## AirBTU

### High-Temperature Engineered Solutions







We want to see your plant succeed!

#### The CG Thermal Experience:

- High-temperature design expertise
- Custom-tailored solutions for your unique reliability challenges
- Use of digital twin for CFD analysis and design
- Responsiveness and agility
- Transparency of results
- Customer input to ensure success



# Up To 1200C+

#### **Industries & Applications**



CO2 & Bioenergy Recovery



Thermal Oxidizers



Green Hydrogen



Sulfuric Acid **Plants** 



**High-Temperature Energy Storage** 



Steel Mills & **Foundries** 









#### **High-Temperature Engineered Solutions**

#### AirBTU VPRR High-Temperature Gas Recuperator

tBy integrating an AirBTU VPRR heat transfer solution, industry professionals can avoid common pitfalls and

"design in" reliability and efficiency. AirBTU VPRR is designed using tube wall temperature and flow mapping to eliminate stress failures and cold-end



corrosion, reduce pressure drops, and maximize thermal efficiency.

#### AirBTU HTXP High-Temperature and High-Pressure Exchanger

Using an innovative design including a novel application of high performance insulation the AirBTU HTXP allows for thermal expansion, without the material stresses typical in high-temperature and high-pressure process streams. AirBTU HTXP supports both high temperature and high pressure streams, with a design that eliminates hot spots and maintains suitable material temperatures.



#### High-Temperature Engineered Solutions

With a hands-on approach and customer-focused discovery process, our engineers develop a plan to mitigate inefficiencies and improve plant reliability. Engineering analysis results are provided with or without a fabrication contract – we want to see your plant succeed! You can expect:

- Site audit
- In-house engineering analysis and design
- CFD and FEA modeling where applicable
- ASME B31.3 duct strain analysis
- Fabrication and installation drawings
- Materials and supplies recommendation
- Fabrication, controls and instruments, complete skids



