



"ENERGY PRODUCTS & SERVICES WORLDWIDE"

4 Brand New Wellhead Processing Units Available

Total Energy is in the process of acquiring two brand new, never used Wellhead Processing Units. Specifications for these units are described below. Please contact Frank Kovacs or Robert Armentano with any additional questions or inquiries. Thank you.

(2) Toromont WPU Technical Specifications

The gas processing plant utilizes electric motor driven compression and mechanical refrigeration with JT valve. A gas engine generator supplies all electric power required by the plant. All plant modules are enclosed in skid mounted, heated buildings which are easily transported to other well sites. Optimal performance is achieved with inlet volumes between 450-800 MCFD depending upon seasonal ambient temperatures.

Compression Skid – Toromont Energy Systems Sweet Gas Modular Package:

- 125 BHP EMD @1200 RPM with VFD drive
- Ariel JGA/2 two throw/two-stage reciprocating natural gas compressor
- Electrically driven aerial cooler for process gas and NGL product cooling
- Electric oil cooler for compressor lube oil cooling
- Stage 1 Cylinder: 8.5" x 3.00" stroke, MAWP 375 psig
- Stage 2 Cylinder: 4.125 x 3.00" stroke MAWP 1270 psig
- Variable volume clearance pockets for each cylinder
- Inlet scrubber: 16" OD x 72"s/s, horizontal 375 psig @ 120F MAWP
- Interstage Scrubber: 12" OD x 60"s/s, vertical 375 psig @ 300F MAWP
- Discharge Separator: 14" OD x 72"s/s, horizontal 815 psig @ 120F MAWP
- Allen-Bradley CompactLogix Control Panel

Generator Set Skid – Wagner Power Systems Dual Fuel (Propane/Gas) Generator Package:

- 425 BHP Caterpillar G3408TA engine
- Automatic Fuel Switching system
- Radiator and cooling system
- Standard exhaust muffler
- Custom weatherproof enclosure



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Mini Plant Skid – 450 Mscfd Refrigeration NGL Recovery Plant

- 10 HP, 66.5 MBtu/hr, Keeprite Packaged Refrigeration system complete with compressor, condenser, process temperature control, freon circulation loop; with a J-T valve for additional gas cooling
- Chiller, 58.9 MBtu/Hr, 33.2 sq ft, 400 psig @ 120F shell, 815 psig @ 120F tubes
- Gas/gas heat exchanger, 56.9 MBtu/Hr, 43.4 Sq ft, 100 psi @ 130F design tubes, 815 @ 300F psig design shell
- Gas/liquid heat exchanger, 22.2 MBtu/Hr, 46.5 sq ft, 815 @ 130F psi design tubes, 815 @ 130F psi design shell
- 3-phase low temperature (cold) separator 20" diameter x 108" s/s, 815 psi @ 120F design
- NGL stabilizer, 10"/6" dia x 294" s/s, 265 psig @ 175F design, including reboiler equipped with 20 KW electric heating coil, 265 psig @ 175F
- 2 BHP instrument air compressor package with air drier and 50 gallon dry air receiver
- 1/4 BHP methanol injection pump with multipoint methanol injection points
- Fuel gas system including fuel scrubber and pressure controls for gas engine generator and building heater fuel gas.
- Local pneumatic instrumentation and controls
- Motor control center in weatherproof enclosure

Plant ancillary equipment includes one Portapak portable 18,000 gal, 250 psig NGL storage tank, 2000 gallon methanol storage tank and containment pan, and skid module interconnecting cables and piping.

(2) Thomas Russell Co. WPU Technical Specifications

The gas processing plant utilizes electric motor driven compression and mechanical refrigeration with JT valve. A gas engine generator supplies all electric power required by the plant. All plant modules are enclosed in skid mounted, heated buildings which are easily transported to other well sites. Optimal performance is achieved with inlet volumes between 450-800 MCFD depending upon seasonal ambient temperatures.

Compression Skid – Toromont Energy Systems Sweet Gas Modular Package:

- 125 BHP EMD @ 1200 RPM with VFD drive
- Ariel JGR/2 two throw/two-stage reciprocating natural gas compressor
- Electrically driven aerial cooler for process gas and NGL product cooling
- Electric drive oil cooler for compressor lube oil cooling
- Stage 1 Cylinder: 8.375" x 3.00" stroke, MAWP 635 psig
- Stage 2 Cylinder: 4.625 x 3.00" stroke MAWP 1900 psig
- Variable volume clearance pocket for each cylinder



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- Inlet scrubber: 30" OD x 72" s/s, vertical 150 psig @ 150F MAWP
- Interstage Scrubber: 24" OD x 48" s/s, horizontal 215 psig @ 150F MAWP
- Discharge Separator: 24" OD x 48" s/s, horizontal 800 psig @ 150F MAWP
- Allen-Bradley CompactLogix Control Panel

Generator Set Skid – Wagner Power Systems Dual Fuel (Propane/Gas) Generator Package:

- 425 BHP Caterpillar G3408TA engine
- Automatic Fuel Switching system
- Radiator and cooling system
- Standard exhaust muffler
- Custom weatherproof enclosure

Mini Plant Skid – 450 Mscfd Refrigeration NGL Recovery Plant

- 29.3 KW York Packaged Refrigeration system complete with compressor, condenser, process temperature control, secondary ethylene glycol circulation loop; with a J-T valve for additional gas cooling
- Chiller, 140MBtu/Hr, 158.6 sq ft, 150 psig @ 150F shell, 800psig @ 150F tubes
- Gas/gas heat exchanger, 51 MBtu/Hr, 77.4 Sq ft, 800 psi design tubes, 450 psig design shell
- Gas/liquid heat exchanger, 117 MBtu/Hr, 77.4 sq ft, 800 psi design tubes, 450 psi design shell
- 3-phase low temperature (cold) separator 24" diameter x 84" s/s, 450 psi @ 200F design
- NGL stabilizer, 12"/8" dia x 13' s/s, 250 psig @ 200F design, including 18" dia x 10' reboiler equipped with 140 MBtu/Hr electric heating coil, 23.8 sq ft, shell: 250 psig @ 200F, tubes: 150 psig @ 350F
- 2 BHP instrument air compressor package with air drier and 50 gallon dry air receiver
- 1/2 BHP methanol injection pump with multipoint methanol injection points, 6gpm @ 700psig
- Fuel gas system including fuel scrubber and pressure controls for gas engine generator and building heater fuel gas.
- Local pneumatic instrumentation and controls
- Motor control center in weatherproof enclosure

| Plant ancillary equipment includes one Portapak portable 18000gal, 250 psig NGL storage tank, 2000 gallon methanol storage tank and containment pan, and skid module interconnecting cables and piping.