

DIRECT FIRED PROCESS HEATER

Client: _____ Date: _____

Project: _____ Contact: _____

Location: _____ PSL Reference: _____

1. SITE CONDITIONS

Ambient Temperature: °F _____ Design Wind Speed - mph _____

Elevation - feet ASL _____ Earthquake Zone (NBC) _____

2. PROCESS DATA Heat Medium Fluid. Yes/no If yes, type _____

2.2 Operating Conditions

Inlet	Outlet
Pressure: PSIG _____	Pressure: PSIG _____
Temperature: °F _____	Temperature: °F _____
Liquid flow rate _____	Liquid flow rate _____
Vapour flow rate _____	Vapour flow rate _____
Liquid Gravity _____	Liquid Gravity _____
Vapour Molecular weight _____	Vapour Molecular weight _____
Viscosity Liquid/Vapour _____	Viscosity Liquid/Vapour _____

3. MECHANICAL DATA

3.1 Design Conditions

Piping is to ASME for Steam and to API 530 for all other process Piping.

The Heater Design will be to API-560

If you require a different Design , please state here _____

3.2 Inspection requirements ASME for steam and B31.3 for all other Processes.

If you require a different Inspection requirements, please state here _____

3.3 Type of Fuel

Gas / Oil

Sweet Fuel gases with a LHV of 997 is assumed.

If you have, different fuel gases please fill out the information below

<u>Composition</u>	Gas		Oil
<u>Component</u>	<u>Mole %</u> _____		
N2	_____	Ash %	_____
CO ₂	_____	Water %	_____
H ₂ S	_____	Oil Gravity: °API	_____
C ₁	_____	Viscosity	_____
C ₂	_____	Pressure at Burner	_____
C ₃	_____	Temperature	_____
iC ₄	_____	Steam pressure	_____
nC ₄	_____	Air Pressure	_____
iC ₅	_____		
nC ₅	_____		
C ₆	_____		
C ₇₊	_____		
TOTAL	_____		
Gas Molecular Weight:	_____		
Pressure at Burner	_____		
Temperature	_____		
Air Pressure	_____		

Do any emissions restrictions apply? Yes / No

If yes please state _____

3.3 Burner Management system

NFPA requirements Yes / No

If No please list, if any _____



Instrument Air: _____

Supply Pressure: PSIG _____

Utilities:

Electric Power _____

Volts _____

Phases _____

Cycles _____