

# WORLD STEEL DYNAMICS

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## Global Metallics Balances

SAMPLE

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# WORLDSTEELDYNAMICS

## Global Metallics Balances: 1999

Subscribers to Global Metallics Balances **receive three volumes of computer printouts** of the 200-line spreadsheet model for each of the 56 countries in the system containing historical data from 1975 to 1997 and forecasts from 1998 through 2010. This data includes an analysis of apparent steel consumption, production and shipments, a scrap recovery analysis, and metallics requirements by steelmaking method. The consumption, production and trade figures are based on a product-by-product forecast for each country. All calculations are shown, including our assumptions of yields and ratios.

Subscribers **also receive a document summarizing, analyzing and discussing the results.** Specific chapters are:

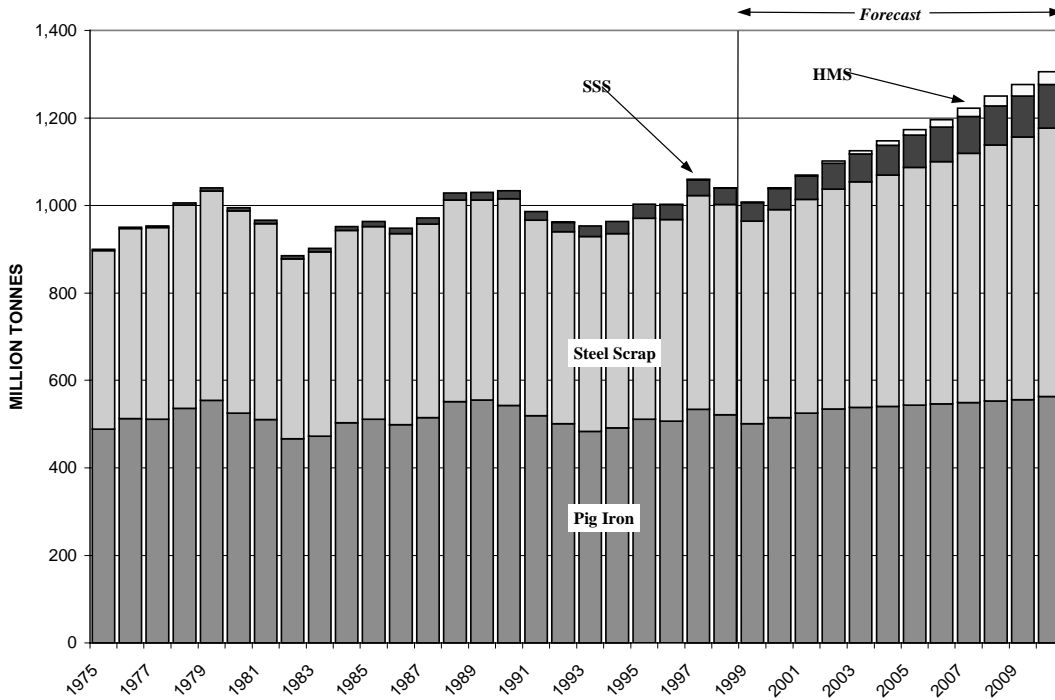
- An analysis of steel scrap generation and requirements including home, new and obsolete steel scrap; a discussion of the obsolete scrap reservoir and historical and forecasted recovery ratios;
- A discussion of alternative iron materials including topics such as the steel scrap substitute market in 1998, DRI plants under construction, DRI pricing and new technologies;
- A regional analysis which includes metallics balances and steel product shipment summaries for 11 regions; and
- A low residual scrap analysis that estimates supply and demand for low residual scrap by region.

Results that are derived include forecasts of:

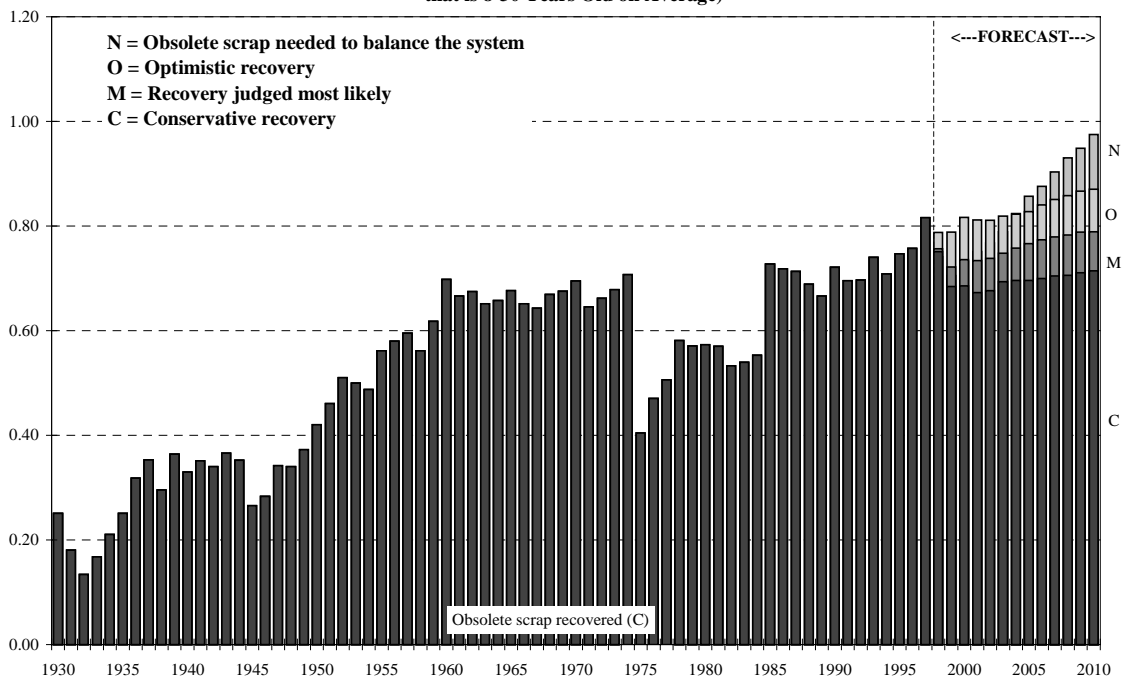
- Pig iron requirements,
- Steel scrap substitute and hot metal substitute requirements, and
- Obsolete scrap requirements versus obsolete scrap availability.

# WORLDSTEELDYNAMICS

Global Metallics Requirements



Global Obsolete Steel Scrap Recovery  
(Ratio of Scrap Recovered to the Scrap Reservoir  
that is 8-30 Years Old on Average)



# WORLDSTEELDYNAMICS

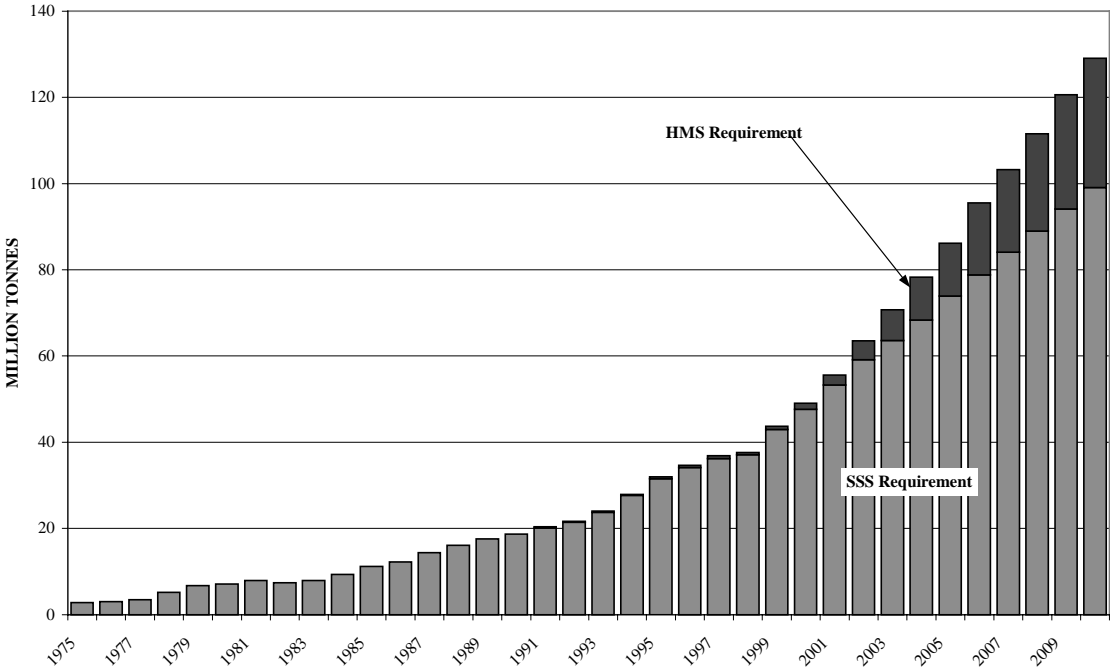
## Atlantic Basin Metallics Balances

million tonnes, unless otherwise specified

	1985	1990	1995	1997	1998	← Forecast →			CAGR	
						1999	2000	2005	2010	1998-2010
<b>Apparent steel consumption (ASC)</b>	387.7	391.6	346.2	361.1	368.6	351.3	363.7	408.9	454.0	1.75%
<b>Crude steel production</b>	506.0	511.0	448.2	462.1	453.8	436.5	450.5	494.9	538.5	1.44%
Ratio: crude production to ASC	1.305	1.305	1.295	1.280	1.231	1.243	1.239	1.210	1.186	
<b>Of which: BOF Steel Production</b>	263.9	275.9	262.3	266.6	263.1	253.2	260.2	269.0	272.8	0.30%
<b>Of which: OH steel production</b>	120.2	97.0	36.5	32.6	26.6	21.1	20.0	8.0	0.0	
<b>Of which: EAF steel production</b>	122.0	138.1	149.4	163.0	164.1	162.3	170.3	217.9	265.7	4.10%
<b>Foundry production</b>	38.5	42.7	36.2	37.9	38.1	38.4	39.2	42.8	46.9	1.75%
<b>Pig iron production</b>	324.4	338.5	279.3	282.3	276.7	264.2	270.4	274.0	274.0	-0.08%
<b>Total Metallics Requirement</b>	649.5	670.6	578.2	598.7	589.1	568.8	584.8	638.5	692.0	1.35%
Ratio: Metallics/ASC+Foundry	1.62	1.57	1.52	1.50	1.45	1.46	1.45	1.41	1.38	
<b>Sources of Metallics</b>										
<b>BF Ore-based metallics</b>	327.26	337.99	269.77	272.58	267.18	255.05	260.99	263.41	263.43	-0.12%
<b>HMS (hot metal substitute) requirement</b>	0.0	0.0	0.3	0.3	0.3	0.5	0.8	3.9	12.5	37.98%
Ratio to EAF output			0.00	0.00	0.00	0.00	0.00	0.02	0.05	
<b>SSS requirement</b>	8.7	13.8	22.4	26.1	27.2	30.7	33.5	47.7	61.1	6.98%
Ratio to EAF output	0.07	0.10	0.15	0.16	0.17	0.19	0.20	0.22	0.23	
<b>Steel scrap requirement</b>	323.7	329.4	294.4	308.6	303.1	290.7	298.0	332.1	363.5	1.53%
<b>Of which: Home scrap generated</b>	139.6	129.1	86.3	78.3	84.7	81.5	79.3	75.2	73.2	-1.20%
<b>Of which: News scrap generated</b>	70.7	66.5	54.3	55.6	56.1	53.3	54.5	58.2	61.6	0.77%
<b>Obsolete scrap needed (derived)</b>	113.4	133.8	153.9	174.8	162.3	155.9	164.1	198.7	228.8	2.90%
Ratio to 8-30 yrs avg reservoir	0.65	0.66	0.70	0.78	0.71	0.69	0.72	0.93	1.13	
<b>8-30 yrs avg obsolete scrap reservoir</b>	175.1	202.0	219.0	225.0	227.0	227.2	226.5	213.2	201.7	-0.98%
Per annum change from prior period (%)		3.6%	1.6%				0.7%	-1.2%	-1.1%	
<b>WSD obsolete scrap available most likely case</b>	113.4	133.8	153.9	174.8	162.2	161.1	164.4	159.9	164.8	0.13%
Ratio to 8-30 yrs avg reservoir	0.65	0.66	0.70	0.78	0.71	0.71	0.73	0.75	0.82	
<b>Obsolete scrap available less needed (likely)</b>	0.0	0.0	0.0	0.0	-0.1	5.2	0.3	-38.8	-64.0	
<b>WSD obsolete scrap available conservative case</b>	113.4	133.8	153.9	174.8	162.5	158.3	154.7	152.0	150.2	-0.65%
Ratio to 8-30 yrs avg reservoir	0.65	0.66	0.70	0.78	0.72	0.70	0.68	0.71	0.74	
<b>Obsolete scrap available less needed (conservative)</b>	0.0	0.0	0.0	0.0	0.2	2.4	-9.5	-46.7	-78.5	

# WORLDSTEELDYNAMICS

Global Steel Scrap Substitute and Hot Metal Substitute Requirements



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## Global Metallics Balances

Global Metallics Balances is offered on an annual basis -- \$12,000 to World Steel Dynamics subscribers and \$17,000 to others.

WSD \$12,000 \_\_\_\_\_

Others \$17,000 \_\_\_\_\_

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