

# Mechanical Refrigeration Units Product Overview



### No other solution affords the same durability, universal applicability, or performance

- Features a turnkey, stand-alone process; no additional dehydration or stabilization equipment is required
- Highest refrigeration horsepower in the class, but with turndown capability
- Remote monitoring and unique controls that enable ethane rejection
- Rapidly deployable—can be transported and mobilized anywhere in North America in 3-5 days
- Proven reliability in the extreme desert heat, as well as the frigid Bakken winters
- Modular design allows multiple MRUs to be combined for large scale gas processing
- Ideal complement for any back-end device, such as gas-to-liquids or compressed natural gas units

### BFX Mechanical Refrigeration Unit (MRU)



Efficient, Reliable, Scalable, Mobile



## **Product Specifications**

#### Three core MRU models scaling from smaller wells to multi-well solutions and gathering station processing

- Features a turnkey, stand-alone process; no additional dehydration or stabilization equipment is required
- Three core MRU models:
  - GRU-1 with a gas flow rate of 2.0 MMscfd;
  - GRU-2 with a gas flow rate of 3.5 MMscfd;
  - GRU-3 with a gas flow rate of 5.0 MMscfd
- GRU-1 and GRU-2 share a common platform, only differentiated by the number of embedded compressors and size of the dehydration unit (which impact the heating capacity available for NGL stabilization and glycol regeneration)
- Unlike some competitor units that are repurposed designs for dewpoint control or other purposes, BFX's line of MRUs was specifically designed and engineered to produce stabilized, transportable NGLs
- BFX can deliver customized 10.0 MMscfd units as requested

MRU Unit Specifications			
Model	GRU-1	GRU-2	GRU-3
Gas Flow Rate (Mcfd)	2,000	3,500	5,000
Refrigeration Capacity (BTU/HR)	350,000	700,000	1,050,000
Refrigeration Horsepower (# Units/HP Rating Ea.)	125* (1/125)	250* (2/125)	375* (3/125)
Reboiler Duty (BTU/HR)	270,000	515,000	1,500,000
Maximum Operating Pressure (PSIG)	1,420	1,420	1,420
Electric Service: Volts/Phase/HZ Run/Start Amps Service Amp Rating Generator Size (KW) Skid Dimensions and Weights: Process Skid Weight (lbs) Refrigeration Skid ** Weight (lbs) Oil Heater Skid Weight (lbs)	480/3/60 224/560 350 250 8' 6" x 31' 10" 27,000 8' 6" x 27' 2" 21,500 NR	480/3/60 394/730 500 350 8' 6" x 31' 10" 27,500 8' 6" x 30' 2" 26,000 NR	480/3/60 594/930 800 500 8' 6" x 31' 10" 29,000 8' 6" x 39' 3" 32,500 5' 0" x 12' 0" 4,500
Initial Fill Quantities: R-507a Refrigerant (lbs) Ethylene Glycol (75/25) (gal) Refrigeration Compr. Oil (gal) Heating Oil (500°) (gal) * Screw Compressor(s)	570 375 19	770 500 37	984 360 55 320
** Max. Height for Transport - 11' 10"			

Note: GRU-1, GRU-2, and GRU-3 each have turndown capability to 500 Mcfd