



About Modern Heat Exchangers

Modern, a "U" stamp certified company with experience of manufacturing over 8,000 Heat Exchangers in the past 24 years has evolved into a quintessential efficient and dependable designer & manufacturer of shell and tube Heat Exchangers.

Since 1994, Modern has developed a reputation of a premier manufacturer of shell and tube Heat Exchangers.

Our clientele spans India, USA, UK, Germany, Denmark, Austria, Italy, France, Mexico, Brazil, South Africa, Turkey, Egypt, Malaysia, Philippines, Thailand and Bangladesh.

Our passion for engineering excellence has helped develop expertise to manufacture Heat Exchangers using exotic metals.

We work with exotic metals for corrosion-resistant applications in chemical process industries such as Chemical, Petrochemical, Fertilizers, Refineries, Oil & Gas, Chlor Alkali, Water Desalination, Pulp & Paper etc.

Our production site in Navi Mumbai, India with clean room facility is managed by qualified team of engineers, manufacturing professionals and a skilled support team.





Tonnes Weight

Bar Pressure

800 °C Temperature 20 Meter Length

Modern manages the complete value chain from - designing, material sourcing, manufacturing, inspecting, testing, packaging, marking and transportation to the shipment point or to the final destinations - exacting international standards and project specifications.

Use of latest manufacturing technology and extensive inspection facilities help ensure delivering products of the highest quality.

To add to our assurance practices, we have maintained ISO 9001:2015 certifications, duly certified by TUV Rheinland. We also have EN ISO 14001:2004, OHSAS 18001:2007, ISO 26000:2010 certified by TUV Austria.

We maintain ideal inventory levels of exotic and special metals. Further, our reliable network of manufacturers and stockists of exotic metals in United States, Europe and Japan help ensure timely delivery, as per demand.



Our Expertise

We offer a wide range of shell and tube exchangers from standard fixed tubesheets to floating head or removable 'U' tube bundle type. Process design and strength calculations are carried out in-house, based on the customers' specifications. In other words, we have a solution to suit a multitude of process conditions and applications in heat transfer operations.

Technical Strengths

- · Engineered to avoid maldistribution of fluid flow
- Deliver designed thermal efficiency
- Close tolerances of internal components enable high heat transfer coefficients and optimum operating cost
- Extensive analysis and testing of raw materials, as per standards
- Tubes sourced from the most reliable manufacturers globally
- Stress-free assembly of tube bundle(s)
- Careful attention paid to thermal expansion between shell and tube bundle at designing stage
- Comprehensive documentation system





We consider Modern Equipment Company as our top choice as a vendor for supply of heat exchangers.



With a vision to be amongst the most admired companies in this segment, we follow stringent quality assurance systems for manufacturing Heat Exchangers in full compliance with ASME, EN 13445 & AD 2000 construction codes, also fulfilling requirements of TEMA standards, in corrosion resistant metals such as:

- Hastelloy
- Inconel
- Incoloy
- Nickel
- Monel
- Titanium
- Alloy 20
- Alloy 904 L
- Duplex
- Super Duplex
- Stainless Steel



Heat Exchangers for processes involving phase transition

- Condensers
- Falling Film Evaporators
- Reboilers

Heat Exchangers without phase transition

- Coolers and pre-heaters
- Tubular Reactors

Construction configuration

- Stationary tube sheets
- Floating head
- U tube bundle





I am pleased to report our full satisfaction with your pieces of heat exchangers. Durability and efficiency vs. prices are above market average and make your exchangers valuable machinery in critical process and apps.

- Managing Director, Italian fine chemical manufacturing company.

Our Advantages

- Experience of over two decades and over 8,000 Heat Exchangers
- Specialize in the category of exotic metals
- Sizeable inventories of exotic raw materials
- Well networked globally
- Speedy and on-time deliveries

- Highly skilled team, well versed in exotic metal manufacturing
- Deep understanding of the business dynamics in this segment
- · Financially sound organization

Performance Comparison

Other Heat Exchangers

Leakage streams can degrade thermal output

One of the principal reasons for Heat Exchangers failing to deliver the expected thermal performance is that fluid flows do not follow idealized pattern since fluid finds least resistance path.

As fluid flows on shell side, following undesirable streams (leakage streams) occur in clearance spaces between:

- Baffles tube holes & tubes outer diameter
- Edge of baffles & shell inner diameter

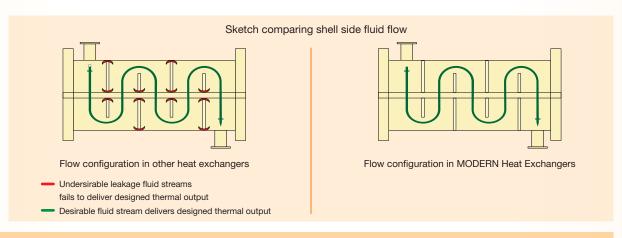
Improperly manufactured Heat Exchangers not only adversely affects heat transfer rates but also lead to higher operating cost.

Modern Heat Exchangers

Modern quarantees effective heat transfer

Modern Heat Exchangers are engineered to avoid leakage streams and maldistribution of fluid flow, thus achieving optimum thermal output.

Our Heat Exhangers guarantee effective heat transfer and faster rate of condensation, boiling, cooling or heating, depending on applications. We are able to achieve this by fully complying to quality assurance systems, correct dimensioning, precise manufacturing and strict adherence to close tolerances and clearances as laid down by TEMA.





I observe that they manufacture heat exchangers in full compliance with international codes and standards. On all occasions, they have honoured their commitment of dispatch schedule.

- Engineering Director, leading API manufacturer in Mexico.



In the 1990's the doors to the Indian economy were thrown open to globalisation. Since then the country's exports has risen from \$18 Billion to \$178 Billion.

Both, the corporates and talent of modern India, especially in the field of engineering, scaled up their performance to meet global quality standards. Today, Indian products and services are in demand across the planet. In fact, quite a few have set global benchmarks in their respective fields.

We at Modern have also made our contribution to the growth story of India in the field of special metal heat exchangers. From a modest beginning in 1994, catering to a few local markets to a presence in 17 countries and a 30% of our turnover coming from global markets. It is our quest to constantly challenge ourselves and improve quality standards.

Industry Expertise:

- Chemical
- Petrochemical
- Fertilisers
- Refineries
- Oil & Gas
- Chlor Alkali
- Water Desalination
- Pulp & Paper





Global Footprints





Modern Equipment Company

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