

HEATING/COOLING SYSTEM QUESTIONNAIRE

Your Details

NAME: _____ POSITION _____
 Department: _____
 Email: _____ @ _____
 Mobile / Direct Line: _____

Company Details

COMPANY _____
 ADDRESS: _____

 TELEPHONE: _____ FAX: _____
 Email: _____ @ _____

Process Details

Plant Location: _____ Tank ref: _____
 Process: _____ Duty Required Heating / Cooling*

Solution Details

Chemical: _____ Specific Gravity: _____
 Operating Temp: _____ °C Specific Heat: _____
 Start Temp: _____ °C Ambient Temperature: _____ °C
 Heat Up time (hours): _____ from start to operating temperature.

Maintain conditions

Workload material (e.g. steel): _____ Entering the tank at: _____ °C
 Throughput (kg/hour): _____ Specific Heat: _____
 Air Sparging used: Yes/No* Air flow rate _____
 Solution flow into tank? (eg. from acid recovery) _____
 Is solution agitated: Yes/No* if yes give details _____

Heating Application

Heating method : Heat Exchanger/Electric Immersion Heater*

Heat Exchanger Information:

Heating Medium: Water/Steam/Thermal Fluid*
 Delivery temperature of medium: _____ °C
 Delivery pressure of medium: _____ Bar

Electric Immersion heater information:

Electrical supply details: single/three phase*, _____ V _____ Hz
 Required lead length for heater: _____ M



Cooling applications

1. To remove heat from electro process: (e.g. Electro plating/Anodising/Electro Polishing)

Electrical input: _____ V _____ Amps

Operating time per Hr _____ Mins

2. To remove heat from exothermic reaction:

Heat input if known: _____ kW

Or Temperature rise of solution from _____ °C to _____ °C in _____ hours

Tank Details

Construction Material (e.g. Metal/Plastic) _____ is the tank Insulated? (Yes/No)*

Length: _____

Width: _____

Height: _____

Diameter: _____

Horizontal / Vertical: _____ Solution Depth: _____

Is there a lid or surface covering? (e.g. Frogspawn) _____

Fume Extraction fitted:(Yes/No)* _____ What air flow speed? _____

Preferred location of heater / cooler: Vertical at side/Horizontal at bottom/External*

Is a guard required? _____

Any other relevant information such as present system: _____

* Delete as applicable

Please return to Braude at the address shown by email, fax or post.