

WORLD STEEL DYNAMICS

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North American and World Long Product Producers' Process-by-Process Costs

SAMPLE

WORLDSTEELDYNAMICS

Steelmakers' Process-by-Process Costs

Steel Mill Product Coverage

USA: Long Product Producers

	Blm /Blt	HRB /CP	CRC	HDG	EGL	TM	Plate	Bar	Shp /RL	Rod	ST	P&T
Ameristeel												
Jacksonville, FL	X							X		X		
Charlotte, NC	X							X				
Knoxville, TN	X							X				
Auburn	X							X				
Bayou	X							X				
Birmingham Steel												
Cartersville	X							X				
Memphis/Cleveland	X									X		
BS/Kankakee	X							X				
CF & I	X							X	X	X		
Chaparral	X							X	X			
Georgetown												
GST/NC	X									X		
GST/Kansas City	X									X		
Keystone	X									X		
USS Kobe/Lorain	X							X		X	X	
NJS (Co-Steel Sayerville)	X							X				
North Star												
Beaumont	X									X		
Kingman	X									X		
Nucor												
Blythesville	X								X			
Nebraska	X							X				
South Carolina	X							X				
Texas	X							X				
Utah	X							X				
NWSW	X							X	X	X		
Raritan River	X									X		
Sheffield/OK	X							X				
SMI												
Alabama	X							X				
Texas	X							X				

CANADA: Long Product Producers

	Blm /Blt	HRB /CP	CRC	HDG	EGL	TM	Plate	Bar	Shp /RL	Rod	ST	P&T
Ivaco	X									X		
Lasco	X							X				

Note: HRB/CP = Hot rolled band and coiled plate

CRC = Cold rolled coil

HDG = Hot dip galvanized

EGL = Electro galvanized

TM = Tin mill products

PLT = Plate

SHP/RL = Shapes and rails

Rod = Wire Rod

ST = Seamless tube

P&T = Pipe & tube

WORLDSTEELDYNAMICS

Steelmakers' Process-by-Process Costs

Steel Mill Product Coverage

WORLD: Long Product Producers	BIm /Blt	HRB /CP	CRC	HDG	EGL	TM	Plate	Bar	Shp /RL	Rod	ST	P&T
Brazil												
Cosigua	X							X		X		
Sider. Mendes jr.	X							X		X		
Canada												
Co-Steel - Lasco	X							X				
Ivaco	X									X		
Europe												
Celsa - Spain	X							X		X		
Irish Steel - Ireland	X								X			
Ispat-Hamburg - Germany	X							X		X		
Sheerness - U.K.	X							X		X		
India												
Bar Re-rolling Mill	X							X				
Bhilai	X							X	X			
EAF Bar Mill	X							X				
Japan												
Tokyo Steel	X							X				
Korea												
Kangwon	X							X	X			
Mexico												
Companie Sider. Guadalahara	X							X				
Sicartsa	X							X		X		
United States												
Birmigham Steel - Kankakee	X							X				
Chaparral	X							X	X			
Co-Steel - Raritan River	X									X		
Nucor Steel - Utah	X							X				

Note: HRB/CP = Hot rolled band and coiled plate

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WORLDSTEELDYNAMICS

Long Product Producer: Executive Summary Bar Mill

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A. Capacity, Prod'n, Capacity Util'n, Prod'n Costs, MHPT (ex SG&A) & Energy use in mmbtu/ton (EUPT)

(tons in millions)	Capac.	Prod'n	CH(%)	Prod'n C	ProcCst	MHP' Proc	MHPT	EUPT
EAF	0.400		93.24		66.38		0.42	4.75
CCBlf	0.400		90.91		22.81		0.27	5.33
Bar/Rod	0.400		85.00		51.80		0.82	8.73

B. Raw Material & Labor Use, & cif Prices (tons in millions)

Item	Use	Cost	
Labor (incl cont.)	286 #		per hr
DRI	0.000 tn		per ton
Scrap (net)	0.370 tn		per ton
Elect.		0.040	per kwh
Nat. Gas		2.750	per MCF

C. Shipments, Revenues/ton, Product Cost/ton, MHPT/ton (w SG&A)

(tons in millions)	Ship'ts	Rev. *	ProdCst	SG&A	CshProf	Dep.	Int.	NetProf	MHPTwSGA
CCBlf	0.000			12.73	14.56	7.00	7.00	0.56	0.86
Bar/Rod	0.340			20.60	39.12	9.00	6.00	24.12	1.87
Total	0.340			20.60	39.12	9.00	6.00	24.12	1.87

D. Financials (mm\$)

	Rev. *	COGS	SG&A	CshProf	Dep.	Int.	NetProf
Total							

* Revenues are based on indicative industry prime and second product prices for period.

Note: Selected Data has been deleted in this sample.

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Sales & Overhead	S=	0.000			
Labor-Ship	x		MHPT		
Admin	x		MHPT	0.17	
Misc(incl Taxes)				7.83	
Operating Costs				0.86	5.33
Financial Costs					
Depreciation				7.00	
Interest				4.66	
Taxes				0.00	
Total Costs				11.66	
Revenue:Primes	x	0.940			
Seconds	x	0.060			
Gross Cash Generation =				14.56	
Net Profit				2.90	

Own Billet: CC	x	1.000			
Purchased Billet	x	0.000		0.69	5.33

Bar and Rod

Bar/Rod Mill	P=	0.340	S=	-0.020	
Yield Loss	x	0.065			
Scrap Credit	100.000 x	0.059			-5.85
Labor-Direct	x		MHPT		
M & MH	x		MHPT		
Elect.	0.040 x	135.000	kwh	5.40	
Other Energy	2.750 x	1.650	mmbtu	4.54	
Supplies				5.18	
Rolls				2.85	
Maint. & Rep.				4.14	
Operating Costs					

Note: Data deleted

Sales & Overhead	S=	0.340			
Labor-Ship	x		MHPT		
Admin	x		MHPT		
Misc(incl Taxes)				9.90	
Operating Costs					

Financial Costs					
Depreciation				9.00	
Interest				6.00	
Taxes				0.00	
Total Costs				15.00	

Revenue:Primes	x	0.940			
Seconds	x	0.060			

Gross Cash Generation =				39.12	
Net Profit				24.12	

EAF	0.750	99.94	71.06	0.30	5.45
CCBlT	0.750	95.94	32.63	0.31	6.53
Wire Rod	0.950	84.21	41.03	0.47	7.94

B. Raw Material & Labor Use, & cif Prices (tons in millions)

Item	Use	Cost		Use	Cost	
Labor (incl cont.)	489 #		per hr	Billet	0.127 mmt	285 per ton
DRI	0.128 mmt		per ton			
Scrap (net)	0.647 mmt		per ton			
Elect.		0.042	per kwh			
Nat. Gas		2.750	per MCF			

C. Shipments, Revenues/ton, Product Cost/ton, MHPT/ton (w SG&A)

(tons in millions)	Ship'ts	Rev. *	ProdCst	SG&A	CshProf	Dep.	Int.	NetProf	MHPTwSGA
CCBlT	0.000			14.32	3.54	12.06	1.66	-10.19	0.74
Wire Rod	0.800			19.69	25.94	14.50	2.00	9.44	1.31
Total	0.800			19.69	25.94	14.50	2.00	9.44	1.31

D. Financials (mm \$)

	Rev. *	COGS	SG&A	CshProf	Dep.	Int.	NetProf
Total			15.75	20.75	11.60	1.60	7.55

* Revenues are based on indicative industry prime and second product prices for period.

Note: Selected Data has been deleted in this sample.

WORLDSTEELDYNAMICS

Conversion Costs for Wire Rod:

Long Product Producer

(US\$/net ton; 90% CU)

					Costs	Costs Cumul.
				I= 0.128		
Molten Steel 100% EF with L	P=	0.750	S=	0.708		
DRI	x				23.01	
Scrap	x				118.06	
Labor-Direct	x			MHPT		
M & MH	x			MHPT		0.30
O2	x			ton	1.51	
Elect.	x			kwh	19.32	4.80
Other Energy	x			mmbtu	1.79	0.65
FA & Alum.					13.00	
Fluxes					4.50	
Electrodes	x			lbs	5.81	
Refractories					5.25	
Supplies					5.00	
Maint. & Rep.					5.00	
Operating Costs						
Vacuum Degass & Ladle Met.						
Molten Steel	x	0.000			0.00	
Scrap	125.000 x	0.000			0.00	
Labor-Direct	x			MHPT		
M & MH	x			MHPT		
Elect.	0.042 x	10.000		kwh	0.42	
Other Energy	2.750 x	0.300		mmbtu	0.83	
N&H					1.00	
Refractories					1.00	
Supplies					0.00	
Maint. & Rep.					1.00	
Operating Costs						
VDG Normalization						
VDG	x	0.000				
NON-VDG	x	1.000				
Billet Cast/Prep						
	P=	0.720		-0.0216		
Yield Loss	x	0.040			8.48	
Scrap Credit	125.000 x	0.030			-3.75	
Labor-Direct	x			MHPT		
M & MH	x			MHPT		0.30
Elect.	0.042 x	30.000		kwh	1.26	0.31
Other Energy	2.750 x	0.550		mmbtu	1.51	0.55
Refractories					5.25	
Supplies					5.00	
Maint. & Rep.					5.00	
Operating Costs						
					0.61	6.53

Note: Data deleted

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Sales & Overhead	S=	0.000		
Labor-Ship	x		MHPT	
Admin	x		MHPT	0.14
Misc(incl Taxes)				9.79
Operating Costs				0.74 6.53

Financial Costs			
Depreciation			12.06
Interest			1.66
Taxes			0.00

Total Costs

Revenue:Primes	x	0.940
Seconds	x	0.060

Gross Cash Generation =		3.54
Net Profit		-10.19

	B=	0.127	
Own Billet: CC	x	0.850	
Purchased Billet	x	0.150	0.51 5.55

Wire Rod

Rod	P=	0.800	-0.0396	
Yield Loss	x	0.055		13.79
Scrap Credit	125.000 x	0.050		-6.19
Labor-Direct	x		MHPT	
M & MH	x		MHPT	
Elect.	0.042 x	85.000	kwh	3.57
Other Energy	2.750 x	1.200	mmbtu	3.30
Supplies				3.50
Rolls				2.00
Maint. & Rep.				3.50

Operating Costs

Sales & Overhead	S=	0.800	
Labor-Ship	x		MHPT
Admin	x		MHPT
Misc(incl Taxes)			
Operating Costs			11.67

Financial Costs			
Depreciation			14.50
Interest			2.00
Taxes			0.00

Total Costs

Revenue:Primes	x	0.940
Seconds	x	0.060

Gross Cash Generation =		25.94
Net Profit		9.44

Note: Data deleted

WORLDSTEELDYNAMICS

STEELMAKER'S PROCESS-BY-PROCESS COSTS

For long product producers in North America	\$10,000
For selected long product producers in the World	\$10,000

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