

# COMBINED CYCLE POWER PLANT HEAT EXCHANGER PACKAGED SKID SOLUTIONS



**TEi**  
a Babcock Power Inc. company

**THERMAL ENGINEERING INTERNATIONAL (USA) INC. (TEi)**, a Babcock Power Inc.® company, is a leading supplier of heat transfer technology to the electric power generation and industrial markets. Backed by more than 100 years experience, we offer fully integrated design, engineering, manufacturing, construction, research and development services; including providing superior products to major EPC firms worldwide.

## PRIMARY HEAT EXCHANGE EQUIPMENT

TEi's GT Fuel Gas Performance Heater Control packages are designed site specific to provide heated gas at optimal temperatures for the GT operation. TEi's packaged heaters are also designed to knock out excess moisture that may otherwise condense in the gas turbine combustor.

Other primary heat exchanger equipment designed and manufactured by TEi are Rotor Air Cooler Kettle Boilers (Combined Cycle); Rotor Air Cooler (Simple Cycle); CCW Heat Exchangers (Combined Cycle).



Fuel Gas Performance Heater Skid



## FEATURES

- Local control panel
- Electric/instrument parts rated Class 1 Division 2
- Site specific for outdoor equipment
- Performance heaters made from carbon steel
- Factory acceptance testing (FAT)

## BENEFITS

- Pre-packaged design more cost-effective than component based site-build helping to reduce overall project cost
- Field construction timeline reduced shortening
- Overall project delivery schedule
- Complete function testing done prior to delivery and installation
- Single source accountability



**TEI**  
a Babcock Power Inc. company

## COMBINED CYCLE POWER PLANT HEAT EXCHANGER PACKAGED SKID SOLUTIONS

### TYPICAL PACKAGE INCLUDES:

- Electric/instrumentation parts will be rated for Class 1 Division 2
- Panels will be NEMA 4
- Design/ambient temperature — site specific for outdoor equipment
- Temperature control valve with actuator
- Drain pot redundant level switching
- Orifice flow meter with differential pressure transmitter
- Transmitter: Hart based (4-20 MA)
- Performance heater is made out of carbon steel (Shell, Tubes, Channel, and Nozzles)
- All interconnecting piping is carbon steel
- Drain tank if required
- Factory acceptance testing (FAT)

### OPTIONS

- Triple redundant drain pot switching
- Junction box for customer DCS connection point
- Materials upon request
- Heat tracing
- Insulation
- Relief valves
- Drain, vent, bypass and isolation valves as required

### GOVERNING SPECIFICATIONS

- Vessel: ASME Section VIII Div 1
- TEMA C
- HEI Power Plant Heat Exchangers
- Piping: ASME B31.1

### FULL RANGE OF HEAT TRANSFER COMPONENT SERVICES

- Feedwater heaters
- Surface condensers
- Moisture separator reheaters (MSRs)
- Heat exchangers
- Engineering & field services



SAFETY<sup>3</sup> PEOPLE. POWER. PROJECTS.

We're giving safety the third degree.

Babcock Power Inc. and its subsidiaries place the safety, health and security of our people at the core of our company values. Our team is our most valuable resource, generating solutions everyday to deliver safe, clean, reliable energy globally. With a keen focus on safety, Babcock Power Inc. conducts business in a manner that protects our people, our customers and the environment. From innovation to generation, we are proud of our award-winning safety record and are committed to operating with integrity and excellence.

The data contained herein is solely for your information and is not offered, or to be construed, as a warranty or contractual responsibility.  
© Thermal Engineering International (USA) Inc., 2018

 **Babcock Power**<sup>®</sup>