



iP55-200 Intensifier Pump

The J.R. Jet iP55-200 is a 200-horsepower intensifier pump rated at 60,000 psi (4,100 bar). It is capable of producing output pressures from 1,000 to 55,000 psi (4,100 bar) with flow rates of 0 to 4.0 gallons (15.2 liters) per minute to a variety of cutting, surface preparation or cleaning tools.

The iP55-200 intensifier pump features a patented intensifier design combined with a certified attenuator, complying with ASME pressure vessel standards, to minimize pressure fluctuations. Its 200-horsepower motor drives an axial piston, variable displacement, pressure-compensated type hydraulic pump. The high efficiency, totally enclosed, fan cooled (TEFC) electric motor with wye-delta "soft start" ensures high reliability, long service life and minimal energy usage. A programmable logic controller (PLC) monitors and controls all machine functions, and automatically energizes relays to light the warning lamps in the event of potentially damaging conditions. The integrated water filter and booster system eliminates connections between other filtration systems.

Like all J.R. Jet UHP intensifier pumps, the iP55-200 offers complete flexibility for waterjet cutting, cleaning or coating removal applications.

Construction

- Heavy gauge sheet metal covers
- Rugged all-steel welded framework
- Hinged cover and removable access panels for convenient machine inspection and maintenance
 - Integral hydraulic reservoir
 - Sound insulated for quiet operation
 - NEMA 12/13 rated electrical enclosure

Finish

High solids/polyurethane

Standard Features

- High efficiency TEFC motor
- 1,500 or 1,800 nominal motor speed (rpm)
 - Electronically shifted intensifiers
 - Wye-Delta soft start with disconnect
- 0.5 gallon (1.9 liter) high pressure attenuator with 1.45 micron filtration
 - Safety shutdown systems
 - Automatic safety pressure bleed-down valve
 - Thermostatically controlled cooling system
- Programmable Logic Controller (PLC) for operation and safety monitoring
- Axial piston, variable displacement, pressure-compensated hydraulic pump
 - Liquid-filled pressure gauges
 - UHP safety shielded tubing

Industry Standards

- TUV, TTK, ASME attenuator certifications
- U/L, CU/L listed industrial control panel

Product Specifications

Physical Size

- Length: 92 in (233 cm)
- Width: 57 in (145 cm)
- Height: 61 in (155 cm)
- Approximate Weight with Fluid: 6,200 lbs. (2,812 kg)

Electric Motor

- Motor Output: 200 hp (149 kw)
- Motor Type: High Efficiency TEFC electric motor
 - Full load amps @ 460vac (60Hz): 233
 - Full load amps @ 230vac (60Hz): 466
 - Full load amps @ 380vac (50Hz): 280

Intensifier

- Type: Single piston, dual plunger, reciprocating
 - Number of Intensifiers: two
 - Rated Pressure: 60,000 psi (4,100 bar)
 - Intensification Ratio: 19:1
 - Flow Rate: 4.0 gpm (15.2 lpm)
 - Maximum Rated Orifice Size .028 in (.71 mm)

Low-Pressure Water/Intensification Water

- Type: Pretreated, <100 TDS, PH 6-8, Silica <15 PPM
- Supply Requirements: 4.0 gpm @ 20 psi (1.4 bar) min. / 75°F (24°C) max.
 - Filtration: 10, 1, .5 Micron

Coolant Water

- Maximum Temperature: 70°F (21°C)
- Minimum: 0-15.0 gpm (0-56.7 lpm) @ 20 psi (1.3 bar)
 - Ability to Remove: 175,000 BTUs/Hour
 - Heat Exchanger: Shell and Tube (2)

Hydraulics

- Reservoir Capacity: 95 gallons (361 liters)
 - Filtration: Full Flow 10 Micron

Environmental

○ Ambient Room Temperature: 50°-100°F (10°-37°C)
Relative Humidity: Non-condensing, Maximum 95% @ 100°F (37°C)