

Mix- and Storing-Unit fully-automatic

MRS 700-18-E-A-AUT



Technical Data

Drive	Electro-hydraulic
Drive Power	15 kW
Total Power Consumption	approx. 27 kW
Connections	
Electrical	CEE 63 A / 400 V AC, 50 Hz, IP 54
Water inlet	G 2 BSPP AG DN 50 - C-coupling G 1 BSPP IG DN 25 - GEKA
Outlet	
Suspension	G 2 ½ BSPP IG DN 65 - Kamlok 250 MT
Dimensions (L x W x H)	2.800 x 2.250 x 2.250 (mm)
Weight	approx. 3.200 kg
Application	Fully automatic mixing and pumping of cement-, micro-cement, fly ash and bentonite suspensions at anchorings, injections, fillings, flushings, groutings, piling and vibrating jobs, slurry walls, Soil-Mixing WSM and Cutter-Soil-Mixing CSM
Performance	
Mixer with weighing system	Hand feed up to 12,0 m³/h Feed per screw-conveyor up to 17,5 m³/h
Volume Mixing Tank	volume 700 l [185 gal U.S.] / effective volume 600 l [159 gal U.S.]
Volume Storing Tank	volume 1.800 l [476 gal U.S.] / effective volume 1.700 l [449 gal U.S.]

(Status April 2016 / Technical changes reserved)

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Standard Features

Framework

skid steel frame, partially enclosed and with partition panel, floor and oil pan, central towing device, fork lift guides transversal, machine room sound proofed, lockable doors, finishing 2K-paint RAL 5005 (signal blue) or on customer desire

Electric Drive

electric motor 15 kW, 400 V AC, 50 Hz, IP 54, automatic phase correction, motor safety switch, control voltage 24 V DC (for valves and remote control), operating hour meter

Hydraulic

oil tank volume 170 l [45 gal U.S.], gear pump, oil cooler with thermostat, main oil filter, oil filling and ventilation filter, electrical oil filter pollution control, oil level and temperature indicator

Water Metering

water storing and dosing tank V = 380 l [100 gal U.S.], fixed overflow pipe, water connection C-coupling with flushing connection and butterfly valve DN 50 pneumatically controlled, water tank inlet valve DN 50 and water tank outlet valve DN 80 pneumatically controlled, fully-automatic water metering with fluid level indicator

Mixing Tank Colloid-Mixer

round tank with conical floor, volume 450 l [119 gal U.S.], effective volume 400 l [106 gal U.S.], mixer drive hydraulic motor (rotation speed infinitely variable), foldable and lockable tank covers with safety switch, cover for screw conveyor inlet with inspection flap, hopper with bag ripper, circulation and pump down valves DN 80 pneumatically controlled

NO DOSING SCREW CONVEYORS NECESSARY! Standard screw conveyors usable!

Weighing System

weighing system with display (max. weight), three mixtures pre-selectable, producing mixtures manually or automatically, display for counting the mixtures, infinitely variable mixing time, pumping in circulation and pumping down automatically controlled, screw-conveyor automatically controlled, all butterfly valves are pneumatically controlled

Tools in Mixing Tank

3 fast turning mixing tools on one common drive shaft with pump down function, 2 mixing blades Ø 250 mm, 1 pumping wheel Ø 210 mm, drive shaft bearing above mixer fluid level (No stuffing box, so dry running possible w/o any problems!)

Storing Tank

round tank with straight floor, volume 1.800 l [476 gal U.S.], effective volume 1.700 l [449 gal U.S.], agitator drive hydraulic motor (rotation speed infinitely variable), foldable and lockable tank covers with safety switch, suspension inlet DN 65 with inlet basket, suspension outlet DN 80 with pneumatically controlled valve and suction basket, cleaning cover sidewise, slowly turning agitator with a floor scraper and stream screen

Fluid Level Control

fluid level control per ultrasonic sensor

Operating Devices

rotary knob for max. delivery pressure adjustment bar [psi], rotary knob for max. flow rate adjustment l/min. [gal U.S./min.], valves for infinitely variable mixer and agitator speed, flow rate counter l/min. [gal U.S./min.] and l/total [gal U.S./total] with zero-setting, auto pre-select counter for flow rate l/total [gal U.S./total], main switch, control lamp for voltage and power, ON/OFF push button for hydraulic motor, mixer and agitator, ON/OFF switch for remote control, START/STOP push-button for fully-automatic water metering, switch DEWATERING ALL VALVES or SUSPENSION/WATER (dewatering winter time / flushing with water), EMERGENCY STOP switch

Weighing System

pre-select switch for three mixtures, switch for AUTOMATIC, HAND or AUTO PRE-SELECT operation (mixtures), push-button AUTOMATIC START (mixtures), LCD display with adjustment of the weighing system for total weight (water and solid), batch pre-select counter with zero-setting for mixtures, LCD display for fluid level control (storing tank) per ultrasonic sensor

Accessories (included)

operating manual and spare part list, special tools for operation and maintenance, cable remote control 15 m and cable reel 100 m, circulation hose, high pressure cleaner 4 kW, 950 rpm, 200 bar [3.045 psi] (industrial device, fixed installed), air compressor (industrial device, fixed installed), working lamps for machine room, mixing and storing tank

Accessories (optional)

spare part kits, grouting hoses, suction hoses, fittings, grouting grippers

Supplementary Devices

injection pumps, pump units and storing tanks for solid suspensions, dosing devices, screw-conveyors, radio remote control, control devices, electronic data acquisition and recording, regulating and measuring systems RMS with computer evaluation per USB and injection journal, flow meter with delivery pressure measuring, electronic delivery pressure devices (pressure transmitter) at injection place, devices for radio data transmission

Further devices, special equipments and accessories on request!