

CEMENT & ACIDIZING UNIT

DESCRIPTION

Sanjel Energy Services' Cementing & Acidizing (C&A) Unit provides three key benefits: Reliability, Simplicity, and Mobility. The unit's mixing system and hydraulics are powered by the independent Auxiliary Diesel Engine, leaving the entire 355 kW road engine available for downhole pumping. The C&A provides tremendous versatility in a compact package, able to mix and pump cements, diesel gel, diesel gel cement, batch frags, acid, acid solvents and sand slurries. The Cementing & Acidizing Unit is field designed and fabricated to withstand extreme weather conditions.

APPLICATIONS

- Shallow to deep well applications
- Critical and sour gas wells
- Surface, intermediate and production casings
- Liner cementing operations
- Injectivity tests
- Conductor barrels and well kills
- High pressure pumping operations
- Remedial cementing and acidizing operations

EQUIPMENT

- 95 kW auxiliary diesel engine
- 355 kW triplex pump
- 3" x 2" centrifugal mixing pump with 13" impeller
- 5" x 4" centrifugal pre-charge pump with 12" impeller
- 2 – 3m³ sealed displacement/batch tanks with hydraulic augers
- 2" Fig 1502 treating iron package
- Blower for bin operations or bulk transport redundancy

INSTRUMENTATION AND CONTROL SYSTEMS

- Real-time Field Data Acquisition System (FDAS)
- Digital rate and total flow readouts
- Independent Martin Decker pressure gauge
- 70 MPa adjustable mechanical relief valve
- Transfer case safety protection mechanism for switching between road and pump gear

PERFORMANCE

- Maximum Mixing Rate: 1.2 m³/min
- Maximum Pumping Rate: 1.6 m³/min with 127mm plunger
- Maximum Cementing Pressure: 42 MPa
- Maximum Acidizing Pressure: 70 MPa with 89mm plunger
- Batch Capacity: 6.0 m³
- Electronic over pressure management

