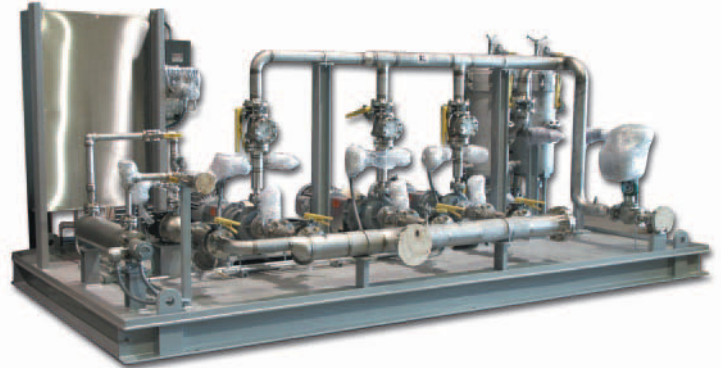


Heat Transfer/ Hot Oil Systems

Integrated Flow Solutions Heat Transfer/Hot Oil Systems are designed to store and transfer heat transfer fluids used for industrial heating. The heat transfer fluid is normally stored in an elevated insulated vessel skid mounted. Special high temperature centrifugal pumps are used to circulate the heat media fluid from the storage tank through an electric process heater, gas fired heater or exhaust heat exchanger. The heat transfer fluid's elevated temperature is then used to safely heat a process system and is then returned to the storage vessel.



Industries



POWER



OIL & GAS



GENERAL

Benefits

- Single Source Accountability
- Pre-Packaged Modular Design Costs Less Than Component Based Site-Built Systems Reducing Overall Project Cost
- Minimizes Field Erection Time - Shorter Overall Project Delivery Schedule
- Complete System Function Testing Prior To Shipment
- 24/7 Customer Service

Industry Standards

- Vessels Code Stamped ASME Section VIII & National Board Registered
- Piping Designed to ANSI B31.1/ANSI B31.3
- Pipe Fabrication to ASME Section IX
- Structural Steel Assembly Designed to AWS D1.1

Standard Features

- Special Centerline Mounted or Vertical Inline High Temperature Centrifugal Pumps Designed for Thermal Growth
- Thermal Pipe Stress Analysis to Prevent Pipe Rupture & Increase Equipment Life
- Cellular Glass Insulation for Easy Leak Detection and Fire Prevention

Standard Features (Continued)

- Double Drop and By-Pass Expansion Tank for Venting of Low Boilers
- INTEGRAHEAT™ Electric Process Heaters
 - Heat Transfer Oils - (15W/In2) To Reduce Coke Buildup and Maximize Oil and Heater Life
 - Water - (45W/In2) To Minimize Scale Buildup and Maximize Heater Life
 - TriEthylene Glycol - (12W/In2 - 15W/In2) To Minimize Degradation and Extend Heater Life
- On-Skid Across-the-Line Starting Control Panel Wired to Electric Motors

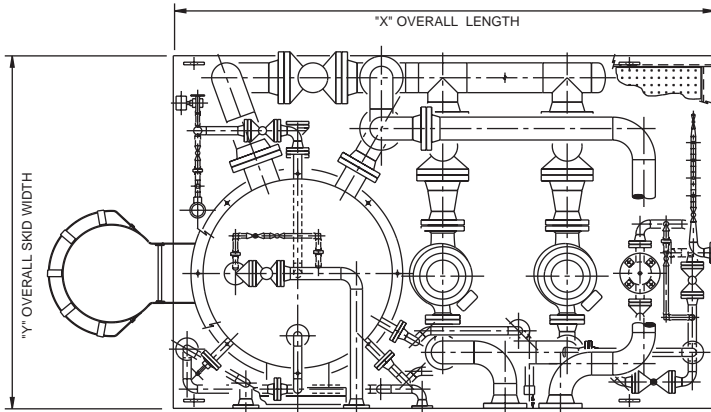
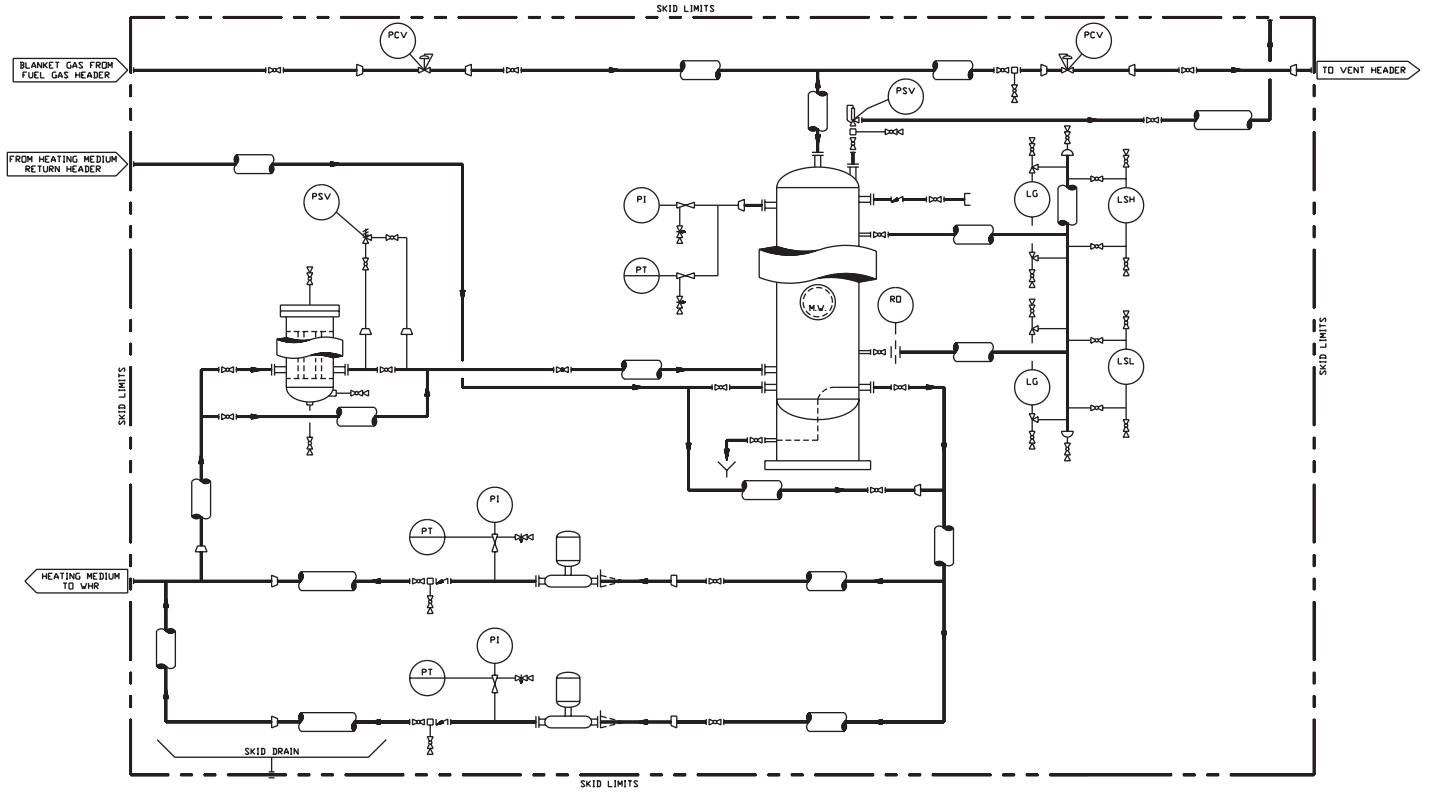
Optional Features

- Metal Fiber Filters in 5-10% Slip Stream Flow to Prevent Fouling of System
- Ladder and Platform for Expansion Tank Access
- Air Cooler for Quick Shutdown
- API 610 Centrifugal, Canned Motor or Mag Drive Pumps
- PLC Control System with Data Highway
- IEC/CENELEC/CSA Compliant Control Panel, Conduit and Wiring
- Compliance with Plant/Engineering Specifications

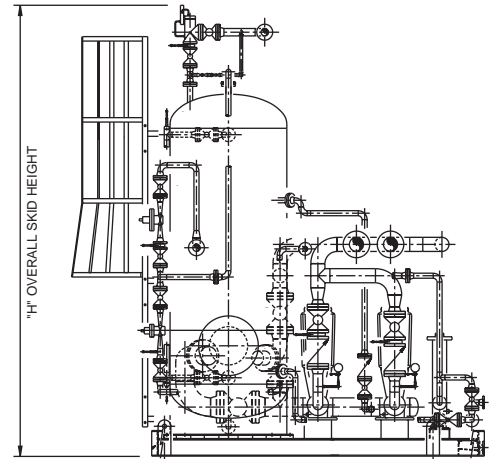
Additional Services

- Nationwide Service Network
- Installation/Training/Start-Up Supervision
- Equipment Leasing Program
- Extended Equipment Warranties
- "Aspen Plus" Process Simulation Software to Guarantee Process Conditions

Heat Transfer/Hot Oil Systems



PLAN VIEW



ELEVATION VIEW

FLOW RATE (GPM)	EXPANSION TANK WORKING VOLUME (GALLONS)	LENGTH - X	WIDTH - Y	HEIGHT - Z	DRY WEIGHT (LBS.)
50	500	6'	4'	12'	2,000
100	1,000	6'	8'	14'	4,000
200	2,000	8'	10'	16'	8,000
300	3,000	12'	10'	18'	12,000
500	5,000	20'	10'	20'	20,000