DIRECT AND INDIRECT FIRED HEATERS

Propak Systems is a Canadian based, totally integrated Engineering, Procurement, Fabrication and Construction company serving the energy industry worldwide.

Since 1976 Propak has provided Indirect Fired Heaters to our many clients in a variety of applications and locations throughout the world. In 1995 the company introduced the Direct Fired Heater product line, designed and fabricated by experienced industry specialists. In addition to conforming to Propak’s stringent guidelines, these heaters meet API, ASME and CSA standards along with other client specific requirements.

The comprehensive array of heating system services offered includes Design, Fabrication, Erection, Training, Commissioning, Start-ups, Inspection, Insurance Investigations and shop or field Revamps and Upgrades.

DIRECT FIRED STANDARD DESIGNS

- Horizontal Box - single or multiple
- Horizontal Cabin - single or twin cells
- Horizontal Helical
- Vertical Cylindrical
- Vertical Helical
- From 5 to over 300 mm BTU/hr

APPLICATIONS

- Heat Medium Heaters using TEG/Water Mixtures, Sun 21, Therminol, Dowtherm
- Regeneration Gas
- Cracking Units
- Vacuum Furnaces
- Steam Recovery Systems
- Waste Heat Recovery

BURNER FUELS

- Gases with LHV’s from 200 to 300 BTU/lb
- Oils ranging from No. 1 to No. 6
- Various Waste and Vent Gases

30 mm BTU/hr oil cracking furnace with a 12 mm BTU/hr heat medium combined with incineration. This unit is fired with natural gas, process gas, and No. 2 oil.

135 mm BTU/hr heat medium heater and Acid Gas Incinerator.
BMS system for natural gas, process gas, diesel and vent gas, certified to NFPA and European standards.

**BURNER MANAGEMENT / COMBUSTION CONTROL SYSTEMS**

- Single Burner to Multi-Fuel/Multi-Burner
- Compliance with CSA B149.3-00 and NFPA 85/86
- Insurance Standards
- ETL Certified Panels to CSA Standards
- IEC 61508
- PLC's utilized Allen Bradley, Modicon, GE, Triconex etc.
- PLC programming by experienced in-house specialists
- Fixed Program Logic Controllers – Fireye, Honeywell 7800 Series and others

**INDIRECT FIRED HEATERS**

- Glycol and Glycol / Water Baths
- Salt Bath
- Thermal Fluids
- Single and Multiple Furnaces
- Standard U-Tube or Multi-Return
- Sizes from 250,000 to 20 mm BTU/hr

Heater construction on a platform in the Gulf of Mexico.

BMS for 25 mm BTU/hr natural gas and 1 mm BTU/hr No. 2 oil complete with waste gas injection, certified to CSA B149.3-00.

Natural gas indirect glycol / water bath heater.
PRODUCT LINE

HYDROCARBON LIQUIDS RECOVERY SYSTEMS
- Turbo Expander Processes
- Mechanical Refrigeration - Propane, Ammonia, Freon
- J-T and Refrigerated J-T Processes
- Mixed Refrigeration, Desiccant Adsorption

HYDROCARBON TREATING SYSTEMS
- Gas Sweetening Systems
- Sulphur Recovery
- Natural Gas and CO₂ Dehydration
- LPG Treating and Sweetening
- Molecular Sieve Treating

LIQUID DISTILLATION SYSTEMS
- Stabilization
- Gas Liquids Fractionation

OIL TREATING
- Separators and Freewater Knockouts
- Direct Fired Treaters
- Electrostatic Treaters and Desalters
- Produced Water Treating Packages
- Production Satellites

MODULAR REFINERIES
- Crude Topping
- Hydroskimming
- Product Treating
- Utilities

WASTE OIL PROCESSING

DIRECT-FIRED HEATERS
- 5 to 350 mm BTU/hr
- Horizontal Box, Cabin or Helical
- Vertical Box, Cylindrical or Helical

INDIRECT-FIRED HEATERS
- Glycol
- Heat Medium
- Salt Bath

GAS COMPRESSION
- Packages from 50 to 10,000 HP
- Gas Gathering and Production, Sweet and Sour Service
- Wellsite Boosters, Rotary Screw Compressors
- Injection, Storage and Pipeline Compressors
- CO₂ and Acid Gas Injection Services

POWER GENERATION PACKAGES
- 15 kW to 3000 kW, Individual Units or Multiples
- Modular Self Contained Designs
- Stand Alone or Utility Grid Support Systems
- Specialized Designs for Solution / Flare Gas, Digester Gas, Landfill Gas

OTHER PRODUCTS
- Pumping Modules
- Offshore Production Equipment Modules
- Glycol Regenerators
- Shell & Tube Exchangers, Pressure Vessels, Towers
- Aerial Coolers (Horizontal and Vertical)
- Reactor Vessels, Filter Vessels