

Heating Medium Skids

EXHEAT design and manufacture heating medium skids of various sizes and content for use in Zone 1 & 2 or Class 1, Div 1 Hazardous Areas.

Large heater systems are supplied to heat either water or heat transfer fluids. The heating medium is then used throughout the process plant in all types of heat exchangers. Electric heaters are used during low power demand when the waste heat recovery systems do not provide sufficient heat. Units are supplied for both offshore and onshore installations. Electric Heaters can be single units up to 5000kW, or multiple units for ease of maintenance or larger load configurations.



FEATURES

- Single point piping connections for flow and return.
- Single point terminations for field power and instrumentation cabling.
- Optional stainless steel terminal box and control panel.
- Pre-wired for ease of installation.
- Ingress Protection rating up to IP55 (IEC) or NEMA 4X (NEC) suitable for outdoor installation. (Higher IP ratings can be supplied where control panel mounted separately).
- Thermal Insulation.

TYPICAL COMPONENTS

- Electric process heater
- Filter simplex or duplex
- Thyristor / Contactor control system
- Flow measurement
- Temperature measurement instrumentation
- Pressure measurement instrumentation
- Isolation / Bypass valves
- Safety pressure relief valves
- Flow control valves

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
- AS 1210

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 are 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 EXHEAT standard or Client preferred manufacturer.