

COMBINATION FRACTURING UNIT



Sanjel's Combination Fracturing Unit, called the Rate Optimized Fracturing Half Length System (ROX_rS), is a purpose-built unit combining the industry-leading capabilities of Sanjel's Fracturing Blender, Chemical Addition Unit, and Horsepower Unit into one piece of equipment. The ROX_rS is custom-designed for utilization on low rate fracturing jobs, and to minimize equipment requirements on lease without sacrificing operational capability and performance. It is designed to maintain extremely consistent sand concentrations while pumping at lower rates and densities, and versatile for use on a wide range of fracturing processes.

Applications

- Low to medium pumping rate fracturing treatments
- Conventional fracturing operations
- High Foam Quality (FQ) unconventional fracturing systems
- Foam fracturing operations
- Fracturing through coiled tubing

Equipment

Fracturing Blender

- Centrifugal Mission Sandmaster 4" x 5" suction and discharge pumps
- All pumps are variable speed hydraulically driven
- 1 – 12" hydraulic proppant supply auger with low to high range control
- Minimal volume, open tub mixing chamber
- Auto fluid leveler

Chemical Addition Unit

- 6 – Hydraulically-driven positive displacement liquid additive pumps
- 6 – Removable 1000 L totes
- 5' x 8' heated storage area for wet or dry chemical
- Additive concentrations can be varied during pumping to tailor fluids per stage

Horsepower Unit

- Caterpillar 3412E engine (950 kW)
- Allison 8900 Series transmission
- 1000 OPI triplex pump

Instrumentation and Control Systems

Fracturing Blender

- ERAD control system for slurry density control
- Slurry discharge rate and total
- Liquid additive rates and totals
- Clean fluid rate and total
- Discharge slurry density

Chemical Addition Unit

- ERAD control system for automatic operation of individual liquid additive pumps
- Mass flow meters display individual rate and total for each pump

Performance

- Output Range: 0.5 – 1.7 m³/min
- Maximum Concentration: 2400 kg/m³
- Maximum Delivery Rate: 2000 kg/min