

Pugmill TS 20

Instruction Manual

Applications:

The ROHDE TS 20 is suitable for the processing and homogenisation of clays and porcelain masses. It can also be used for mixing different masses together and the mixing-in of fireclays. *It is not suitable for processing clay flour with water in order to produce ceramic masses.* For those purposes a soaking pit or an extruder as closed systems are necessary.

Unpacking:

The ROHDE TS 20 is delivered on palette. The shelf is fastened to the mixing rod with straps. Please take the ROHDE TS 20 off the palette first. Then detach the shelf from the mixing rod. Remove other packing materials.

Installation:

Slightly lift your ROHDE TS 20 at the handle and roll it to the desired location. Remove the fixation screws for the shelf entirely, hold the shelf to its position and fix it there with the previously removed screws. Please ensure that the clay cutter is in a stable position, i.e. on firm ground. Push plug into the socket.

Switching-on:

Press the green „On“ button, the machine is now switched on. Check if the rotating direction of the output shaft corresponds with the red arrow on the mixing rod. If they do not correspond, then 2 phases in the plug have to be switched by an electrician. Now the ROHDE TS 20 is ready for use.

Charging:

Feed the clay in manageable portions into the mixing rod at the top. The clay will be quickly moved downwards by the mixing knives. Please ensure that the mixing rod is always filled properly. This will ensure that the ROHDE TS 20 mixes and deaerates the clay optimally. Keeping the cutter well charged will also result in the best throughput per hour. If the clay is not plastic enough you can add small quantities of water.

Caution! Usually only a very small amount of water is necessary. Adding too much water easily makes the clay muddy, rendering it too soft for the machine to press it through the extrusion rod.

Cleaning:

Caution: Before disassembly or maintenance you have to unplug the clay cutter from the mains.

All parts which make contact with the clay are made of stainless steel, aluminium or plastic. When the same mass is used all the time cleaning the mixing rod is not necessary. If you want to process clay masses with different colours or firing properties we recommend cleaning the rod. You can easily open the mixing rod for cleaning by removing the screws (with the included 6mm Allen key) both at the mixing rod and at the flange at the bottom of the front side.

Make sure that all sealing surfaces are cleaned carefully before reassembling the pugmill. This will ensure that the mixing system is sealed properly again. When you attach the mixing rod after cleaning we recommend slightly oiling the screws; this will make loosening them at a later point easier.

Maintenance and Care:

The ROHDE TS 20 is almost maintenance-free. The worm gear motor is a closed system, which does not have any points that need lubrication for maintenance. The transmission oil has to be changed in the following periods:

Every 4,000 operating hours, or after 4 years at the latest.

0.5 liters of commercially available synthetic transmission oil: SAE 85 W 90

Protection Devices:

The ROHDE TS 20 is equipped with three protection devices:

1. Injury protection:

When the safety ring is pressed down the ROHDE TS 20 switches off immediately. In order to switch it on again you have to actuate the green "On" switch.

2. Protection against motor overloading:

If the load on the motor becomes too heavy, due to too dry mixing material or by a blockage of the mixing shaft by an object, the motor safety switch will respond. This will also happen when a phase of the power supply has failed (check house fuse).

First remove the plug from the socket. You always have to resolve the reason for the switch-off. The motor safety switch will automatically switch back on after a cooling-down period (approx. 3 min).

3. Safety switch:

The „ON/OFF“ switch and the safety switch are protected. These fuses are located in the black screw fuse holder directly in front of the green „ON“ switch.

Technical Data:

Motor performance: 1,5 kW at 1400 U/min

Electric connection: 230 Volt / 16 A

Strang diameter: 80 mm

Max. throughput: 600 kg/h

Dimensions:

Height: 1100 mm

Width: 550 mm

Depth: 1100 mm incl. shelf

Noise level: 76 dB (A)

Worm gear motor: 14 rpm at the input shaft