



XLG® Heat Exchangers for Industrial Applications



SHELL & TUBE

TUBE-IN-TUBE

Shell & Tube Heat Exchangers

Corrugated Tubes are the most efficient approach for gases and liquids without particles

Tube-in-Tube Heat Exchangers

The best solution for processing particulated and fibrous liquids with high performance corrugated tubes

XLG corrugated tube heat exchangers, the state-of-the-art in tubular heat exchange

XLG[®] HEAT EXCHANGERS



FEATURES

- All TEMA heat exchangers, and Tube-in-Tube's.
- Materials available:
 - Stainless steels
 - Duplex stainless steels
 - Titanium
 - Carbon steel
 - Nickel alloys (Inconel, Hastelloy, etc)
 - Copper-nickel
 - Aluminium

EFFECTIVE HEAT TRANSFER

Corrugation enhances turbulence thus boosting heat transfer for a faster and more efficient heat exchange. Moreover, high turbulent flow provokes a self cleaning effect that reduces fouling.

Corrugated tube heat exchangers are therefore smaller than conventional exchangers manufactured with smooth tubes.



WITH CORRUGATED TUBES

BUSINESS SEGMENTS & APPLICATIONS

- **Chemical** : heating/cooling vapours, liquids & slurries, condensation, evaporation
- **Waste Water** : heating sludge for sanitazion, heating sludge for anerobic digestion
- **Petrochemical** : heating/cooling vapours, liquids & slurries, condensation, evaporation
- **Biogas** : heating digesters sludge, demoisturzing biogas
- **Pulp & Paper** : cellulose cooling, white, green and black liquor duties
- **Compresors** : demoisturzing air (air drier)
- **Engine Cooling** : cooling exhaust gas (heat regeneration)
- **Boilers** : heat recovery from exhaust gases
- **Metal Processing** : heating and cooling galvanization liquids
- **Mining** : heating and cooling mineral slurries
- **Ethanol** : heating and cooling fermentation mash
- **Oil & Gas:** : shell & tube applications, retubing low performance units
- **HVAC** : producing sanitary hot water



ASME

XLG is certified by ASME and holds the U-Stamp for manufacturing heat exchangers, pressure vessels and components. Also registered by the National Board.

PED

XLG complies with the European Union PED Pressure Equipment Directive 2014/68/EU and EN13445 design code. Compliances from other countries available on request.



SHELL & TUBE

Shell & Tube with corrugated tubes to process low to average viscosity products. Products may be clean or contain fibres, small particulates and slurries.

Corrugated tube enhance heat transfer and enable to reach performance with smaller heat transfer area than ordinary smooth tube units.

Shell & Tubes with ordinary tubes (not corrugated) available on request.



TUBE-IN-TUBE

Tube-in-Tube corrugated exchanger to process fluids with solids in suspension, fibers, slurries. The heat exchanger is formed by two concentric tubes. Product flows inside the most inner tube and the service outside.

Corrugated tubes in different profiles are chosen to maximize heat transfer and thus minimize the size of the heat exchanger.

The unit is fully welded and lacks gaskets, and includes bellows to absorb thermal expansion.

DESIGN CONDITIONS

- Temperature: min -40°C (40°F) / max $+180^{\circ}\text{C}$ ($+356^{\circ}\text{F}$)
- Pressure: min full vacuum/max 10 bar (150 Psi)

Higher temperature and pressure ratings are available subject to a revision of component thicknesses and connection types.

XLG is certified by ASME and National Board

Heat exchangers also comply with API specifications and other codes

SMALLER FOOTPRINT

XLG® Shell & Tube Heat Exchangers include corrugated tubes that reduce the heat transfer area and size of the units, thus reducing the footprint and volume of the heat exchanger.

MAINTENANCE FREE

Unlike Plate Heat Exchanger and Spiral units, XLG® Tube-in-Tube's have no need of maintenance because they're fully welded. XLG® Shell & Tubes have very few spare parts as well.

CLOGGING FREE

XLG® Tube-in-tubes never clog with solids and fibers like Spirals and Gasketed exchangers do. Whatever that comes in gets out. The perfect scenario for particulated fluids and slurries.