COLLIN

Laboratory machines for the processing of polymers

Bench-Type Roll-Mill W 100 T

The ideal instrument in teaching and small batch test

Application

- As roll mill for the batchwise plasticizing, mixing, kneading and sheet forming of plastics and elastomers.
- As extruder take-off device for the calendering, finishing and laminating.

Function

A batch in powder or pellet form, premixed manually, is applied to the roll gap. The resulting plastic film coating is turned over a number of times with a spatula to improve the mix.
After a defined mixing time, the coating is cut and pulled off manually.

Special features

- Compact design for setting up on the customer's bench
- Quiet running
- With integral electrical roll heating
- High level of safeties

BENCH-TYPE ROLL-MILL W 100 T

Description

The machine consists of the drive unit, roll unit and the electrical control cabinet which also forms the console, and the operating panel.

The drive unit contains a three-phase geared motor for a fixed speed or alternatively a frequency controlled motor for a continuously variable speed setting.
The rear roll is driven via a chain drive.
The front roll is driven via toothed coupling wheels.

Friction
As standard, friction ratio of 1:1.2 is provided with a faster rotating front roll.

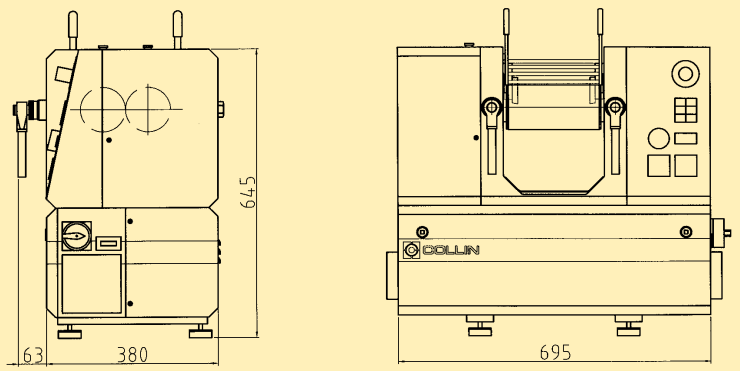
Roll unit
The rolls consist of hardened chromium steel; ground and polished.
The roll bearings are designed for high line forces.
Gap setting is obtained by adjusting the front roll using hand-operated spindles.
The gap width can be read off graduated collars.

Emergency stop of the rolls is activated via two emergency rocker grids situated above the rolls and linked to limit switches.

Heating
The heating can optionally be electrically or by thermally conducting liquid.

Electrical control cabinet
This is located under the roll unit.
A separate operating panel on the right side of the machine contains all operating elements.

Dimensions



Safety

Two swivel grid-covers are positioned over the rolls. These prevent entry to the roll gap.
When they are operated, a rapid stop of the rolls occurs.
Even when the power supply fails the gap can be opened mechanically on the rear roll to 50 mm.

Technical data

Roll diameter		(mm)	100
Roll width		(mm)	210
Working width		(mm)	150
Batch weight		(gr)	30 - 50
Drive power		(kW)	1
Speed	continuously variable	(1/min)	2-20
Friction		(1/min)	1:1,2 (front roll faster)
Gap adjustment	Standard	(mm)	0,1 - 10
(Manual) emergency opening		(mm)	- 50
Dimensions	LengthxWidthxHeight	(m)	1,0x0,4x0,6
Weight	net	(kg)	240

Design modifications reserved. Issued 3/01

Represented by:

Dr. Collin GmbH
Sportparkstr. 2, D-85560 Ebersberg, Germany
Telefon ++49 8092 / 20 96-0, Telefax ++49 8092 / 2 08 62

www.drcollin.de, mail to: collin@drcollin.de