

VELZENER

MASCHINEN GMBH



ESTROMAT 426

Mixing and spraying unit
for fine grained, dry
refractory- and slurry-masses
for Tundish-Repair



ESTROMAT 426

Description of the function

The ESTROMAT 426 is a high developed combined mixing-, pump- and spraying unit for the spraying of refractory-slurry masses for Tundish-repair in steel mills. The combination of the more than thousand time experienced continuous mixer E401 to the powerful vertical worm pump S37 guarantees a homogenous mix of high quality refractory masses for efficient and utmost economical coating of Tundishes. This equipment is worldwide used in modern steel mills with continuous casting units to assure undisturbed operating.

The dry pre-mixed slurry masse is charged from big bags into the material hopper of the worm pump. The combination of a fluidisation unit with vibrator assures a steady flow of the dry material and provides a safe charging of the continuous mixer. In the continuous mixer the dry material is continuously mixed with an adjustable quantity of water to a high quality spray slurry with constant consistency and quality.

The ready mixed wet material flows from the continuous mixer into the wet mortar hopper of the worm pump. A level probe controls the wet mortar supply and switches the mixer on and off automatically as required. The worm pump has a funnel shaped wet mortar hopper with concentric pump drive. A vibrator together with the conveying shaft in the wet mortar hopper are guaranteeing a trouble free steady flow of the slurry masse to the suction opening of the vertically arranged worm pump.

The worm pump is conveying the refractory material through pressure resistant hoses to the spray gun ready for further processing. The gunning material is applied manually or fully automatically and without any loss by a spray manipulator in constant layers at the inside walls of the Tundish. The spraying is controlled by the spray nozzle. A constant adjusting of the water flow – imperative for dry spray systems – is not at all necessary.

Technical Data

Useful volume of the container:	1,5m ³
Mixer motor:	5,5kW
Mixing output:	40 l/min (standard) up to 60 l/min
Pump motor:	7,5kW
Pump output:	35 l/min (pump type UE355) 45 l/min (pump type UE 356x 0,75)
Conveying pressure:	20 bars, max. 40 bars
Conveying distance, horizontally:	max. 40m *)
Conveying height:	max. 20m *)
max. aggregate size:	6 mm *)
Hose connection to the pump:	SKM50
Required water connection:	ID25 / 3 bars
Required air connection:	ID25 / 6 bars
Required compressed air:	300 l/min for spraying 300 l/min for optional fluidisation system
Vibrator container:	150W
Vibrator wet mortar hopper:	150W
Total power required:	13,5 kW (standard machine)
Operating voltage:	400V / 50Hz three phase (other voltages on request)
Control voltage:	42V / 50Hz (other voltages on request)
Power connection:	CEE 532/6h
Protection category - motor:	IP 55
Protection category – electr. control:	IP 54

*) depending on material, grain size, conveying line dia., conveying length and air consumption

Dimensions and weights: (standard machine)

Length:	approx. 2950mm
Width:	approx. 1630mm
Height:	approx. 3430mm
Transport height:	approx. 2430mm
Weight unleadet:	approx. 1500kg
Operating weight:	max. 4000kg

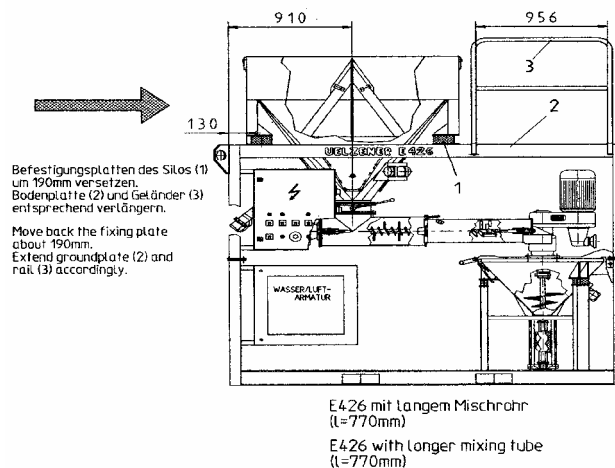
Part number..... 426.00.009 (standard machine)

ESTROMAT 426

Tundish – coating, technical description

The processing of slurry masses with the mixing and spraying unit ESTROMAT 426 has considerable technical and application advantages for the user:

- always homogenous mix by steadily working continuous mixer
- adjustable, controlled water - material proportion
- constant conveying of wet material
- long lifetime by adjustable pressure and in case of wear adjustable worm pump
- few wearing parts and low wear because of the use of high quality materials
- no rebound or loss of material during spraying
- no dust raising during spraying
- optimum remote control function by flow sensor for spray air
- fast and easy cleaning of all machine parts which have been in contact with wet mortar
- the ESTROMAT can be equipped with an additional interface for spray robots
- extremely low amount of work involved with high spraying output
- joint free, monolithic coating of Tundish linings
- safe and easy working conditions



Standard scope of delivery (426.00.009)	Optional additional equipment
+ machine frame of profile steel for installation of all components, with platform, ladder and protection guard	Fluidisation system for container with necessary air armatures and air maintenance armature
Container 1,65 m ³ for dry material with cutter for Big-Bags (can be removed for transport)	Membrane compressor 400 l/min / 400V / 50Hz Membrane compressor 720 l/min / 400V / 50Hz
Vibrator for container	Infinitely variable pump drive
Continuous mixer E401-H	Weighing system to measure the material consumption
Worm pump S37 in vertical type, Pump jackets UE355	Water container 350 l with level control and level switch, thermostatically controlled heating 3 x 2 kW
Vibrator for pump funnel	Housing of machine frame with metal plates, lockable
Pneumatic remote control of the pump	Heating for water dosing armature Recycling system for residuals from cleaning.
Electric control with command and signal devices for all drives	Mains cable 5x4 ² /25m /CEE 532/6h (standard) Mains cable 5 x10 ² /25m /CEE 563/6h (if equipped with water container)
Water dosing armature with flow meter, installed in separate steel box	Spray gun ID35, bended, 600mm,, nozzle 17mm Hose manometer 60bars, SK35 or SK50
Standard spray gun ID35, straight, short, nozzle 17mm	Material hoses ID35, ID50, lengths 13,3m, 20m Air hoses 3/8" , lengths 13,3m, 20m

ESTROMAT 426

Technical details ESTROMAT 426



▲ optional: funnel with cutter for dustless charging from Big-Bags. For dust collection an efficient dust extractor system included in the machine frame is available.

▲ ESTROMAT 426, optional with weighing system for the container with exact measuring of the material consumption by electronic interpretation and 4-digits display indication.

▼ Optional: Vario gear for the pump drive is available.

▼ Air- and water armature are protected in a steel box.

▼ The electric control in a steel box is functionally and ergonomically designed, und easy to operate.



▼ The level probe in the pump funnel controls the wet mortar level und the continuous mixer

▼ In the container the cutter opens the Bib-Bag during charging.

▼ Manually Tundish spraying: Below the slag line is being coated with a special refractory material



Copyright by UELZENER
Stand: 22042005
File: Prosp-E426-eng, ersetzt TI-E426-eng
Designed by cmm-design

UELZENER MASCHINEN GMBH
Wiesenstrasse 18
D-65843 Sulzbach / Ts., Germany
Phone: +49-6196-584-0, Fax: +49-6196-71273
website: www.uelzener-ums.de
e-mail: contact@uelzener-ums.de

Händler