

## SPIRAL HEAT EXCHANGERS



MINING: Slurry to Slurry Interchanger; Duplex 2205



PETROCHEMICALS: 4-strip Design; 254 SMO



CHEMICALS: Pellet Water Coolers; Duplex 2205

### About Our Company

Established in 1989, Gooch Thermal is a US manufacturer and thermal engineering company that specializes in the design and fabrication of spiral heat exchangers for the process and energy industries. Our customized solutions are best suited for demanding heat transfer applications that often cannot be addressed by tubular or plate heat exchangers.

For over 30 years, Gooch Thermal spiral heat exchangers have proven their merit for reliability and performance as heaters, coolers, economizers, condensers and reboilers.

### Major Markets & Industries

- Chemicals & Petrochemicals
- Oil & Gas. Petroleum Refining & LNG
- Oil Sands SAGD & Heavy Oil Extraction
- Steel & Coke Oven Gas (COG) Production
- Municipal & Industrial Wastewater Treatment (WWTP)
- Cellulose, Pulp & Paper Production
- Edible Oils & Oleochemicals
- Metals, Mining & Minerals (Al, Cu, Zn, Ni)
- Renewables Energy, Biofuels & CHP (Biogas)
- Sugar & Alcohol Distilleries
- Food, Pharmaceuticals & Biotech
- EPC Firms & Engineering Consultants

Today Gooch Thermal is a major global supplier of spiral heat exchangers and the largest manufacturer under American ownership. Our success is due to the in-depth knowledge and experience of our engineers and strong commitment of our manufacturing specialists in supplying quality engineered heat transfer solutions and tailor-made spiral heat exchangers that are efficient, reliable and offer maximum ROI and economic value to our clients.

### Design & Manufacturing Capabilities

- Heat Transfer Area: 10 - 6500 ft<sup>2</sup> (1 - 600 m<sup>2</sup>)
- Spiral Plate Width: 8" to 80" (200 to 2000 mm)
- Spiral Plate Thickness: 0.08" to 0.25" (2.0 to 6.35 mm)
- Shell Diameter: Up to 100" (2500 mm)
- Design Pressure: FV to 600 psig (40 barg)
- Design Temperature: -150 to 750 °F (-100 to 400 °C)
- ASME Code & National Board Certified (U, R & NB)
- API Standard 664 Compliance for Oil & Gas Industry
- Drop-in Replacements for Existing Spiral Exchangers

## SPIRAL HEAT EXCHANGERS



High Pressure Spiral Heat Exchangers: MAWP 600 psig (40 barg)



Gooch Thermal Spiral Heat Exchangers are Made in the USA



OIL & GAS: Produced Water Cooler; Carbon Steel



PETROCHEMICALS: Crossflow Vapor Condensers; 304/304L SS

**Gooch Thermal** is the largest American manufacturer of spiral heat exchangers. In 2019 we celebrated our 30<sup>th</sup> year in business as a leading US supplier of spiral heat exchangers for difficult liquid to liquid or vapor (steam) to liquid heat transfer services in the chemical process and allied industries. Our solutions can reliably handle fouling fluids, viscous media, and process slurries, whether on one side or even on both hot and cold sides. Spiral heat exchangers are also efficient and compact for condensing of overhead vapors from atop distillation columns operating under high vacuum. Designed, built, inspected, and tested according to the ASME Code with U-stamp & Nat'l Board registration, we can supply spiral heat exchangers in standard materials like PVQ carbon steel, 304SS / 316SS and Duplex 2205, or higher alloys like 904L, 254SMO, AL6XN, HC-276 & other Nickel Alloys, and any material that can be cold-formed & welded.

### Partial List of Clients & End Users:

DOW • DUPONT • SUNCOR • EXXONMOBIL • CNRL • US STEEL • ALCAN  
 TRONOX • LYONDELL • HUSKY OIL • SHELL AXENS (PROSERMAT) • TOTAL  
 FORMOSA PLASTICS • WESTLAKE • INFINEUM • ARCELORMITTAL • TORAY  
 CARBON OXYCHEM • RESOLUTE PAPER • ADM • WORLEY PARSONS  
 JACOBS • FLUOR • SABIC (GE PLASTICS) • LUBRIZOL ERGON REFINING  
 AMEC FOSTER WHEELER (WOOD) • BASF • CHEMOURS • SNC LAVALIN  
 COVESTRO • EASTMAN CHEMICAL • INTERNATIONAL PAPER • CELANESE  
 TORAY • BAYER MONSANTO • CH2M • CDI ENGINEERS • BOWATER • TATE &  
 LYLE • CARGILL • VANTAGE OLEOCHEMICALS • WHEELING-PITT • NASHTEC  
 AECOM • TECHNIPFC • KBR HARGROVE • WOOD • DOMTAR • GEORGIA-  
 PACIFIC • NEW INDY • ANDRITZ • GLATFELTER • HUHTAMAKI • CONNACHER

Represented by:

**Apogee Engineering  
 Houston, TX**

**713-627-9173**

**sales@apogee-engineering.com**