


Process Heating and Control Modules

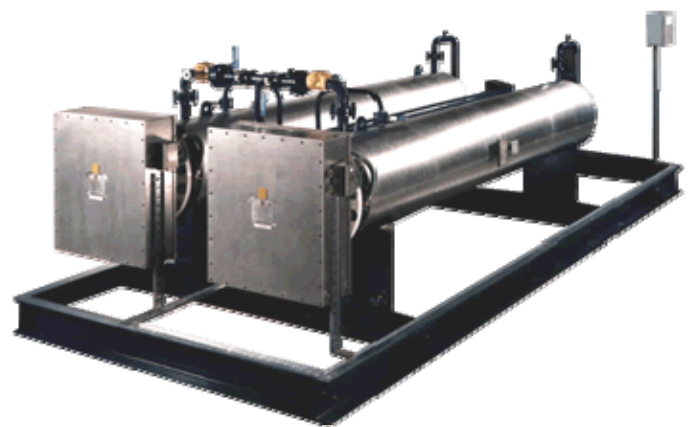
Process Heating skid modules can be engineered to meet specific client requirements. Process heaters from our range of standard designs or custom engineered heaters can be incorporated within the skid design to meet your application requirements. Modules suitable for Zone 1 and Class 1 / Div 2 Hazardous Areas or safe area installation can be offered.

FEATURES

- Up to 5000kW.
- ATEX approved  11 2 G/D.
- Certified EEx'e', Zone 1, Gas Group II or Certified EEx'd', Zone 1, Gas Group II, A, B, C.
- Ingress Protection rating up to IP55 (IEC) or NEMA 4X (NEC) suitable for outdoor installation. (Higher IP ratings can be supplied where control panels are mounted separately.)
- Typical Module Components;
 - Electric Process Heater;
 - Thyristor/Contactor Control System;
 - Temperature, Flow and Pressure;
 - Measurement instrumentation;
 - Isolation and Bypass Valves;
 - Safety Pressure relief valves;
 - Flow Control Valves.
- Single point connections for Process pipe work, instrumentation and power cables.
- Control and measurement instrumentation for Process temperature, Flow and Pressure can be supplied as EXHEAT standard or preferred manufacturer.

TYPICAL APPLICATIONS

- Natural Gas
- Fuel Oil
- Fuel Gas
- Heat Transfer Oil
- Industrial Gases
- Crude Oil
- Heating Medium
- Water



Material Specification

Electric Heater Selectable from EXHEAT standard range for application or engineered to meet your requirements.

Vessel Design Codes

- PED Compliant
- Stoomwezen
- CODAP
- PD 5500 2000 Cat 1
- ASME VIII Div 1/2
- A.D. Merkblatter
- AS1210

Vessel Materials

- Carbon Steel
- Stainless Steel
- Titanium
- Monel
- Low Temperature Steel
- Duplex
- Super Austenitic
- Nickel Alloys

Elements

Hairpin Type

Manufactured from 80/20 NiCr resistance wire with high purity compacted Magnesium Oxide powder sheathed within corrosion/erosion resistant tube, e.g.:

- Incoloy 800/825
- Inconel 600/625
- Titanium
- 316/316L Stainless Steel
- 321 Stainless Steel
- Monel

Element sheath available in welded or seamless tube up to 1.6mm thick.

Ceramic Core Type

Manufactured from 80/20 NiCr resistance wire inside high quality ceramic formers and then inserted into tubular pockets manufactured from various materials e.g. Carbon Steel, Stainless Steel.

Note!

This type of unit allows for the element to be removed and replaced without draining the process, by simply removing the terminal box lid.

System Control

Heater Control PID Thyristor or Step Contactor Control can be offered dependent on outlet temperature accuracy and flow turn down requirements.

Heater Over-temperature Protection Various types of over temperature cut-outs available, including a range of Thermostats, Thermocouples and RTD's.

Instrumentation (optional) Control and Measurement Instrumentation for Process temperature, Flow and pressure can be supplied as Heatex standard or Client preference.