

Questionnaire for Provisional Assessment of Economics of Cokeless Cupola Melting

Name of the Company:
Complete Postal Address:

Contact Person & designation:

E-mail ID:

Website:

Phone no:

Mobile no:

Fax no:

Note: Please answer as many questions as possible. The information is absolutely necessary for a proper assessment of technical and commercial feasibility for using Cokeless Cupola in your foundry, including pay back period. Information will be treated as confidential and not disclosed to others without your prior consent.

1. Charge Make Up

		Pig Iron	Cast Iron Scrap	Steel Scrap	Returns	Other Metals	Fe Si	Other Alloys
Charge %	Grey							
	Ductile							
% Carbon in Metal	Grey							
	Ductile							
Price/Tonne	Grey							
	Ductile							

Total Tonnage of Iron Melted Per Month – Grey Ductile

2. Fuels

	% of Charge	Tonnes/Month
Coke – Charge		
Coke – Bed		
Limestone		

Total coke consumption as tonnes/month, including wastage through handling and any extra coke charged: -

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Fuels Available & Cost per Unit (e.g. price/tonne, price/litre etc.) :-

Coke	Propane
Oil	Electricity
Natural Gas	Others

3. Electric Melting

Type & Size of Unit	
KWH/Tonne	
Cost/KWH (day & night if different rates)	

4. Metal Analysis

Metal Composition of Castings	C	Si	Mn	P	S
Grey Iron					
Ductile Iron					

If SG/Nodular/Ductile Iron is produced, please state: -

Type of Desulphurising Alloy:	
Consumption:	Cost:

Type of Nodularising Alloys:	
Consumption:	Cost:

Type of Inoculant:	
Consumption:	Cost:

5. Melting

Design Melting Rate of Cupola in Tonnes/Hr:	
Diameter of Shell in mm:	Inside Lined Diameter in mm:
Average Melting Rate in Tonnes/Hr:	No. of Melting Days/Month:
No. of Hours Melting/Month:	No. of Hours Melting/Day:
If Oxygen Enrichment Used, State %:	
How Many m ³ /minute of Oxygen:	Cost per m ³ :
If Hot Blast is used, state temperature & cost/tonne:	

6. Pollution Control

Is any pollution equipment fitted to the cupola and if so, give type and operating costs:-

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 Indicate emission levels/regulations where appropriate: -

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7. Metal Handling

Is cupola tapping continuous or intermittent?

If a forehearth is used, state capacity in tonnes:

If heated, state fuel used:

Is an electric furnace used for holding/superheating and if so, state:-

Type:	Holding Capacity:
Electrical Rating:	
Any Additional Relevant Information:	

8. Recarburiser

Is graphite or another suitable recarburiser available locally? (Sieve grading approximately 0-3mm, minimum 90% carbon). If so, give cost per tonne and any technical details: -

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9. Castings

Give indication of type of castings made, typical weights and pouring temperatures: -

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10. Melting capacity of existing Cupola (if any) in Metric Tons per hour.

SIGNATURE & DATE