

PROCESS EQUIPMENT

Gas Cooler



Application

Gas Coolers are used as intercoolers and aftercoolers in centrifugal compressor packages. Specially used for dry air, wet air, nitrogen, process gas application

Design capabilities.

- Design pressure up to 50 bar g
- Shell diameters up to 4000 mm
- Flow rate up to 3,50,000 kg/hr

Gas cooler is a customized cross flow heat exchanger consisting of a fin-tube bundle inserted inside a shell which cools gas in the shell side by cooling water circulating in the tube side. It is a compact and cost-efficient option for gas cooling process. Since thermal conductivity of gases like air, nitrogen and carbon dioxide is low compared to water, gas coolers have extended surface area typically in the form of fins to reduce the overall size of the cooler. The gas flows in a crossflow direction through the tube bundle which is removable in nature. In case of humid air, there is large amount of condensate formation at the outlet side of the bundle. A perforated plate or a wire mesh demister is therefore used to remove this water content.



Materials

- Tubes- Copper, Cupro-Nickel, Stainless Steel, Admiralty Brass
- Shell – Carbon Steel, Stainless Steel
- Fins – Aluminum with/without coating
- Tube-sheet – Carbon steel, Stainless, Naval Brass, Steel forged/Cupro-nickel cladded options.

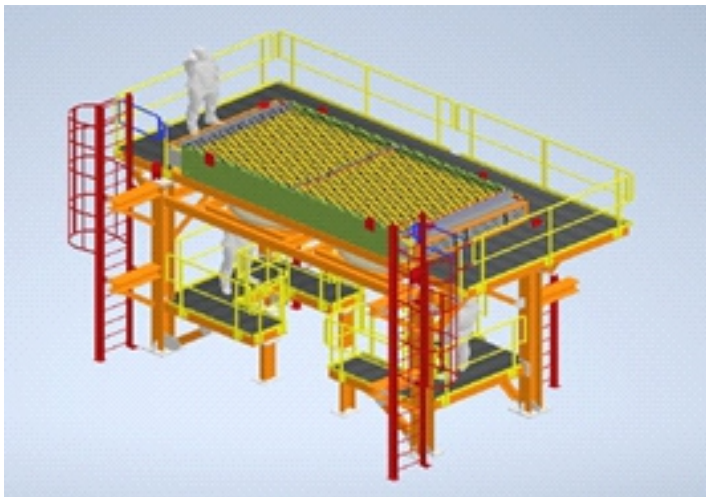
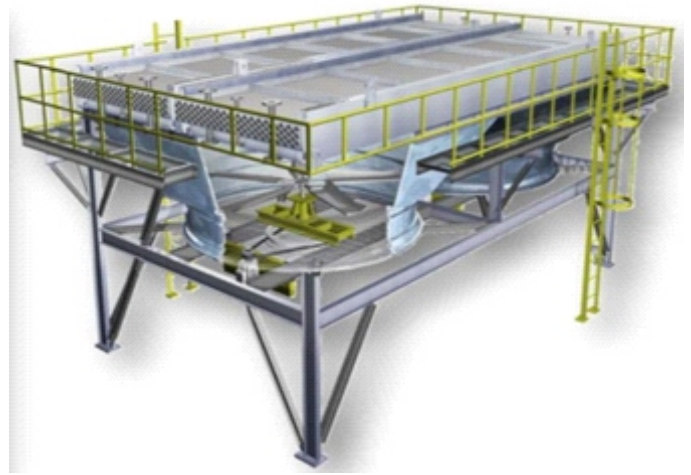


PROCESS EQUIPMENT

Air Cooled Heat Exchanger

Application:

An air-cooled heat exchanger (ACHE) is a device used to cool and condensate process streams using ambient air as the cooling medium. It consists of a series of finned tubes through which the hot fluid flows. Ambient air is forced over the exterior surface of the tubes, transferring heat from the fluid inside to the air outside through convection. The fins on the tubes increase the surface area available for heat transfer, enhancing the efficiency of the cooling.



Key Features :

- Very effective control of the process fluid outlet temperature
- Highly efficient fin to tube heat transfer.
- Operational at any geographical area.
- No Utility cost.
- Lower Maintenance cost.

Material :

- Tubes- Carbon steel, Stainless Steel 304,304L,316,316L, Copper, Cu-Ni.
- Fins – Aluminum.
- Headers – Carbon steel, Stainless Steel.
- Fans – Aluminum, GRP, FRP.el



FOR ENQUIRIES:

Skids: Anand Kshirsagar: enquiries.sed@enproindia.com

Process equipment: Jomey John: enquiries.ped@enproindia.com

Renewables: Hrushikesh Joshi: enquiries.ren@enproindia.com



PROCESS EQUIPMENT

Pressure Vessel

Application: For normal as well as hazardous application



Specifications :

Optimally designed for high performance and long life using PVELite and NozzlePro software

Diameter: Up to 5m

Length: Up to 40m

Thickness: Up to 120mm

Material : Carbon Steel, Stainless Steel, Super Duplex, Super Austenitic Stainless Steel

Shell & Tube Heat Exchangers

Application :

ZLD / Desalination / Chemical / Food / Oil & Gas / Power / Pharmaceutical

Specifications :

Optimally designed for high performance and long life using HTRI, PVELite and NozzlePro. Conforming to TEMA class R,C,B



Material :

Stainless Steel, Carbon Steel, Admiralty Brass, Duplex, Cupro Nickel, Titanium Grade 1,2,12, Super Duplex Stainless Steel



FOR ENQUIRIES:

Skids: Anand Kshirsagar: enquiries.sed@enproindia.com

Process equipment: Jomey John: enquiries.ped@enproindia.com

Renewables: Hrushikesh Joshi: enquiries.ren@enproindia.com

