Modular Shell & Tube Heat Exchangers

Purpose designed for oil cooling applications & especially suitable for handling of hydraulic oil
The TRANSON® Heat Exchanger system introduces new standards of economy in the field of heat transfer and process technology - in design, operating efficiency and versatility of application.

- **Construction Code**
  Where applicable TRANSON Heat Exchangers comply with ASME VIII Division 1.

- **Modular Construction**
  The unit consists of one or more shell and tube type standard units or modules.

- **Standard Dimensions**
  The modules are manufactured to standard dimensions incorporating a rationalised set of components and straight bore tubing. Arranged as single module or multi-module units in parallel or series configuration according to capacity and size requirements.

- **High Thermal Efficiency Unidirectional Flow**
  Unique patented shell pass baffle assembly ensures uni-directional flow at relatively high velocity, eliminating dead spots. Straight tubes ensure unrestricted flow.

- **No Welding**
  Bolted stud assembly eliminates structural welds. Elastomer mountings enable the tube bundle to ‘float’ within the shell when subjected to fluctuating temperatures - thereby eliminating induced thermal shock loads.

- **Versatility**
  Available in a wide range of steels, alloys, corrosion- and abrasion-resistant materials...

- **Easy Maintenance**
  No special tools required. Easy tube cleaning in-situ. Easily replaceable seals. Access to the seals is gained by simply removing the four external nuts.

- **Individual Tube Replacement**
  An outstanding feature of the design is that individual tubes, or the complete tube bundle, can be removed and replaced in-situ without disconnecting related pipework.

- **Fail-safe Fluid Separation**
  Fluid separation is ensured by individual fluid pass headers in conjunction with internal seals. The bolted assembly provides for a separation ‘gap’ to atmosphere between the headers, ensuring that in the event of seal deterioration, fluid leaks externally to atmosphere instead of internally. This prevents internal mixing or cross-contamination of fluids.

- **Ready Availability Means Low Inventory**
  Standardised interchangeable components from locally-manufactured stocks enable short lead times and early delivery of units.

- **Extendable Design**
  Modular design enables installations to be up-rated or extended to provide for increased capacity requirements.

TRANSON® HEAT EXCHANGERS are used in a wide range of industrial applications:

- Water coolers and heaters
- Compressor intercoolers and after-coolers
- Steam and vapour condensers
- Acid and caustic heaters
- Closed circuit cooling systems
- Fuel gas and air heaters
- Storage and non-storage calorifiers
- Economisers and heat recovery units
- Oil coolers
- Engine jacket water coolers
- Charge-air coolers
- Waste heat recovery systems
- CIP and CIL Elution heating
- Refrigeration evaporators and condensers

TRANSON heat exchanger modules are generally smaller than conventional types of exchangers. This facilitates compact plant design and better utilisation of space. Modules can be arranged in horizontal or vertical configurations as required. A standard range of mounting stands designed for simple, quick installation to match related pipework is available for supply with the units.