

THERMAL & *Hydraulic*

Thermal & Hydraulic Equipment Ltd. 895 Don Mills Rd. Tower 2 Ste. 210 Toronto Canada M3C 1W3
tel (416) 487-4737 fax (416) 487-0181 email: imilligan@thermhydra.com website: www.thermhydra.com

PRINCIPALS & PRODUCTS WE REPRESENT

KELVION INC., THERMAL SOLUTIONS (formerly GEA Rainey) – Catoosa, Oklahoma

Heat Exchangers

- **Air-cooled Heat Exchangers** constructed from carbon steel, stainless steel and exotic alloys to withstand pressures in excess of 12,000 psig, **API 661 and non-API designs**
- Fully Winterized units, Fully Assembled Modularized Designs
- **Electronic Monitoring Systems** for Air Coolers for process optimization and energy efficiency
- Replacement tube bundles for air-cooled heat exchangers
- Air-cooled steam condensers
- **Compact Fin Heat Exchangers**

Plate Heat Exchanger

- Gasket plate exchangers
- Fully welded heat exchangers
- Brazed plate heat exchangers
- K Bloc fully welded plate pack up to 400°C and 50 bar

Air Cooled Condensers

- Custom engineered steam condensing solutions.
- Direct Dry Cooling
- Multi row designs
- Alex tube
- Multi row – A-tube designs

Cooling Towers (Formerly GEA Polacel)

- Modular cooling tower concept
- Suitable for all capacities

BOUSTEAD INTERNATIONAL HEATERS LIMITED – Sussex, UK

- Fired heaters for all petroleum and petrochemical applications
- Fired heater revamps including fast tracked rebuilds
- Reformers – Hydrogen, Methanol, Ammonia
- Fired heater engineering studies
- NOx reduction systems for heaters including SCR, turbines, HRSG's, boilers and IC engines
- High temperature, reforming and pyrolysis furnaces including styrene steam superheaters, EDC crackers, steam reformers, acetic acid crackers, etc.

MANOIR INDUSTRIES – Paris, France

- Manufacturer of Tubes, Coils and Transfer lines for fired heaters, reformers and high alloy specialized furnaces.
- Specialize in syngas reformers, ethylene crackers, DRI process gas heaters
- Steam – reforming furnaces for the production of ammonia, methanol and hydrogen
- Steam cracking furnaces for the production of ethylene
- Full range of standardized and high grade alloys

DETROIT STOKER CO. – Monroe, Michigan

Solid Fuel Combustion Technology

- Hydrograte stokers
- Rotograte stokers
- Reciprograte stokers
- Rotary Seal Feeders, Double Flap Air Locks
- Fuel distributors and rotary seal feeders
- Combustion system inspection, repair and rebuild services
- **Quality replacement parts for all STOKER FIRED EQUIPMENT**

LoNox Burners

COPERION (Formerly Schenck Process LLC & Stock Equipment Company) – Salon, Ohio

- Coal flow systems (**bunker to pulverizer/bunker to stoker**)
- Gravimetric & volumetric feeders, coal valves, etc.
- Coal Scales
- Bulk material valves
- Non-pressurized gravimetric bulk material feeder
- Burner line valves
- Conical non-segregating distributors
- Electrostatic precipitator controls

AUMUND Group – Kennesaw, Georgia

- Complete Alternative Fuel Handling Systems - RDF
- Bulk material handling equipment
- Bucket elevators
- Apron feeder/conveyor
- Pan conveyers
- Chain conveyer
- Rotary discharge systems for silo's, storage halls, stockpiles and silo's (Centrex)
- Clinker Silo Technology
- Hot DRI/HBI material transport system

Samson Material Feeder

- Discharge conveyor which receives bulk materials from trucks, railcar or front end loaders
- Mobile solutions for ports and terminals
- Mobile shiploaders, stackers, import hoppers
- Telescopic spout to load materials into trucks and ships
- Dust free ecological hoppers for ship unloading

Schade

- Stacker, Reclaimers
- Circular stockyards
- Longitudinal stockyards
- Stockyard blending systems
- Railcar unloading systems
- Railcar indexing system

SOUTH-TEK SYSTEMS, LLC – WILMINGTON, South Carolina

- NITROGEN GAS Generators from air on demand
- Pressure Swing Absorption Gas Generators are used for corrosion resistance for many power plant applications including HRSG layup, Ammonia purge and Natural Gas purge.
- Generators are designed in a full range of capacities.
- ONSITE ON DEMAND NITROGEN GENERATION

FLOW AMERICA, LLC - COPES VULCAN DIV. – Houston, Texas

- General service, globe style control valves designed to match any general service requirement. ANSI pressure classes 125-600.
- Severe duty globe style control valve. 0.75" though 20" sizes, ANSI pressure class 150-4500.
- Severe duty, critical service design with multiple trim selections.
- Nuclear certified, ASME N and NPT stamps
- Direct and indirect acting pneumatic diaphragm actuators

Desuperheaters, all types and complete range

- Mechanical atomizing for attemperating applications on steady loads
- Variable annulus desuperheater
- Variable orifice type VO-11, VO-76, high pressure and temperature service (ANSI 1500 and above)
- Steam assisted desuperheating stations

Steam Conditioning Valves

- Pressure reducing and desuperheating valve
- Direct steam converting valve

JMS FABRICATED SYSTEMS – Latrobe, Pennsylvania

- Abrasion Resistant Wear Materials
- Alumina Ceramic Tiles
- Silicon Carbide Abrasion resistant materials
- Ceramic wear components including engineering, design, metal fabrication and installation. Specialists in industrial and thermal power station wear applications; ceramic lined burner nozzles, PC elbows.

KANSAS CITY DEAERATOR – Overland Park, Kansas

- Deaerating feed water heaters
- 10,000 PPH to 10,000,000 PPH capacities

TEIKOKU USA INC. – ChemPump Houston, Texas

- Zero leakage canned motor pumps for all seal less applications
- High temperature applications
- All types including horizontal, vertical, steam jacketed, multi-stage, self-priming and slurry applications