

# KOCKEN

SISTEMAS DE ENERGIA INC.

## INDIRECT FIRED HEATERS



**KOCKEN Sistemas de Energia Inc. Indirect Fired Heaters are a blend of rugged oilfield type construction and high combustion efficiency.**

**The heavy gauge heater shell is equipped with one or more firetubes providing combustion heat to a bath which in turn transfers heat into preheat / reheat process coil(s), heating natural gas, condensate and / or oil to the respective required outlet temperature. The fluid of combustion is generally process natural gas; however, ethane, propane or light oils are also viable options. All KOCKEN Indirect Fired Heaters are supplied with a Bath Saver of sufficient capacity to contain the expansion of the bath medium from ambient to operating temperature and to reduce vaporization losses.**

**All KOCKEN Indirect Fired Heaters are constructed according to the API 12 K Specification for Indirect Type Oil-Fired Heaters, GPSA Section 8, CSA B149.3, and applicable Industry Codes and Standards.**



## CONFIGURATIONS AVAILABLE

### Coil Arrangements

- Single Pass
- Split Pass
- Multiple

### Burners

- Inspirating Pre-Mix
- Raw Gas
- Low NO<sub>x</sub>
- Gas / Oil Combination

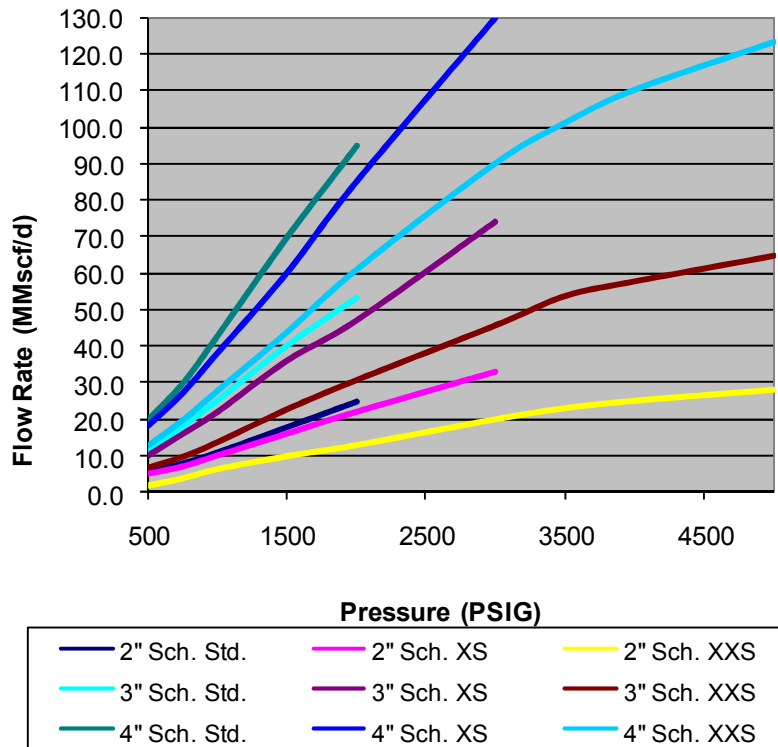
### Bath Mediums

- Water
- Low Pressure Steam
- Salt
- Oil
- EG / Water
- Amine

## OPTIONS

- Firetube Economizers
- Firetube Turbulators
- Forced Draft Burners
- Chimney Dampners
- Burner Management Systems
- Pressure Letdown Valves ( Chokes )
- Waste Heat Recovery
- Electric Heat ( in lieu of Firetube )
- Finned Process Coils
- ASME Section VIII Construction
- Fuel Gas Scrubbers
- Ladders & Platforms

### Approximate Gas Flow Rates



## DESIGN PARAMETERS

Process Inlet Pressure	
Allowable Pressure Drop	
Process Inlet Temperature	
Process Outlet Temperature	
Gas Flow Rate	
Gas Molecular Weight	
Liquid Flow Rate	
Liquid Specific Gravity	
Desired Bath Medium	
Burner Management System	

# APPLYING WORLD CLASS TECHNOLOGIES IN PURSUIT OF SUPERIOR EFFICIENCY

3700 - 400 3RD Ave. S.W.  
Calgary, AB Canada T2P 4H2  
Tel: + 780 468 5007

info@kockenenergia.com

Bldv. Adolfo Ruiz Cortines No. 444-B  
Entre Calle 5 y 7, Fracc. Costa Verde,  
Boca del Rio, Veracruz CP 94294 México  
Tel + 52 22 99 25 40 13  
preguntas@kockenenergia.com

Pine Grove Centre  
305 Highway 10, PO Box 60  
Bridgewater, NS Canada B4V 2W6  
Tel: + 902 527 2000  
info@kockenenergia.com

