



HEAT EXCHANGE AND TRANSFER, INC.

500 SUPERIOR STREET, CARNEGIE PA 15106

PH.# 412-276-3388

FAX # 412-276-3397

Thermal Fluid System: Inquiry Form FOR JACKETED VESSELS

A. Customer Information:

Company Name: _____

Company Address: _____

Contact Name: _____

Phone #: _____ Ext.: _____ Fax #: _____

B. Process Equipment Parameters:

User Equipment Description (e.g. jacketed blender, dryer, extruder, etc.):

Materials of Construction: _____

External surface area of user vessel: _____ sq ft Weight of user vessel: _____ lbs

Type of insulation: _____ Thickness: _____ in.

Volume of user vessel jacket: _____ gal. Temperature rating of user vessel jacket: _____ °F

Pressure rating of user vessel jacket: _____ (psig) ASME Non-ASME

Pressure drop through user vessel jacket: _____ psi @: _____ gpm

Size of user vessel jacket connections: Inlet: _____ in, Outlet: _____ in

C. Product Specifications:

- #1 Material name: _____
Specific Heat: _____ Btu/lb-°F Density of material: _____ lb/ft³
Volume of material: _____ gal. Weight of material: _____ lbs or lbs/hr
- #2 Material name: _____
Specific Heat: _____ Btu/lb-°F Density of material: _____ lb/ft³
Volume of material: _____ gal. Weight of material: _____ lbs or lbs/hr



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D. Process Parameters:

Operation: Batch (e.g. tanks or vessels) Continuous (e.g. extruders) °F

Operating temperature of the user equipment: Initial: _____ °F, Maximum: _____ °F

Heat up time required for initial start-up: _____ (hours or minutes)

Is cooling required? Yes No

Cooling required for: Set point Cool down Exothermic

Cooling control: On/Off Proportional

Cooler Sizing (if applicable):

Continuous: Remove: _____ Btu/hr @: _____ °F using: _____ (media *)
at: _____ °F and: _____ gpm

Batch: Remove: _____ Btu's in: _____ hrs/mins using: _____ (media *)

(* - Air, water, chilled glycol, etc.)

E. Thermal Fluid System Parameters:

Heat Transfer Fluid: _____

Operating Fluid Temperature Range: Minimum: _____ °F, Maximum: _____ °F, Normal Operating: _____ °F

Heater Sizing: _____ kW or: _____ Btu/hr (if known)

Flow Rate: _____ @: _____ ft of Head (if known) Open Skid Sheet Metal Enclosed

F. Installation Parameters:

Distance between fluid system and process equipment: Horizontal: _____ ft., Vertical: _____ ft

Piping between fluid system and process equipment: Size: _____ in, Schedule: _____ in, Length: _____ in.

Type of fluid piping Insulation: _____, Thickness: _____

Ambient temperature at installation site: Minimum: _____ °F, Maximum: _____ °F

Area Classification or NEMA rating: _____

If hazardous, is air purging acceptable? Yes No

G. Available Utilities:

Power Available: _____ Volts _____ Phase _____ Hz _____ Amps

Air: _____ °F _____ psig _____ SCFM

Nitrogen: _____ °F _____ psig _____ SCFM

Steam: _____ °F _____ psig _____ lb/hr

Water: _____ °F _____ psig _____ gpm

Thermal Oil: _____ °F _____ psig _____ gpm _____ Type

Other: _____ °F _____ psig _____ gpm _____ Type

H. Please list any requirements that may affect the design of this equipment:
