

Mixing- and Conveying Unit for LC- and ULC-Refractories

ESTROMAT 260-600



The Mixing- and Conveying Unit ESTROMAT 260-600 is designed especially for the processing of LC- and ULC-refractories. The system of the unit enables to mix and convey pneumatically semi humid and dry materials as well as thixotropic materials.

Refractory materials – mostly with high specific density and small content of water of only 4-6% - cannot be pumped by means of displacement pumping systems, such as piston pumps or worm pumps. The unit ESTROMAT 260-600 conveys these materials by means of the principle of conveying by intermittent flow with compressed air up to 30m, depending of material, diameter of hose and volume of air.

The system is working by giving air onto the material in the vessel and at the same time to the vessel outlet as injection air. Thereby the material is conveyed in bulks by air cushions up to the end of conveying hose. This system is well known and approved since years and was taken over from the screed pumps with are to be used in the civil construction market.

Standard Delivery:

- pressure vessel with wear plates , material discharge, wide maintenance opening and cleaning connection outlet
- charging vessel cover with security-aeration lever and protection switch for charging grid
- build in compulsory mixer system with 4 wear resistant mixing blades
- rigid three phase gear motor with automatically thermistor-overload protection
- electric control box with all necessary devices, amp-meter for control of motor charge
- water-dosage system with adjustable water meter, build on water tank
- Air armature with overload valve, 3 control valves and anti - flow back valves
- charging funnel with cutting tool for big bags of dry material, aeration outlet, mounting plate for vibrator
- rigid steel frame with openings for forklift and crane eyes

Operation of the ESTROMAT 260-600

- The dry material in bags or big bags is fed into the pressure vessel via the charging funnel
- At the same time the preset water volume is dosed into the pressure vessel by means of the water dosing system and the water tank
- The compulsory mixer is mixing the material and the additives homogeneously in a short time depending of the material characteristics
- After a certain mixing time, depending on the material, the vessel cover is closed and the air is given via the air armatures to the system
- The batch has been conveyed, if the air pressure has run down to approx. 1 bar, than the main valve is closed
- The air relief valve on top of the cover has to be opened
- Now the next batch can be handled in the same manner



Clear and ergonomic work station with all important switch and monitoring devices as well as water dosing and air in eye contact

Advantages of the ESTROMAT 260-600

- economical mode of operation
- rapid readiness for use
- easy handling
- high reliability
- steady mixtures of high quality
- insignificant wear and tear
- conveying of masses, which are not or difficult to pump
- consistency can be set without consideration of the manner of conveying (i.e. by piston pumps)

Recommended accessories

- boom transport system
- conveying hoses with different diameters
- blow back device for different diameters
- automatic lubricating device for mixer bearing
- dust filter for feeding funnel
- vibrator for feeding funnel
- Re-mixer unit E402NM
- heavy-duty wear resistant mixing tools

Technical Data

motor power	: 30 kW
voltage **	: 400V/50Hz three phase
mixer speed	: 47 U/min
total volume of vessel	: 600 l
working volume of vessel	: 350 l
working temperature	: 20°C (68°F)
conveying capacity *	: up to 8m ³ /h
conveying distance	: 30 m
working air pressure	: 5 bar
max. vessel pressure	: 8 bar
necessary air volume	: 5-10 m ³ /min
standard vessel outlet	: 100mm, flange-coupling 100-4"

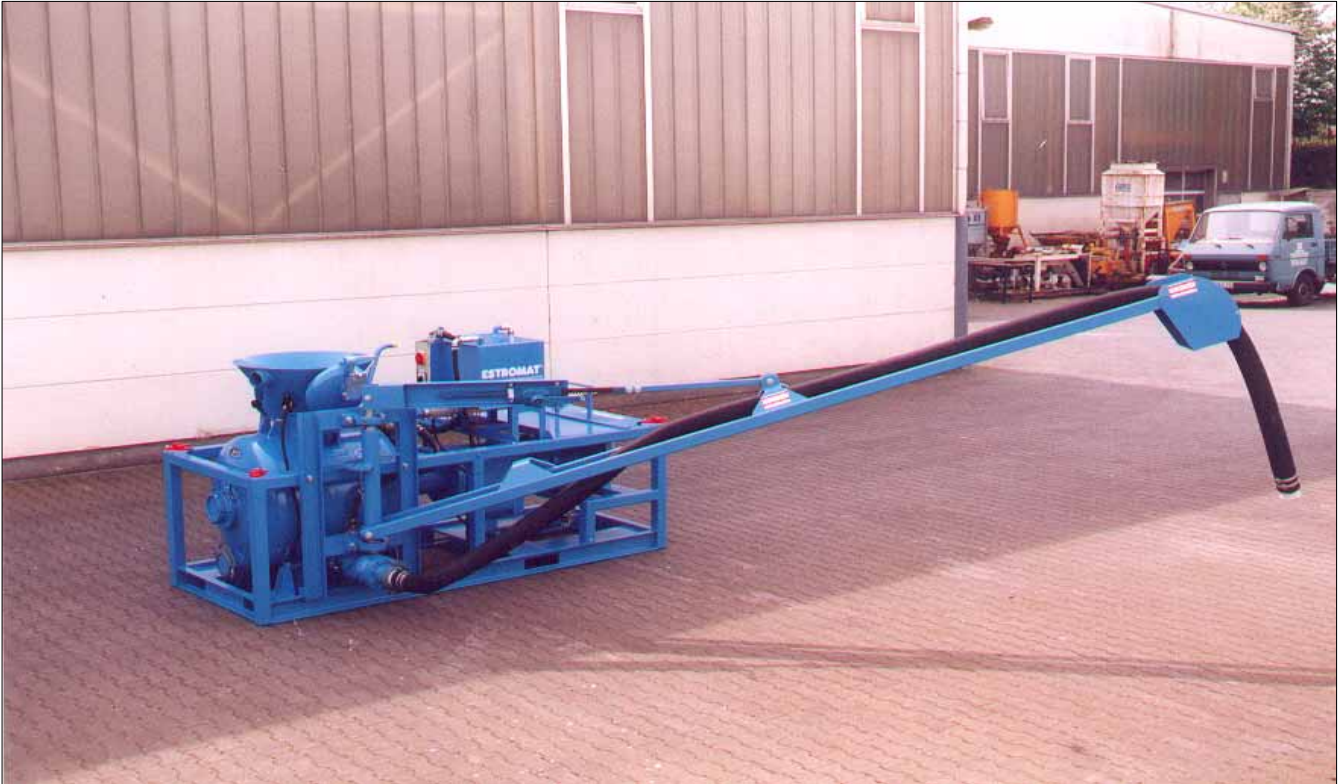
* depending on air consumption, hose diameter and conveying line

** other voltages on request

Dimensions:

total length	: 3000 mm
total height	: 1640 mm
transport height	: 1620 mm
total width	: 1150 mm
approx. weight	: 1900 kg

Boom Transport System for ESTROMAT 260-600



The boom transport system is designed for optimal positioning the end of the transport hose for lining works of ladles and similar vessels, as well as runners of blast furnaces. The system supports the manual distribution and facilitate build in of the refractory material.

By means of a tooth and pinion jack the boom transport system can be adjusted into the best positioning height. The vertical shaft, hold by ball bearings, supports a swivelling range of " 90°. The belt of ports at the swivelling shaft enables the fixation by bolt at every 15°. By this a large working area of the unit can be reached without displacement of the ESTROMAT.

The boom transport system can be delivered for the mixing and placing unit ESTROMAT 260-600 or ESTROMAT 850. It can be mounted subsequently to previously delivered units at every time. It is to be used for transport hoses with ID 50 up to ID 100, as well as in combination with the equivalent blow back devices.



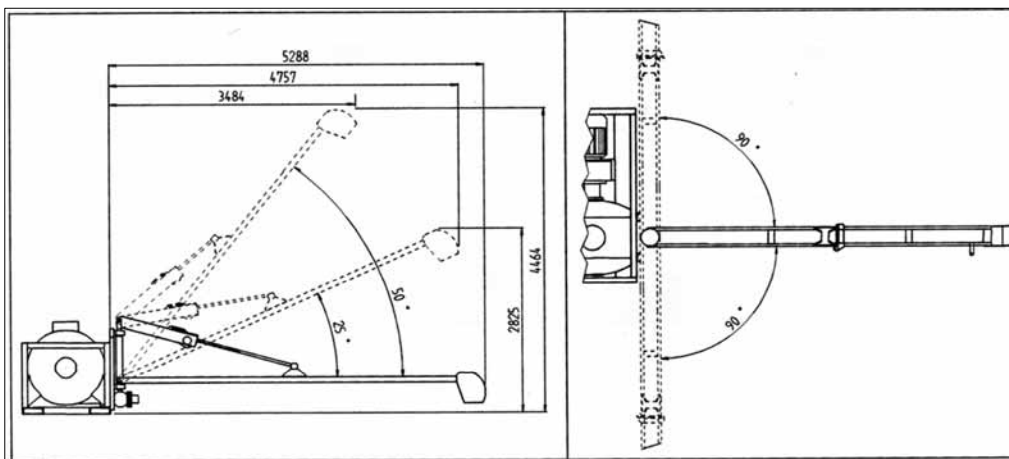
Technical Data

maximal height of head	: 4460 mm
maximal weight of boom	: 5290 mm
Swivelling area	: " 90°
weight without hose	: approx. 220 kg

Variants of outfit

- boom with swan neck to reduce the transport length to 2800mm
- manual or electromotorical elevation device for boom

Working radius of boom transport system



The vertical bearing application of the boom is effected by means of a vertical shaft with ball bearings, which supports the coping at the lower end of the shaft.



The boom support is fixed by means of a separate rigid steel frame onto machine frame. The blow back device is free accessible.



The boom can be fixed in 15° steps by using the segment-disc in every position.

