

Mix-Pump-Station Fully Automated MPS 110S-D-B-AUT Diesel Motor



Technical Data

drive mechanism	diesel-hydraulic
drive power	37 kW / 2.800rpm, aspirated engine 4 cylinder in-line, 2.3 l / 0.6 gal U.S. displacement, automatic preheat
fuel consumption	7.5 l/hr - 2 gal U.S./hr + / -25%
fuel tank capacity	100 l / 26.4 gal U.S., made of steel
connections	
• electric	24V DC
• hydraulic	quick coupling for screw conveyor motor
• water	G 2 BSPP C-coupling DN50 + G 1 BSPP GEKA
outlet	
• feed pump pressure	G 1 BSPP internal thread DN25
• feed pump circulation	G 1 BSPP internal thread DN25
dimensions	
length x width x height	2250 x 1600 x 2100 (mm)
weight	approx. 2800 kg

Application

Mixing and pumping of cement-, flying ash-, bentonite- and insulation suspensions at backfillings, jetting drillings, pressings, pilings and vibrating jobs.

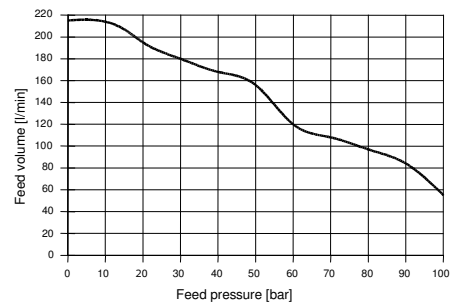
Performance

Mixer with weighing system

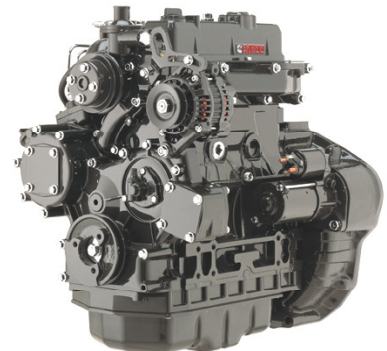
- hand feed up to 3.5 m³/h
- feed per screw conveyor from 4.5 m³/h up to 8.0 m³/h

Feed Pump

- pressure max. 100 bar¹⁾
max. 1450 psi
- flow rate max. 215 l/min¹⁾
max. 56 gal U.S./min



Dieselmotor Cummins A2300



¹⁾pressure and flow rate infinitely variable. Both max. performances are not simultaneously possible, please refer to graph.

1 bar = 1 x 10⁵ N / m²

Status: February 2007
Technical changes reserved

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Standard Features

Diesel Drive	diesel engine Cummins A2300 37 kW, 2800rpm, max. speed limited to 2100rpm 4 cylinder water-cooled, silencer approx. 30 dB/A input voltage 24V DC, operating hour counter
Hydraulic	oil tank volume 150 l / 39.6 gal U.S., axial piston pump and gear pump oil/combination cooler
Feed Pump	vertical two-plunger pump, Ø110mm, flow rate per double stroke V = 3.6 l / 0.95 gal U.S., pump valves self-acting (ball valves) by-pass/circulation valve / pump down valve manually operated quantity adjustable electro-proportional
Feed Pressure Measurement	manometer 0-100 bar / 0-1450 psi, Ø100mm with stainless steel membrane
Water Metering	water distributor with flushing connector and pneumatic shut-off flap DN50 water reservoir and metering tank V = 200 l / 52.8 gal U.S., fixed overflow pneumatically operated draw-off tab DN50 water distributor with C-coupling and shut-off flap DN50 full automatic water metering with fluid level indicator
Framework	partially enclosed steel frame with runners and partition panel floor panel and oil drip pan, central towing device fork lift guide transversal and longitudinal, finishing 2 K – paint RAL 5005 (signal blue)
Reservoir	round tank, cleaning lid, suction screen, run in basket 5mm reservoir covers, pneumatic shut-off flap DN50 volume 500 l / 132 gal U.S., effective volume 450 l / 118.9 gal U.S. slow turning agitator, revolutions per minute infinitely variable fluid control by sonar sensor
Mixing Tank Colloid-Mixer	weighing system with display and automatic control of screw conveyor 3 pre-selectable mixture ratios, adjustable by selector switch mixture preparation either automatically or manually display of mixture number circulation – and pump off automatically controlled round tank with conical floor volume 250 l / 66 gal U.S., effective volume 200 l / 52.9 gal U.S. covered screw conveyor intake, hopper with bag ripper hydraulic drive, rpm infinitely variable all shut-off flaps pneumatically controlled No dosing screw conveyor necessary! Standard screw conveyor usable
Tools in Mixing Tank	2 fast turning agitators on one common drive shaft with pump off function 1 agitator Ø250mm, 1 pump rotor Ø185mm drive shaft bearing above mixer fluid level no stuffing box so dry running possible w/o any problems
Control Devices	rotary knob for pressure control, rotary knob for flow rate control (l/min) cut-off/adjustment valve for mixer speed cut off/adjustment valve for agitator speed on/off push button for feed pump, mixer and agitator on/off push button for full automatic water metering on/off remote-control, switch connector, operating hour counter
Weighing System	hand/auto switch, pre-selector switch for three mixing proportions auto-start push-button, LED-display scale and adjustment total weight for water and solids, push button for total mixtures and total weight
Accessories	service manual and spare parts list, special tools for service and maintenance remote-control with cable and 100m cable reel, radio remote-control (no legal authorization necessary) available as extra equipment high pressure cleaner 210 bar / 3045 psi, low speed for industrial use rotor jet and 2 x 10m high pressure tube, unit is firmly installed
Supplementary Devices	control units, electronic data collection electronic data recording, control-measuring-system and computer evaluation, injection protocol generation “Ninja”

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Views

