

Government experimental plant, admits of immediate commercial application without other modification of the furnace than increase of its capacity.

ESTIMATE FOR A 10,000 H. P. PLANT* PRODUCING 120 TONS OF PIG IRON PER DAY OF 24 HOURS.

Furnaces, contacts, overhead work.	\$ 24,500
Bins, chutes, elevators	14,000
Crushers	4,000
Hoists and regulators	10,500
Instruments	1,400
Cables for conductors	8,400
Building	10,500
Mixer and casting machine.	10,000
Travelling crane and tracks	5,000
Ladles	1,500
Slag trucks	3,000
Ore bins.	3,000
Repair shop	5,000
	\$100,800
Charcoal plant	50,000
Power plant (assuming cost of developing 1 H.P. horse power = \$50.00)	500,000
	\$650,800
Electrode plant	6,000
Unforeseen expenditure	43,200
	\$700,000

Amortization	5%	} 15% on \$700,000 = \$105,000.
Depreciation	5%	
Interest	5%	

On a production of 43,200 tons per year of 360 days per ton of pig iron \$2.43

COST OF PRODUCTION PER TON PIG IRON.

Ore (55% metallic iron) at \$1.50 per ton.	\$2.70
Charcoal, $\frac{1}{2}$ ton at \$6.00 per ton.	3.00
Electric energy, amortization, etc.	2.43
Labor	1.00
Limestone.	0.20
18 lbs. of electrode at 2 cents. per lb.	0.36
General expenses	1.00
Total.	\$10.69

GENERAL REMARKS.

The ores treated, with the exception of the hematite and the roasted pyrrhotite, contained a high percentage of magnesia, producing a very

* This estimate is given on the authority of Dr. P. Heroult.