

API Specification

12K

Eighth Edition, October 2008

Specification for Indirect Type Oil Field Heaters

Annex A

Indirect Heater Design Information

API Monogram® Required

☐ Yes ☐ No

Annex A
(informative)

Indirect Heater Design Information

Field _____ Geographical Location _____

Service _____

Design Conditions

Gas Rate SCFH _____ Sp. Gravity _____ @ 60°F

Condensate/Oil Rate BPH _____ API Gravity _____

Water Rate BPH _____ Sp. Gravity _____ @ 60°F

Well Shut-in Pressure _____ psig Inlet Pressure _____ psig

Outlet Pressure _____ psig Site Elevation _____ ft

If Sour Gas: H₂S _____ Mol%, CO₂ _____ Mol%

Inlet Flowing Temperature _____ °F Minimum

Outlet Flowing Temperature _____ °F _____ psig

Fuel Gas Available _____ Yes _____ No Pressure _____ psig

Fuel Gas Source _____ High Heating Value (HHV) _____ BTU/SCF

Other Fuel: Specify _____

NOTE Flow rates should be maximum instantaneous rates based on expected flow surges.

Design Requirements

Coil Bundle: Single _____ Split _____

Coil Working Pressure: Preheat _____ psig, Expansion _____ psig

Coil Corrosion Allowance _____ Yes _____ No in. _____

Choke Required: Mfg. Standard _____ Other _____

Type Choke _____ Adjustable _____ Diaphragm _____

Paint Required: Mfg. Standard _____ Special: Specify _____

Regulatory Requirements/Limitations Such as: Stack Height, Emissions, API RP 14C:

Specify _____

API Specification 12K: Eighth Edition, October 2008
Specification for Indirect Type Oilfield Heaters

Annex A

Indirect Heater Design Information

Optimal Requirements

Coil Connections: Flanged _____ Threaded _____ Other _____

Companion Flange Bolted On (CFBO) _____ Yes _____ No, Bore _____ in.

Skid Mounted * _____ Lifting Lugs _____

Insulation: Specify _____

Shell Lifting Lugs _____ Yes _____ No

Intake Flame Arrestor _____ Stack Flame Arrestor _____

Stack Spark Arrestor _____ Stack Down Draft Diverter _____

* If so, state how unit will be loaded, unloaded, and supported in normal operation.

Stack Rain Shield _____ Stack Gas Sample Connection _____

Fuel Gas Scrubber _____ Electric Spark Ignitor _____

Pilot Flame Failure Shutdown _____

Telltale Holes _____ Yes _____ No

Fuel Gas Regulator _____

Other Accessories _____

Water Bath Additive _____

Controls: Mfg. Standard _____ Other _____

NACE MR 0175 Required _____

Manufacturer's Heater Data

Firetube Capacity _____ BTU/hr

Firetube Size _____ in. OD Surface Area _____ ft²

Coil No.	Size and Schedule	Material	Coil Area ft ²	Max. W.P. psig	Limited by
1	_____	_____	_____	_____	_____
2	_____	_____	_____	_____	_____
3	_____	_____	_____	_____	_____

Water Bath Capacity _____ gal, Empty Shipping Weight _____ lb