

Hydra Rig™

660K/840K Direct-fired Trailer-mounted Nitrogen Pumping Units



Customized to your needs with proven reliability and performance in North American oilfields

Our 660K and 840K direct-fired trailer-mounted nitrogen pumping units can be customized to fit your needs. These pumpers utilize the Hydra Rig™ direct-fired vaporizer, triplex pump, cold ends, and boost pumps to provide gaseous nitrogen at pressures up to 15,000 psi (103 MPa).

The most severe operating conditions are no match for our patented cold ends, which are proven to perform in harsh environments. Simple operation and control is provided by the Merlin™ automated vaporizer controls that are unique to our equipment. The controls of the pumping unit can be configured to match each individual operating environment and can be located in a climate-controlled cabin or externally on the side of the unit. Operation of unit control valves can be done manually or remotely utilizing electric actuators.

Power is supplied by a Cummins QST30 (1,350 HP) deck engine with a Allison S8610M transmission. Liquid nitrogen is stored at -321° F (-196° C) in a 2,987 US gallons (11,306 L) vacuum-insulated tank. All units are available with a CSA B620 TCRN Certificate for Transportation of Dangerous Goods on Canadian roads.

We can also incorporate magnetic filtration into the hydraulic coolant, engine coolant, fuel, lube oils, and liquid nitrogen circuits, improving reliability and reducing maintenance costs.

Rates and Pressures

Cold End Diameter	Maximum Flow	Maximum Pressure
2.00" (50.80 mm)	415,200 SCFH (11,753 m3/hr)	15,000 psi (103 MPa)
2.52" (64.00 mm)	659,400 SCFH (18,610 m3/hr)	15,000 psi (103 MPa)
2.875" (73.03 mm)	858,000 SCFH (24,300 m3/hr)	11,200 psi (77 MPa)
3.00" (76.20 mm)	934,200 SCFH (26,443 m3/hr)	10,000 psi (69 MPa)
3.25" (82.55 mm)	1,096,380 SCFH (31,034 m3/hr)	8,800 psi (61 MPa)