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 fracs, 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

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

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

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