



# CGThermal

Process Technology Solutions  
for Harsh and Corrosive Process Streams





- **The CG Approach**
- **Our Capabilities and Areas of Expertise**
- **Advantages of working with us**

# Company Overview



# CG Thermal Expands to Second Facility

- Growing demand for Systems projects
- Space for additional equipment and staffing



# CG Thermal Expands to Second Facility



- Specialized systems engineers on staff
- New, larger space to enable further growth

# Mission, Values, Vision

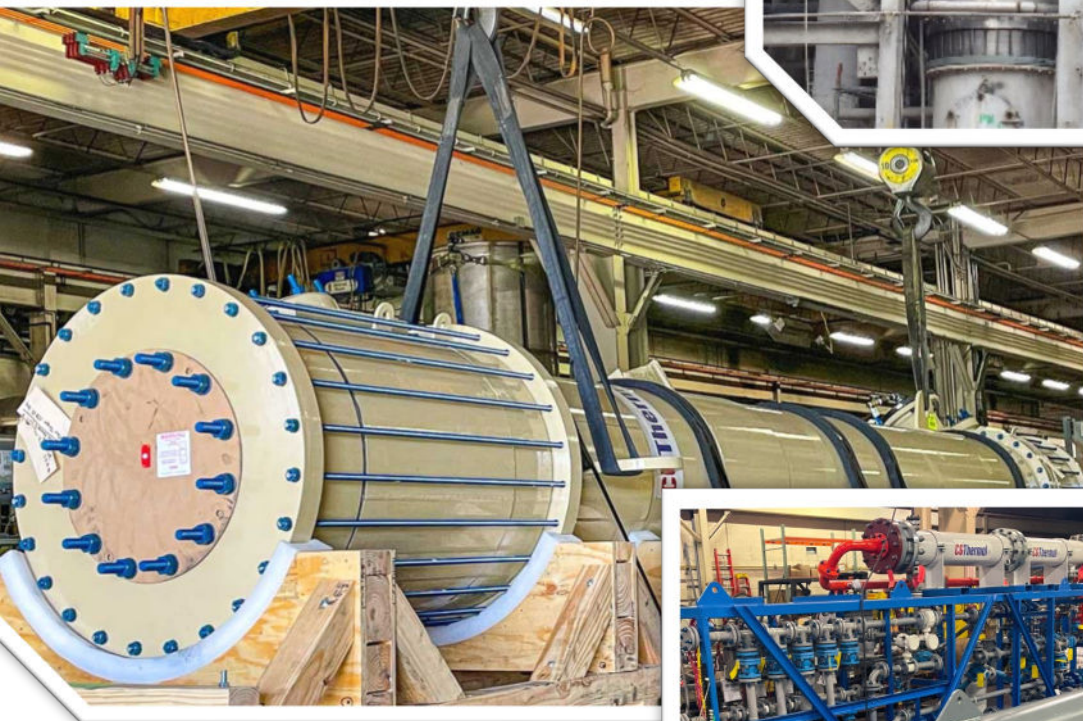
*At CG Thermal we proudly:*

**Listen** to our customers to understand their unique challenges and objectives.

**Design** the best solution for their process equipment and systems needs, emphasizing teamwork, safety, and reliability.

**Deliver** the product solution using only the most suitable materials and technologies available worldwide. The success of our customers is paramount, and we maintain a personal stake in the successful implementation of the result.

We combine our **heat/mass transfer expertise** and fabrication capabilities with our process expertise to deliver optimal, proven processing technology solutions for **harsh and corrosive process streams**



- **Turnkey Packaged Unit**
- **Engineering Services**
- **Optimization Consulting**
- **Customer Specific Process Equipment**
- **Engineering and Technology Support**





# Process System Expertise

Additional Areas of Expertise

- **HCL** Recovery
- HCL Azeotrope Breaking
- **AHCL** Production
- **H2SO4** Dilution
- **HF/Nitric** Cooling System
- **Cl2** Recovery
- Pilot plants
- Crystallization
- Pyrolysis
- VOC Stripping / Scrubber



# Specialized Materials

With expertise to recommend the most appropriate option for your harsh process requirements

- **Impervite® Graphite**
- **Umax® SiC Ceramic**
- **Impervite® Advanced Graphite**
- **SST/Nickel-based Alloys**
- **Fluoropolymers**



# Impervite® Graphite

- **Excellent corrosion resistance** in reducing environments with higher chloride concentrations.
- Higher thermal conductivity and thermal shock resistance.
- Fully graphitized, more ductile graphite resulting in **extended operating life.**

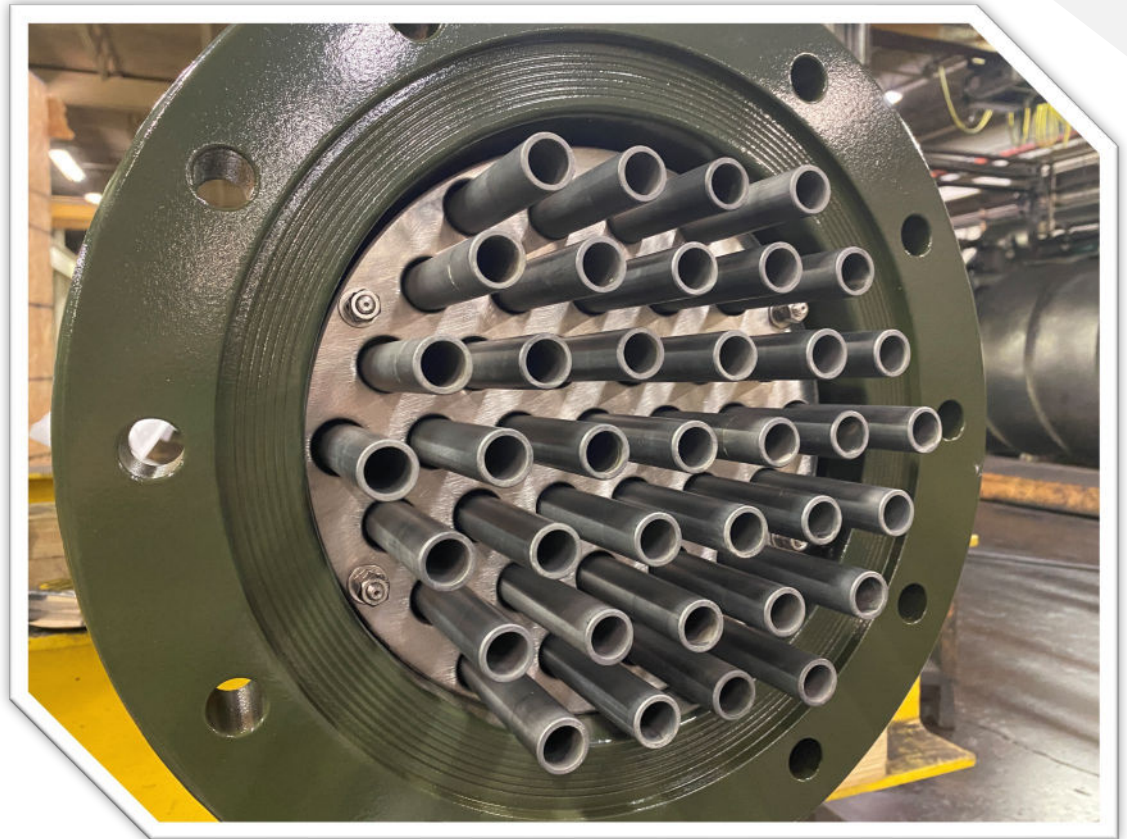


- Corrosion resistant in all concentrations of HCL and up to 85% H2SO4.



# SiC Umax<sup>®</sup> Advanced Ceramic

- Universally **erosion and corrosion resistant**
- **Unmatched** high thermal conductivity and thermal efficiency
- **Alpha sintered SiC** tube with no free silicon
- Extremely hard, easy to clean surface.

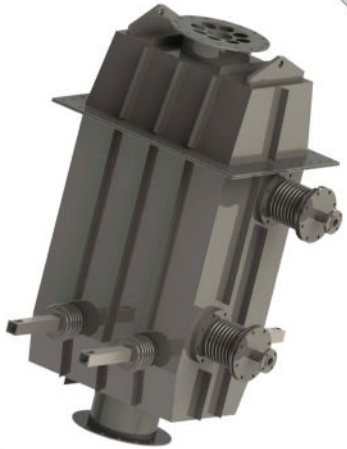


# Impervite® Advanced Graphite



- Graphite composite material
- Extended **corrosion resistance in HCl, H<sub>2</sub>SO<sub>4</sub> and P<sub>2</sub>O<sub>5</sub> applications.**
- Superior **resistance to thermal shock**
- Ductile material **resistant to vibration stresses**
- Higher pressure applications
- **Resistant to fouling and easily cleaned**

# Nickel-based Alloys



## AirBTU.VPRR / HTXP / Quench Lid Advanced

- Well suited for **high-temperature gas to gas** applications.
- Can operate in excess of **2000 Deg F temperature**
- Highly Engineered to avoid stress failures, hot spots, and cold-end corrosion.

# High-Temperature Engineered Solutions



## AirBTU.VPRR / HTXP / Quench Lid Advanced

- Well suited for **high-temperature gas to gas** applications.
- Can operate in excess of **2000 Deg F temperature**
- Highly Engineered to avoid stress failures, hot spots, and cold-end corrosion.

## ***Our Expertise***

Heat/mass transfer  
Fabrication of Process Equipment  
Process Design

## ***Our Values***

Listening and Transparency  
Commitment to Customer/Project success  
Commitment to Innovation

## ***Your Best Solution***







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