



Riva-Minipress, single punch excenter press

ONE SINGLE PUNCH TABLET PRESS Type RIVA MINIPRESS

This tablet press was developed for the use in R&D and Galenic .

Technical Data:

- Number of compression station	1
- Max. compression force	60 KN
- Filling depth	18 mm
- Max.tablet diameter	24 mm
- Penetration of upper punch	0 - 8 mm
- Type of tooling	Riva
- Output rate	up to 6.000 tabl/h
- Power requirement	ca 1.0 KW
- Power supply	230V, 1 Ph, 50 Hz, (with neutral)
- Dimensions	845 x 662 x 340 mm
- Weight	net: 160 kg gross: 190 kg

The machine is equipped with:

- Gravity fill shoes
- Upper and lower punch holder
- Electrical control buttons incl. key switch and emergency stop
- Manual lubrication
- Standard electrical circuitry with contactors
- Drive by means of a frequency modulated AC motor with smooth start characteristic

Machine description

The main body consists of a solid frame with stainless steel shroudings. The compression compartment is easily accessible and closed off by means of a detachable transparent acrylic panels, equipped with safety switches

All components of the press, which are in contact with the product are made of stainless steel (AISI 316) or hard chrome plated.

The press is designed to conform to the most stringent GMP requirements.

Removable components are equipped with quick release clamps for fast disassembling and cleaning

Compression and die filling system

The compression system consists of a plunger actuated by a crankshaft, the die table, the holding device for the upper and lower punches as well as the ejection rod, moved by a cam disk, mounted at the crankshaft.

The gravity fill shoe carries out its oscillating movement, actuated again by the central crankshaft. It is connected to the hopper by a flexible tube

This pressure system is designed to take up to 60 KN pressure. The pressure builds up according to the filling level of the die. This filling volume can be adjusted by turning a sprocket on the lower central shaft of the punch holder.

The thickness of the tablet is adjusted by adjusting the penetration of the upper punch via the plunger on the crankshaft.

The accuracy of the tablet weight depends on the number of cycles, as well as the size of the tablet. These parameters have to be manually optimised

INSTRUMENTATION

The single punch press can either be equipped with a small LCD terminal for the digital display of the main compression force, or with full instrumentation and a data acquisition- and analysis software

Display of main compression force via LCD terminal

The single punch press will be equipped with

- Pressure cell installed in the lower punch carrier
- Amplifier , A-D converter, LCD backlight display
- Calibration functionality.

The compression force can be displayed, in KN or t (1000.kp)

When working with KN, the lowest resolution will be 0.1 KN , the highest 99,9 KN

The error could be +/- 0,01 KN

In case the display is in t, the lowest resolution is 0,01 tonnage, the highest is 9.91 t.

The error could be +/-0,001 t

INSTALLATION QUALIFICATION AND TRAINING

Tablet press

Including an operation handbook in **English** language is included in the standard supply scope