

## Shell & Tube Heat Exchanger

We manufacture Shell & Tube type Heat Exchanger in a wide variety of sizes & materials. Rapid Cool is a complete facility to design (Thermal and Mechanical) and manufacture complete range of Shell and Tube Heat Exchanger for cooling, condensing and heating application.



The Shell & Tube Type Heat Exchanger from Rapid Cool is designed to provide high-efficiency heat transfer for various industrial applications. Built with durable materials and precision engineering, it ensures optimal performance in cooling and heating processes. With a robust design and superior thermal efficiency, it is the ideal choice for industries requiring reliable heat exchange solutions.

### Working Principle

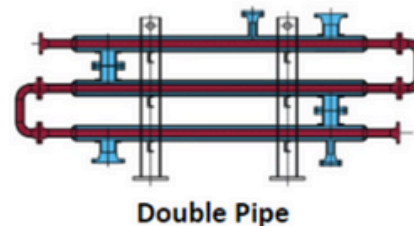
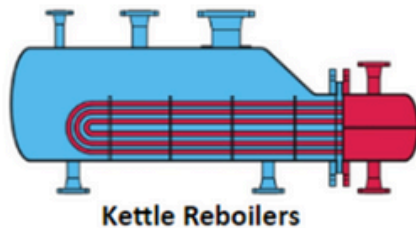
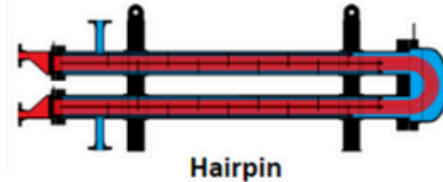
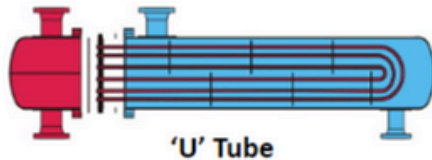
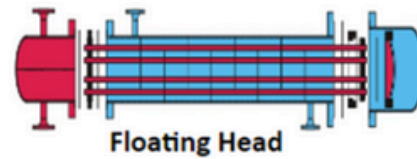
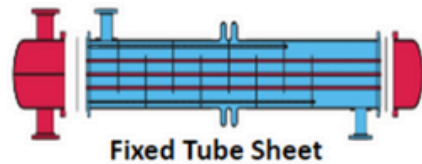
The heat exchanger consists of a series of tubes enclosed within a cylindrical shell. One fluid flows through the tubes, while the other circulates around them within the shell, enabling efficient heat transfer between the two. This design ensures effective temperature regulation, making it suitable for demanding operational conditions.

### Key Features

- High Thermal Efficiency** – Optimized design for maximum heat exchange
- Durable Construction** – Built with corrosion-resistant materials for extended service life
- Customizable Configurations** – Available in various sizes, materials, and tube arrangements
- Easy Maintenance & Cleaning** – Designed for easy access and servicing
- Pressure & Temperature Resilience** – Capable of handling high-pressure and high-temperature applications
- Leak-Proof Design** – Ensures safety and operational reliability

### Technical Specifications

- **Tube Material:** Copper, SS304, SS316, Titanium (as per requirement)
- **Shell Material:** Carbon Steel, Stainless Steel
- **Tube Diameter:** 6mm – 50mm (customizable)
- **Tube Arrangement:** Straight, U-tube, Fixed, Floating head
- **Pressure Rating:** Up to 25 bar (depending on design)
- **Temperature Range:** -40°C to 400°C
- **Cooling Medium:** Water, Oil, Air, Refrigerants, Steam
- **NON IBR**



## Applications

HVAC & Refrigeration Systems  
Power Plants  
Oil & Gas Industry  
Chemical & Petrochemical Processing  
Food & Beverage Processing  
Marine & Automotive Industries

## Advantages

- **High-Quality Engineering:** Manufactured using advanced technology for superior performance
- **Cost-Effective Solutions:** Designed for long-term operational efficiency and reduced energy consumption
- **Industry-Specific Customization:** Tailored solutions to meet specific industrial needs
- **Reliable Performance:** Tested for pressure, leakage, and thermal efficiency before dispatch