



BYINIOVATION





Engineering Excellence in Heat and Mass Transfer Solutions

Tema India is a global leader in design & manufacture of Process Equipment, specialising in high-pressure, high-temperature, hazardous, corrosive and dirty service applications for Oil, Gas, Petrochemical, Specialty Chemical, Fertilizer, Pharmaceutical, Food Processing, Hydrogen, Polysilicon, Power and Nuclear industries.

Expertise in handling various metallurgies such as Titanium, Tantalum, Zirconium, Niobium, Hastelloy, Monel / Inconel / Incolloy, Duplex / Super Duplex, Cupro-Nickel, Admirality Brass, Aluminium, Stainless Steel, Low Alloy Steel, Carbon Steel and Clad Combinations

Product Portfolio

Shell & Tube Heat Exchangers

Screw Plug Heat Exchangers

Inclined Baffle Heat Exchangers

Rod Baffle Heat Exchangers

Air Cooled Heat Exchangers

HP/LP Feedwater Heaters

Surface Condensers

Fired Heaters

Pressure Vessels

Columns / Towers

Reactors

Rotary Dryers

Piping Spools

RedLok™ Piping Connectors

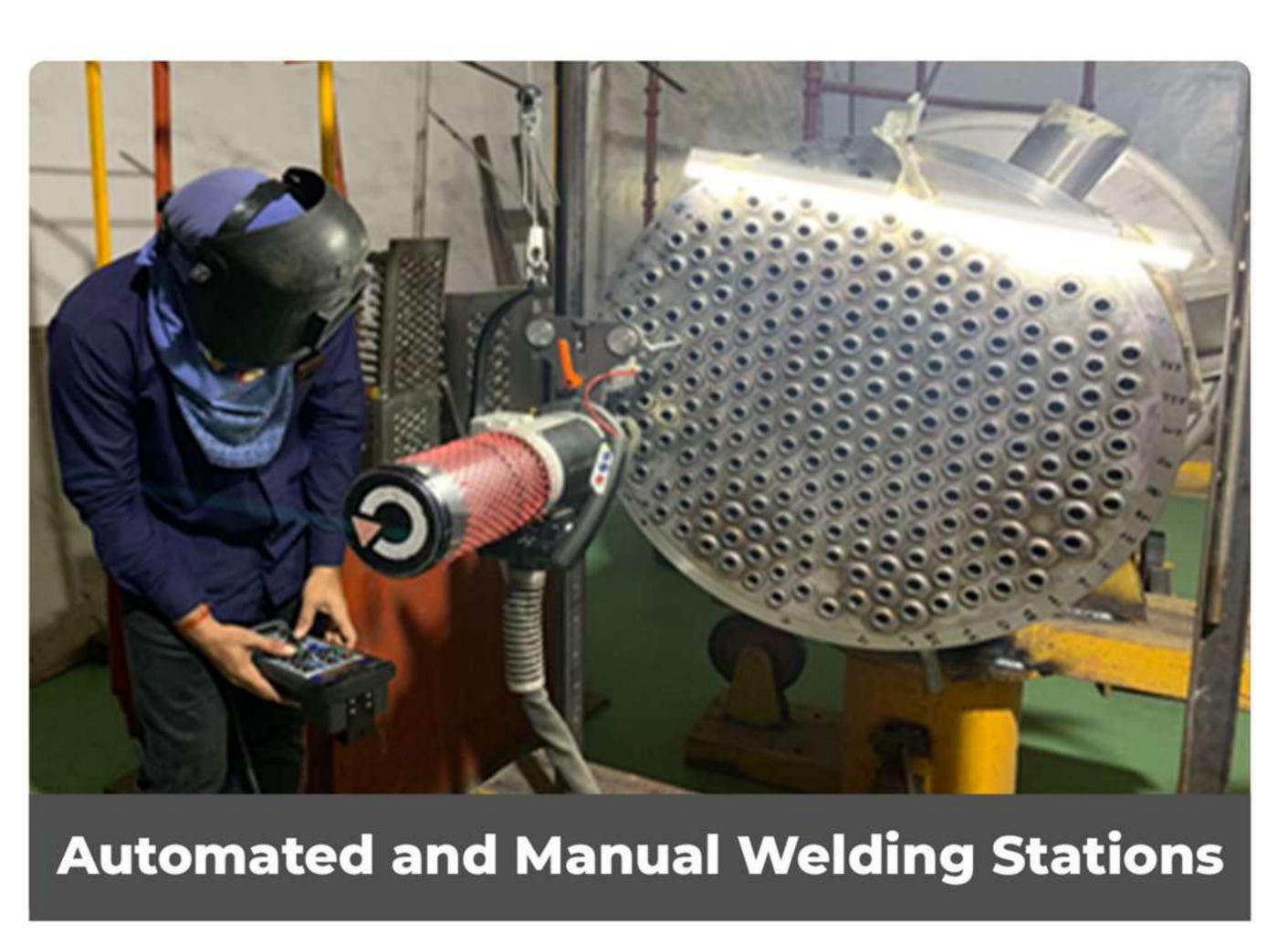
Proprietary Licensor Equipment



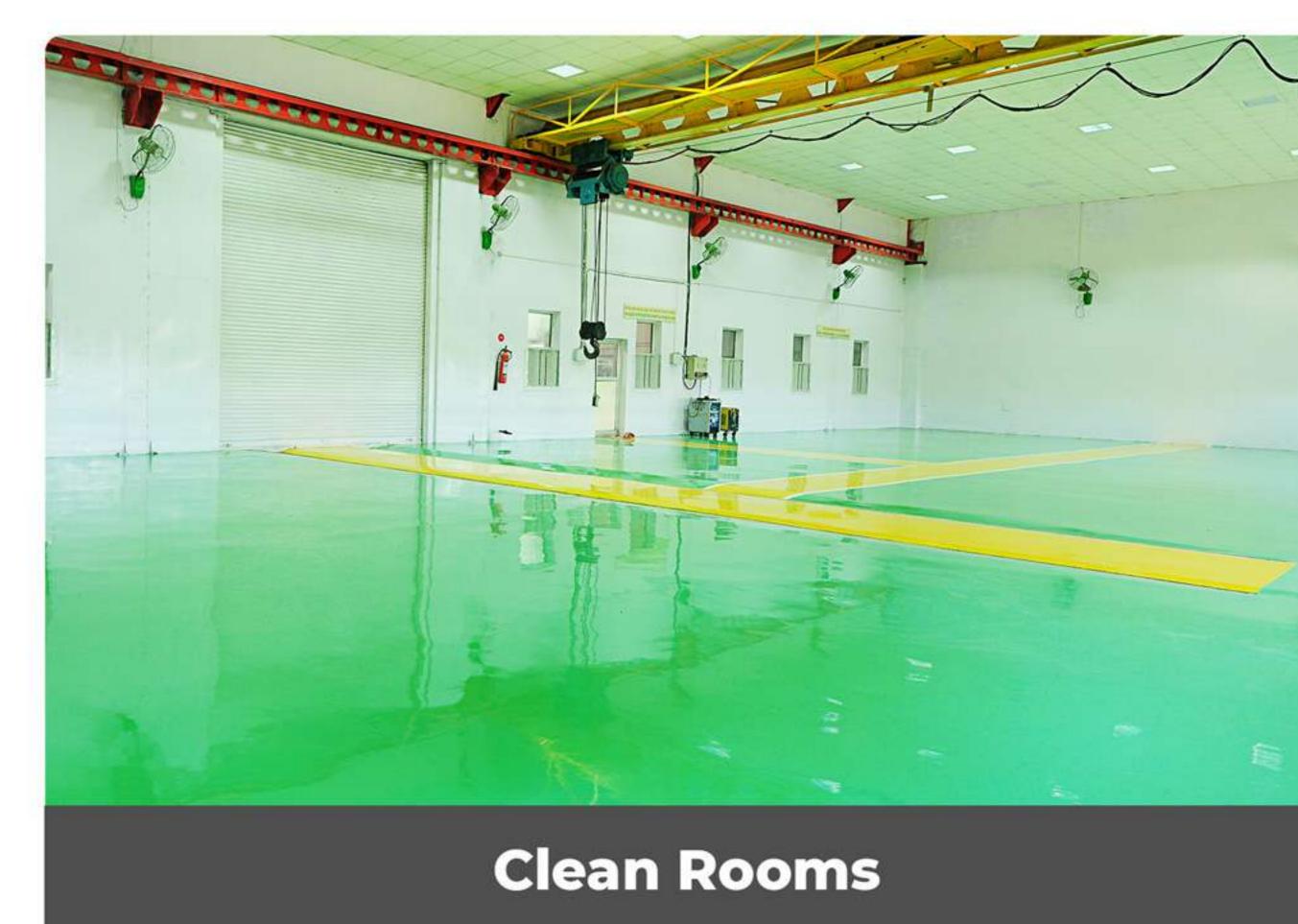




| 45+ Years of Experience | 9000+ Equipment Delivered | 250+ Screw Plug Heat Exchangers (SRX TM) | 100+ Clients Served | 30+ Countries Served |
|-----------------------------------|--|---|--|--------------------------------------|
| 400 MT Maximum Lifting Capacity | 7500 mm Maximum Equipment Diameter | 1500 mm Maximum Drilling Capability | 140 mm Maximum Rolling Thickness | 80 m Maximum Equipmer Length |

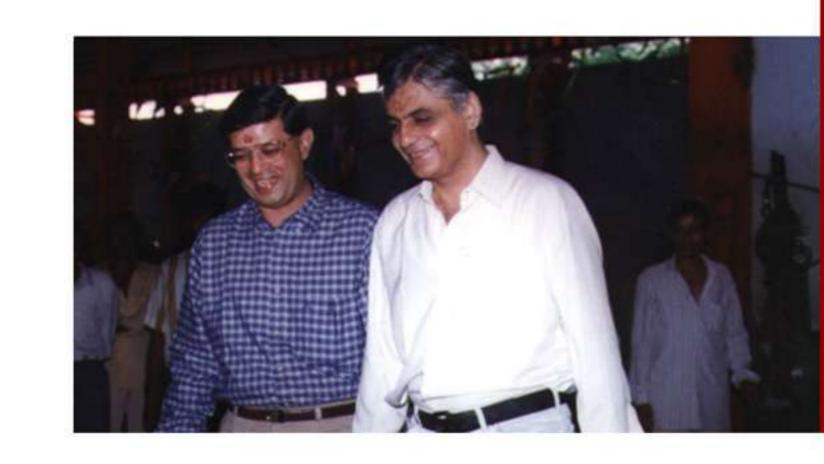






1970s

Leo Engineering Works was founded by Mr Haresh Sippy to manufacture Shell & Tube Heat Exchangers In India



Formation of Tema India Limited, dedicated to pioneering excellence and innovation in industry

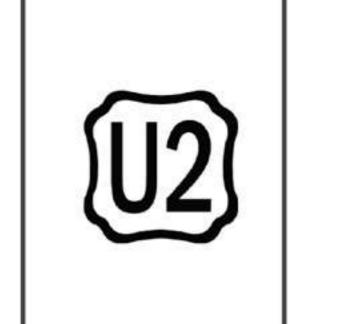


1980s

First order of screw plug heat exchangers and "U" Stamp accreditation



"U2" Stamp Accreditation, Phase 1 & 2 expansion (15000MT/Annum) and Patent awarded for Shrink Ring on the channel barrel of





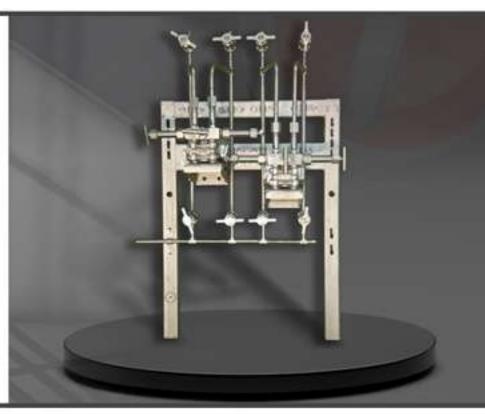
2000s

Ventured into FPSO, Power, and Nuclear industries achieving a successful debut across all sectors. Dispatched Titanium Grade 12 Heaters & Evaporators



Secured a groundbreaking Nuclear Contract for Distillation Columns, Delivered Thickest Presssure Vessels of 270 mm, achieved Zr, Ta, Nb & Al welding qualifications, and "U3" Stamp Accreditation





N4ST FLNG

(Fluor-NFE)

P-83 FPSO

(Seatrium-Petrobras)

23 Shell & Tube

Heat Exchangers

P-80 FPSO

(Seatrium-Petrobras)

23 Shell & Tube

Heat Exchangers

P-74 FPSO

(EBR-Petrobras)

39 Shell & Tube

Heat Exchangers

P-79 FPSO

(Saipem-Petrobras)

47 Shell & Tube

Heat Exchangers

Scarabeo 5 FLNG (Saipem-Eni) 11 Shell & Tube Heat Exchangers

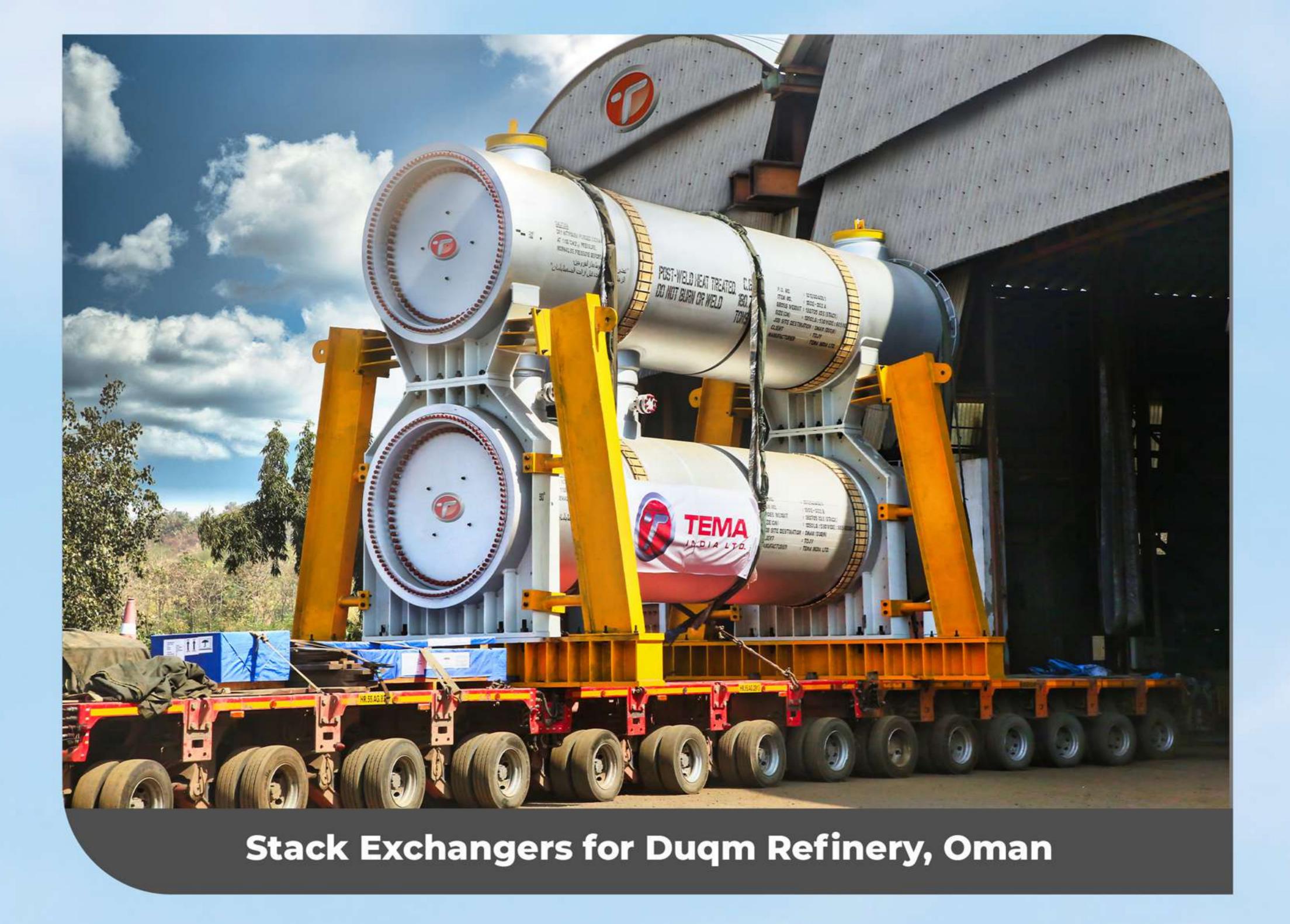


Our Screw Plug Heat Exchangers (SRX[™]) are known all over the world for patented Shrink Ring technology used for high pressure, high temperature, corrosive, hazardous and dirty service applications within Hydrocrackers, Hydrotreaters and other Desulphurisation units of a refinery.

CUSTOM SOLUTIONS

- THERMAL AND MECHANICAL DESIGN
- ENGINEERING AND MANUFACTURING
- DESIGN MODIFICATION AND REFURBISHMENT
- OPERATIONAL MAINTENANCE
- OPERATIONAL SPARES
- ON-SITE SUPERVISION

Successfully delivered 250+ Screw Plug exchangers in the past 20 years. All performing efficiently to the client's satisfaction!



CYLINDER TO TUBESHEET GASKET SET SCREWS CHANNEL THREADED LOCK RING OUTER COMPRESSION RING / WITH CENTERING SCREWS

Our Shrink Ring Screw Plug Heat Exchangers (SRX[™]) are manufactured in two variants:

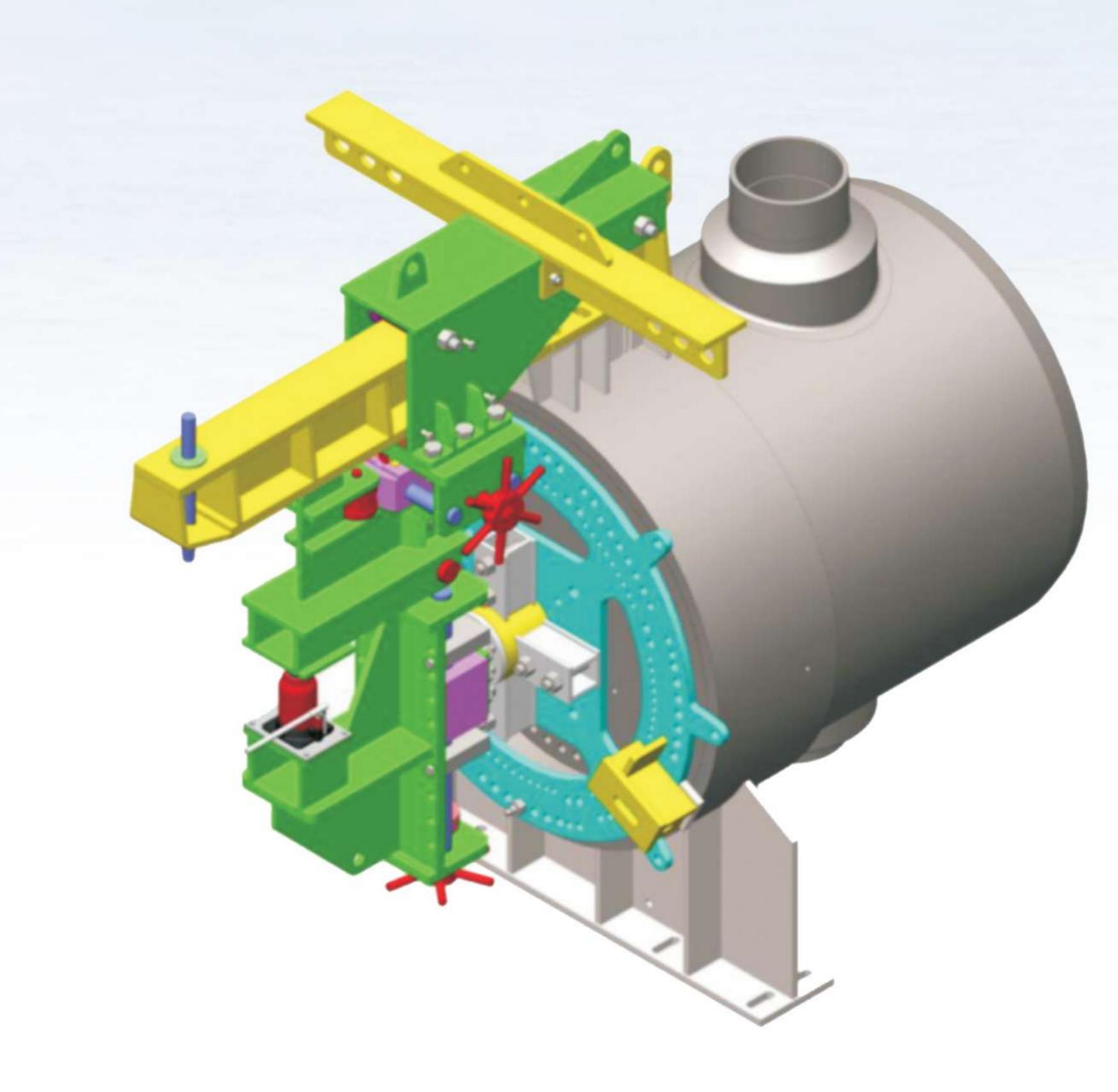
- Hi-Hi Type (channel integrated with shell): These are designed based on the differential pressure of the shell side and tube side of the exchanger.
- Hi-Low Type (channel integrated with tubesheet): These are designed considering full pressure on both shell side and tube side of the exchanger.

A TYPICAL CHANNEL CLOSURE ASSEMBLY

ADVANTAGES

SET SCREWS /

- Prevents bell-mouthing of the threaded portion to guarantee quick opening of the plug during time critical turnaround operations.
- Use of latest technology to ensure there is no intermixing of fluids from the gasketed joint between the shell side and tube side



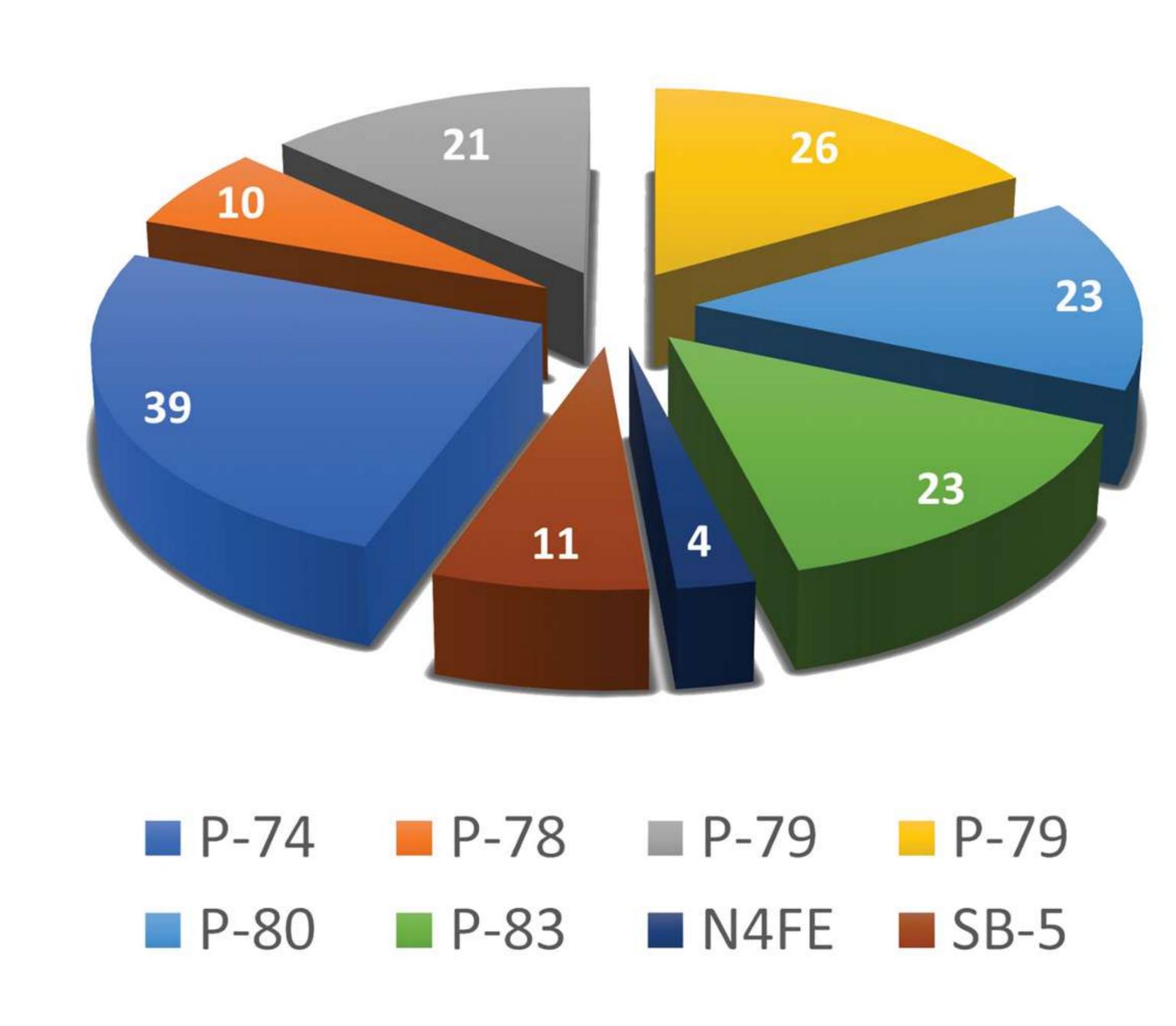
AUTOMATED EQUIPMENT MOUNTED JIG FIXTURE

PROPRIETARY JIG FIXTURE

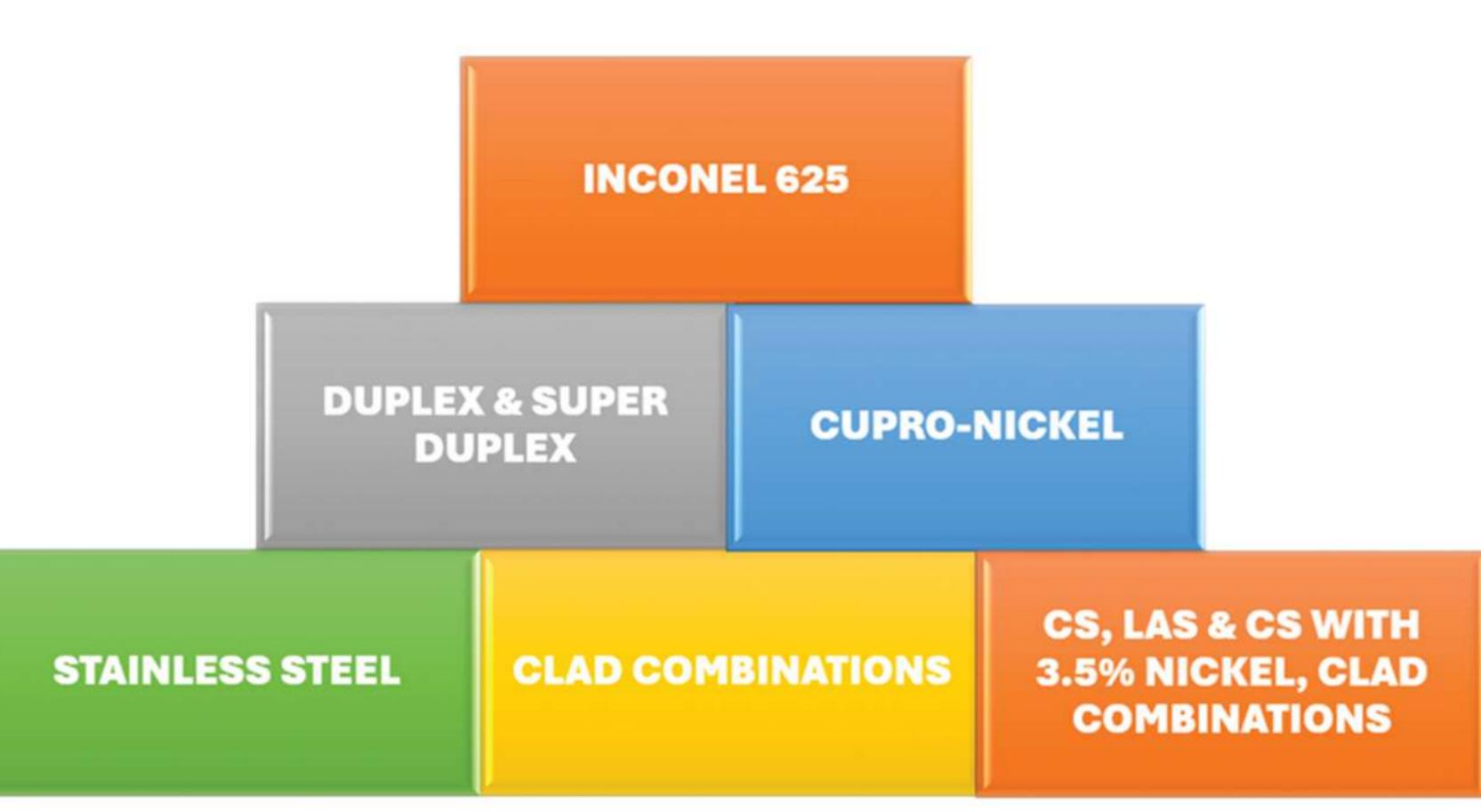
Tema India has a proprietary equipment mounted jig fixture for smooth assembly and dis-assembly of the channel cover along with internals.



- High Pressure Heat Exchangers with 12.7 mm OD x 0.89 mm thick tubes of Inconel 625 with U-bending
- Sulfide Stress Cracking (SSC) testing requirements for SA765 Gr.3 materials
- Classification body certification from DNV, ABS, LR Marine, RINA and NR13
- Vessels with intricate internals (Cyclone, Mist Eliminator, Distributors etc). Sizing, Process guarantee and supply of internals

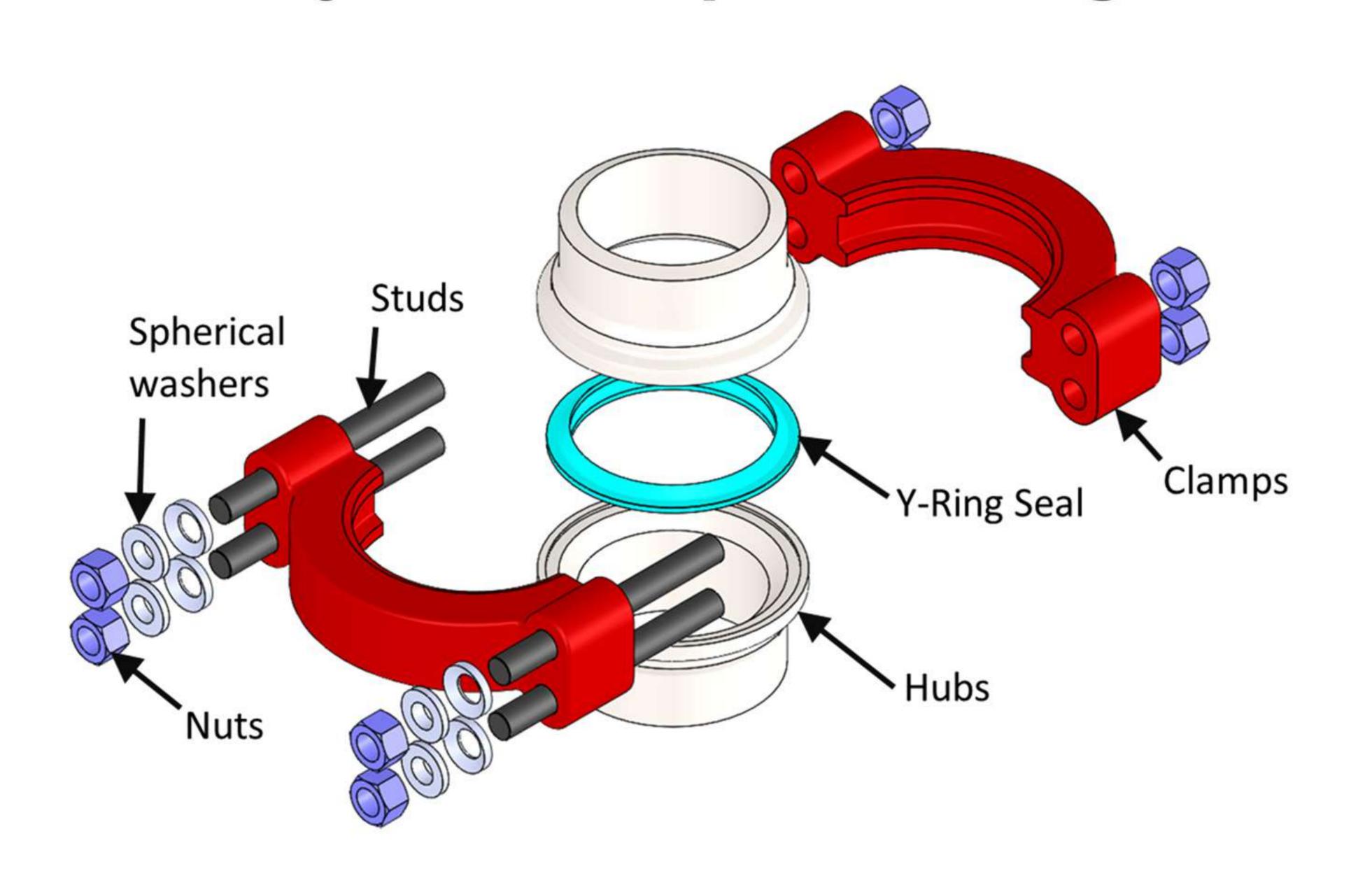


150+ Heat Exchangers & Pressure Vessels for 8 different FPSO & FLNG projects



Metallurgy Experience

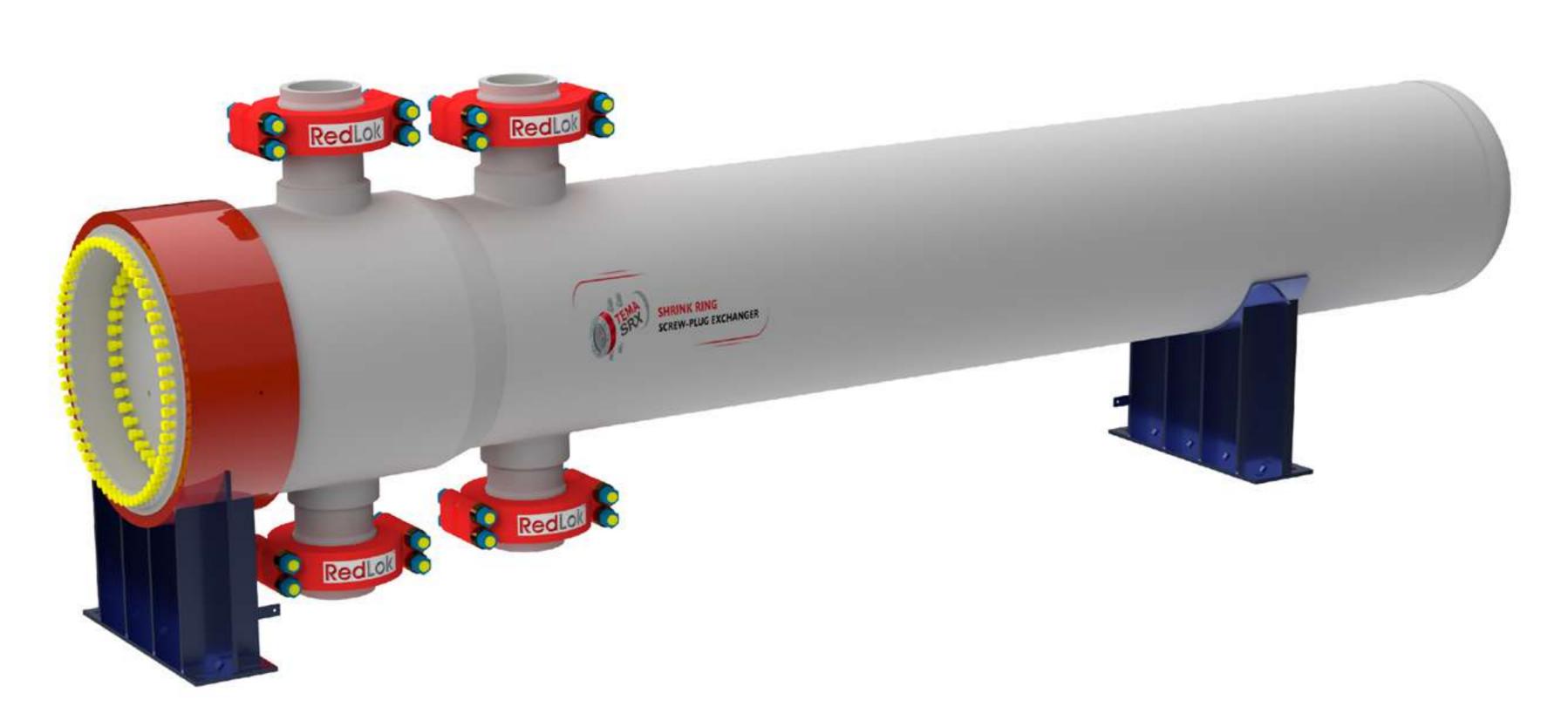
Achieving Unparalleled Leak-proof Performance with Enhanced Reliability and Foolproof Design



Introducing Tema's Self Energised RedLok™ Connectors

2

- An indigenously developed solution
- Unique shape of seal, setting it apart from the rest
- Replace nozzle flanges with self-energized, pressure enhanced clamped connectors



Ideal Applications

- Perfect for Nozzle to Pipe connections in Screw-Plug Heat Exchangers
- Excellent fit for Pipelines in Oil, Gas, Refinery, Petrochemicals, Fertilizers, Chemicals, and more
- Removable connections for robust leak-proof features and quick turnaround/ maneuverability
- Optimal choice for pipe sizes larger than 12NPS and class 2500, where ASME B16.5 lacks standard flanges

NUCLEAR DIVISION is one of the initiatives taken by our management to expand its clean energy product offerings.

Fabricated equipment for PHWR

Moderator Heat Exchangers

Bleed Cooler

Dearerator

LP / HP Heater

Bleed Condenser

SGBD Drain Cooler

EPC Packages for PHWR / LWR

- SFSR Away From Reactor
- Away from Reactor Spent Fuel Storage Facility (SFSF)
- Control and Instrumentation Package
- Waste Management Package

Instrumentation Support Stand

Qualified and experienced resources

We possesses highly qualified and experienced resources in the Nuclear field having hands on experience of execution of packages for both Nuclear Island and Turbine Island.









Equipment Installations Pressure Vessels Columns Reactors

9000+

250+

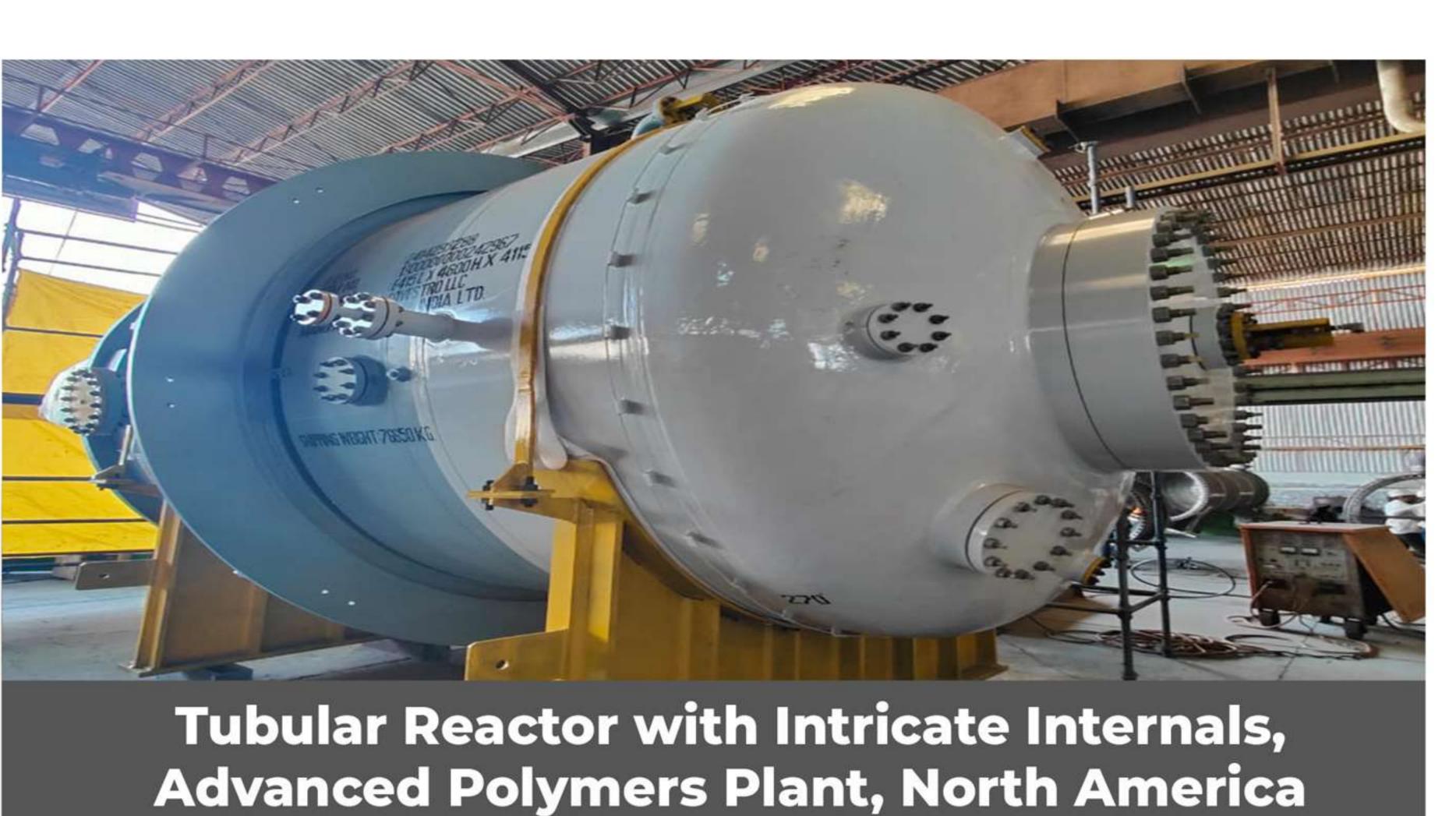
90+

30+

With a commitment to quality and innovation, we deliver reliable solutions to meet the stringent requirements of our clients, ensuring safety, efficiency and performance

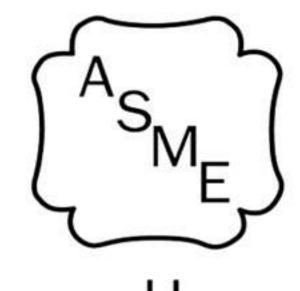


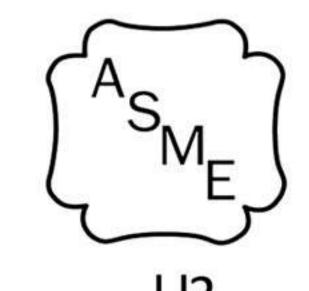


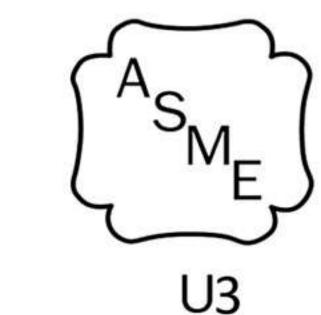


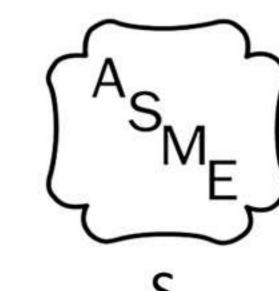


























MANUFACTURING FACILITIES



Achhad Manufacturing Unit (AMU)

Survey No.6/1, K/B, 9/1-B, 7/2, 7/3, 7/4, 77/4, 77/7, National Highway 8, Achhad, Palghar 401606, Maharashtra, India



Kherdi Manufacturing Unit (KMU)

20/1/2 Udhava-Khanvel Road, Kherdi, 396 230, Dadra & Nagar Haveli, India



Panoli Manufacturing Unit (PMU)

Plot no. 201/18, 201/19 & 667 GIDC Estate, Panoli 394 116, Gujarat, India

CONTACT US

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