
Serbia and Montenegro (2)		n/a	69	17	15	10	9	9
Canada	61	69	53	56	58	56	58	58
United States	399	238	204	171	151	140	125	121
Brazil	132	133	115	78	65	65	64	68
South Africa	70	65	54	39	24	20	19	18
Japan	380	349	305	252	197	186	176	170
South Korea	n/a	n/a	n/a	67	57	57	57	57
Australia		n/a	30	22	21	20	19	21
Total of above	1 834	1 414	1 264	1 032	872	834	797	790

(1) - includes former German Democratic Republic after 1990.

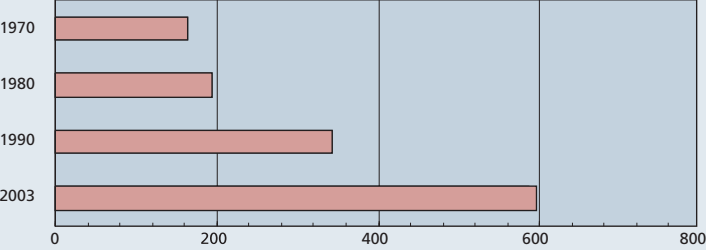
(2) - Yugoslavia 1980-1990

Totals are rounded. United States figures are averages for 12 months. Various other differences in coverage and definition exist, so that inter-country comparisons are of dubious value.

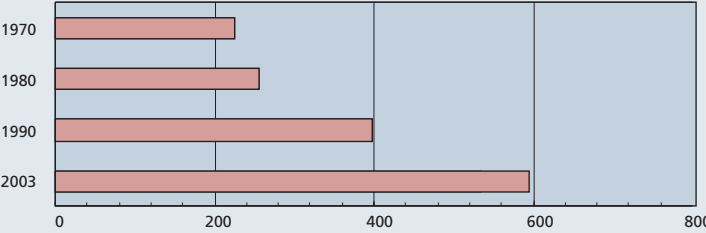
Crude steel production per employee

metric tonnes

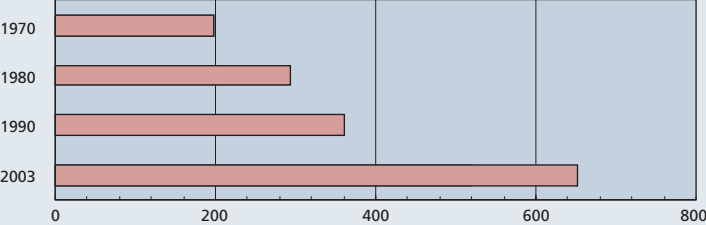
EU (15)



United States and Canada



Japan



Apparent Steel Consumption, 1996 to 2003

million metric tonnes finished steel products

	1997	1998	1999	2000	2001	2002	2003
Austria	3.5	3.9	3.8	4.2	3.7	4.0	4.1
Belgium-Luxembourg	3.9	4.3	3.9	4.1	3.6	3.5	3.3
France	15.5	16.6	16.5	18.0	16.5	16.3	15.5
FR Germany	34.0	34.6	35.2	37.0	35.6	34.3	33.7
Italy	27.5	29.3	29.6	30.5	30.4	30.2	31.4
Netherlands	4.7	5.6	5.1	4.7	4.5	3.8	3.3
Spain	13.7	15.6	17.5	17.4	18.9	19.3	21.1
Sweden	3.1	3.5	3.5	3.6	3.1	3.2	3.3
United Kingdom	14.0	14.5	13.5	13.1	13.2	12.8	12.9
Other EU	9.7	10.2	9.8	11.2	10.8	11.4	11.5
European Union (15)	129.6	138.1	138.3	143.8	140.3	138.7	140.0
Czech Republic	3.7	3.7	3.3	3.9	4.0	4.2	4.3
Poland	6.1	6.6	6.7	7.6	7.1	7.1	7.5
Romania	3.3	2.8	2.1	2.6	2.7	2.8	3.1
Turkey	11.9	12.1	11.0	12.7	11.0	12.3	15.2
Others	10.0	10.3	9.1	10.8	11.3	11.5	12.0
Other Europe	34.9	35.5	32.2	37.6	36.1	37.8	42.1
Europe	164.5	173.6	170.5	181.4	176.5	176.5	182.1
Russia	15.6	15.4	16.9	22.1	23.4	23.3	23.9
Ukraine	4.8	3.7	3.3	3.4	2.5	1.9	2.0
other CIS	5.5	2.7	3.0	4.9	5.2	4.9	5.1
CIS	25.9	21.8	23.2	30.4	31.1	30.1	31.0
Canada	15.4	15.8	16.2	17.8	15.2	15.9	15.5
Mexico	11.1	12.6	12.8	14.1	13.0	13.9	14.6
United States	108.0	115.7	110.9	114.7	101.6	103.0	100.5
NAFTA	134.5	144.1	139.9	146.6	129.8	132.8	130.6
Argentina	3.7	3.8	3.1	3.0	2.6	1.7	2.9
Brazil	15.3	14.5	14.1	15.8	16.7	16.5	15.9
Venezuela	2.5	1.9	1.7	1.7	1.8	1.4	1.2
Others	6.6	7.4	5.9	7.6	7.3	7.8	8.1
Central and South America	28.1	27.7	24.8	28.1	28.4	27.5	28.1
Egypt	4.6	4.6	5.1	4.0	4.4	3.7	3.8
South Africa	4.5	4.0	3.8	4.0	4.2	4.9	4.1
Other Africa	6.1	7.1	6.5	7.0	7.7	8.8	9.2
Africa	15.1	15.7	15.4	15.0	16.2	17.4	17.1
Iran	6.9	5.7	6.1	7.8	6.9	7.2	7.4
Other Middle East	9.0	10.1	10.1	10.0	12.0	13.7	14.2
Middle East	15.9	15.8	16.2	17.8	18.9	20.9	21.6
China	103.2	110.6	122.6	124.6	153.4	185.6	232.4
India	22.9	23.2	25.1	26.3	27.1	29.0	31.0
Japan	82.1	70.3	68.9	76.1	73.2	71.7	73.8
South Korea	38.1	24.7	33.8	38.5	38.3	43.7	45.8
Taiwan, China	21.0	20.2	20.4	21.1	17.7	20.4	19.9
Other Asia	40.0	26.9	31.1	35.2	37.7	42.0	43.0
Asia	307.3	275.9	301.8	321.8	347.3	392.3	445.9
Australia and New Zealand	6.6	6.7	6.7	6.4	6.3	7.1	7.5
World	698.0	681.4	698.6	747.6	754.6	804.8	863.7

Complete booklet available on line at www.worldsteel.org

Founded in 1967, the International Iron and Steel Institute (IISI) is a non-profit research organisation whose members are steel-producing companies, national or regional steel federations, and steel research organisations in more than 50 countries. Together the countries in which IISI steel-producing member companies are located account for over 70 percent of total world steel production.

IISI undertakes research into economic, financial, technological, environmental and promotional aspects of world steel and into various raw materials and human resources matters on behalf of its members. It also collects, evaluates and disseminates world steel statistics.