PCT-511B Single pump cementing truck

1.Overview

PCT-511B system is a truck-mounted single pump cementing unit with TPH400 plunger pump. Standard configuration should be equipped with North Benz 2535A 6X6 chassis.

The input shaft of TPH400 pump is paralleled with centre line of engine, so the fluid end is located at the rear of unit. This inline installation feature makes the maintenance and service of pumps easier. Compared with other cementing plunger pumps with same plunger size, TPH400 pump has features of maximum operation pressure, long stroke and high self-priming capacity.

2.General specification

Max. working pressure 76.2Mpa (11,200Psi W/ 4 1/2" fluid end)

Max. flow: 1.50m³/min

Density range: 1.3-2.5g/cm³

Auto control precision: ±0.02 g/cm³

Mixing capacity: 0.3-2.3m³/min

Working ambient temperature: -20°C ~ 50°C

Overall dimension (mm): 9700(L) x 2500(W) x 4200 (H)

Net weight: 24000kg

Configuration	
Chassis	North Benz 3525A 6X6
Engine	Caterpillar C13 475HP@2100RPM
Transmission	Allison 4700 OFS
Triplex pump	SERVA TPH400x4.5"
Mixing system	High energy recirculating jet mixing system
Density Control system	ACM- III.1 auto density control system
Slurry recirculating	Serva RA56
Booster pump	Serva RA56 (or RA45)
Mixing water pump	Serva RA43
Measuring tank volume	2X1 OBBL stainless steel tank
Mixing tank volume	1.6M³



3.Features

- 1m³ surge tank avalible, utilized to make bulk cement delivery more stable so as to improve the accuracy of auto control system and slurry quality.
- The mixing power is partially supplied by chassis engine which increases the actual operation power of deck engine.
- TPH400 inline installation, makes the maintenance and service of pumps easier.
- High energy recirculating jet mixing system.
- Off-center dry cement valve avoids bulk cement from choking.
- Emergency kill system of air inlet shutoff.
- SPS non-leakage packing system
- Plunger pump overpressure protection system.
- F300 Non-radioactive densitometer is easy to wash, safe and reliable.
- Simplify operation, adapts to working habits in oilfield.
- 10" operation screen, convenient to monitor the working data.
- Portable wireless/ wired data acquisition system.
- Diesel fired coolant pre-heat system available. The heater allows the engine to be preheated before starting without the use of external power.