

HIGH HORSEPOWER FRACTURING PUMPING SKID



Sanjel's High Horsepower Fracturing Pumping Skid is purpose-built for multi-stage horizontal well completions and continuous duty high-pressure pumping and fracturing applications. This custom-designed skid provides the productivity of up to three conventional pumping units or as much as a four times increase in equipment durability on approximately the same footprint. Superior up-time is achieved by utilizing high power components and operating them within their continuous duty power rating. Site environmental hygiene is ensured with the integral spill containment system, while worker safety is enhanced by close-to-the-ground maintenance locations and large platforms with guardrails. The fracturing skid can supply 1864 kW (2500 hp) continuous or 2386 kW (3200 hp) peak power and is capable of 18 hours of continuous pumping per day, seven days per week.

Applications

- Massive hydraulic fracturing treatments
- Multi-stage horizontal well completions
- Shale gas fracturing treatments
- Conventional fracturing treatments

Equipment

- 2237 kW Cummins QSK 60 16 cylinder main diesel engine
- 149 kW auxiliary diesel engine
- 7 speed, 2237 kW input rated transmission
- Extended duty SPM QEM-2500 quinteplex pump
- Integral spill containment system
- 3" Fig. 1502 discharge iron package

Instrumentation and Control Systems

- Sanjel developed PLC-based control system featuring:
 - Auto rate control capability
 - Auto pressure control capability
 - Auto pressure testing capability
 - Electronic over pressure protection
 - Emergency shutdown feature
- Multi-unit control by single operator
- Compatibility with Sanjel developed automatic fueling system

Performance

- Maximum Working Pressure: 103 MPa
- Maximum Flow Rate: 2.83 m³/min with 101.6 mm plunger
- Maximum Input Power: 2610 kW
- Continuous Input Power: 1864 kW
- Air temperature rating: -40°C to 46°C

Pumped Fluid Compatibility

- Water
- Gelled fluids
- Hydrocarbon fluids
- CO₂
- Acid