



Whiting Hydro-Arc Electric Furnace Questionnaire

Data required as the basis for Proposal

Date _____

1. Data supplied by:

Company Name: _____

Address: _____

City, State/Province: _____

Zip/Postal Code: _____

Individual Name: _____

Title: _____

2. Primary Power Supply (See item 10)

Voltage: _____

No. of phases: _____

Frequency: _____

Note: Generally it is most economical and practical to use one in the following general classifications:

13,200 Volts, 3 phase, 50 or 60 Hertz

34,500 Volts, 3 phase, 50 or 60 Hertz

Short circuit capacity of above specified primary power supply _____ MVA 3 phase symmetrical.

Note: Short circuit capacity should be at least 50 times and preferably 100 times the rated capacity of the furnace transformer

3. Auxiliary power supplies

Voltage: _____

No. of phases: _____

Frequency: _____

Voltage: _____

No. of phases: _____

Frequency: _____

DC Voltage: _____



WHITING EQUIPMENT CANADA INC.

Manufacturers of Heavy Industrial Equipment

4. Required capacity of furnace shell. Heat sizes to be poured

Maximum _____

Normal _____

Minimum _____

5. Product rate required

Annual molten metal production _____ tons based on operation:

_____ Shifts per day (8 hrs. per shift)

_____ Shifts per week

_____ Weeks per year

Melt rate _____ tons per hour

6. Type of charge materials

Types of scrap _____

Density of scrap _____ (lbs/ft³)

Types of pre-reduced ore _____

Metallization (%) _____

Total FE _____

If used, Oxygen availability/usage in cfm _____

7. Types of metal to be produced

Typical analysis: C _____ Mn _____ Si _____ other _____

Metal poured into:

Molds _____

Continuous Caster _____

Ladle Furnace _____

Ingot Molds _____

Other (describe) _____

Final Product:

Reinforcing Bar _____

Shapes _____

Other (describe) _____



WHITING EQUIPMENT CANADA INC.

Manufacturers of Heavy Industrial Equipment

8. Additional features required (check)

- Water-cooled panels
- Water-cooled roof assembly
- computer control
 - Charge make up
 - Heat profile
 - Alloy additions
 - Demand limit
 - Heat logs
 - Furnace monitoring and alarms
 - Others (describe) _____
- Eccentric bottom tap
- Others (describe) _____

9. If available please submit

9.1. Building plan and elevation in area of proposed furnace

9.2. Overhead crane capacities, hook approaches, overall dimensions in plan and elevation, crane rail location.

9.3. Ambient temperature, relative humidity

Average _____°F, _____ %

Maximum _____°F, _____ %

Minimum _____°F, _____ %

9.4. Available compressed air supply _____ psi

9.5. Available cooling water supply

Temperature Average _____°F

Maximum _____°F

Quality Ph _____

Hardness _____ ppm



WHITING EQUIPMENT CANADA INC.

Manufacturers of Heavy Industrial Equipment

10. Power Supply Data – Provide single line diagram if available

10.1. Step Down Transformer to EAF Transformer

MVA _____

%Z _____

Voltage Ratio _____

10.2. Capacitor Bank

MVAR _____

Voltage _____

10.3. Static VAR

MVAR _____

Voltage _____

10.4. Infinite Bus Voltage

(KV/3ph/50hz) _____