



# Shell & Tube Heat Exchangers

TITANIUM · TANTALUM · ZIRCONIUM · HASTELLOY® · DUPLEX STAINLESS STEEL

[www.tricormetals.com](http://www.tricormetals.com)

[www.astrolite.com](http://www.astrolite.com)

#### Corporate Office

3225 West Old Lincoln Way  
P.O. Box 752  
Wooster, Ohio 44691  
Toll Free: 800-421-5141  
Phone: 330-264-3299  
Fax: 330-262-6678

#### Tricor Industrial Store - Wooster

823 West Bowman Street  
Wooster, Ohio 44691  
Toll free: 800-421-5141  
Phone: 330-264-3299  
Fax: 330-262-7311  
[sales@tricorindustrialinc.com](mailto:sales@tricorindustrialinc.com)

#### Tricor Industrial Store - Belmont

66921 Belmont-Morristown Rd.  
Belmont, Ohio 43718  
Phone: 740-782-0098  
Fax: 740-782-0099

#### Tricor Metals

##### Ohio Division & Corp. H.Q.

3225 W. Old Lincoln Way  
Wooster, Ohio 44691  
Phone: 330-264-3299  
Fax: 330-264-1181

#### Tricor Metals

##### Texas Division

3517 North Loop 336 West  
Conroe, Texas 77304  
Phone: 936-273-2661  
Fax: 936-273-2669

#### Tricor Metals

##### Michigan Division

44696 Helm St.  
Plymouth, MI 48170  
Phone: 734-454-3485  
Fax: 734-454-7110

#### Astrolite / Tricor Alloys

##### California Division

201 Bernoulli Circle, Units B & C  
Oxnard, CA 93030  
Phone: 805-487-7131  
Fax: 805-487-9694

**Tricor Metals has extensive fabrication and design experience with ALL of the most advanced metals for corrosion-resistance!**

#### INDUSTRIES SERVED

- Chemical
- Pulp & Paper
- Pharmaceutical
- Refinery
- Off-Shore Technology
- Flue Gas Desulfurization
- Water Purification
- Food & Beverage Industry
- Geothermal
- Steel Processing
- Power Generation
- Mining

#### MATERIALS

- Titanium
- Zirconium
- Tantalum
- Niobium
- Nickel Alloys
- Inconel
- Duplex Stainless Steel
- Stainless Steel
- Explosive Bonded Materials

#### TUBE SIZES

- 1/4" through 3"

#### SHELL DIAMETER

- 2" to 144"

#### SHELL LENGTH

- Up to 40 ft long

#### QUALITY STANDARDS

- ASME Section VIII Division 1 & 2
- ASME Section IX
- TEMA
- CE stamped units to PED
- ISO 9001QMS

#### ENGINEERING

- ASME Section VIII Division 1 & 2
- Aspen (Thermal Design)
- HTRI (Thermal Design)
- CodeCalc (Mechanical Design)
- PV Elite (Mechanical Design)
- AutoCad (Drawings)
- FEA analysis for flanged & flued exp. jts.
- AutoDesk Inventor – 3D & 2D

#### SPECIAL APPLICATIONS/FEATURES

- Mechanical (roller) expanded tube-to-tubesheet joints
- Hydro-expanded tube-to-tubesheet joints
- Seal-welded tube-to-tube sheet joints
- Strength-welded tube-to-tube sheet joints
- Thermal oxide coating designs for added erosion & corrosion resistance
- Extended surface tubing available
- Flush mount tube to tube sheet for full drainability
- Polishing requirements up to 15 Ra
- Double tube sheet design
- Platinum spotting for tantalum units
- Leak detection ports on mechanically lined tube sheets
- Solid or explosive bonded designs to fit your requirements