Semiautomatic Press

QCX® P40M SEMIAUTOMATIC PRESS

The P40M Semiautomatic Press produces pressed samples in tablet or pellet form for X-ray analysis. It is suited for use with non-sticky, granular samples including minerals, slag, ores, cements and raw materials.

With its high press pressure and different press tools, it has proven it's ability to reliably produce smooth tablets with a stable surface at the right height to support high-quality chemical analysis.

The press is easy operate with 16 processing programmes available – there is a press recipe to suit all sample material types. Adjustable pressing parameters provide flexibility while the set programming eliminates the risk of human error.

The press is available with four different configurations to suit the most common sampler holder types. Easy cleaning of the press tool and the holder ensures the possibility of sample cross contamination is eliminated.

ADVANTAGES

- **Powerful and precise**: the P40M Semiautomatic Press is designed to efficiently and consistently achieve the desired uniformity and density in each individual pressed pellet, ensuring increased cost-effectiveness and productivity for your operation.
- **Long-wearing**: the robust press has been enginered to withstand high pressing forces and the demands of a busy laboratory, making it a valuable addition to any sample prepartion process.
- **Safety**: it has been designed according to ergonomic guidelines for protection of your operator. Additionally, during the pressing operation, the cover is monitored by a safety switch. If the cover is opened the press stops immediately to prevent harm.

CONSISTENT AND SAFE SAMPLE PREPARATION

How it works

Powdered sample material is introduced into the press through the entry funnel.

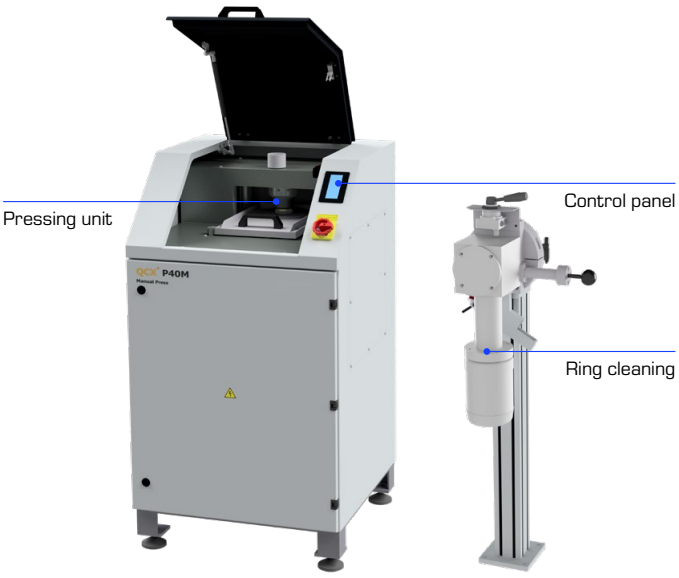
With the sample in the sample holder (a steel ring or aluminium cup), the operator starts the pressing cycle by choosing one of 16 process programmes, where all pressing parameters are adjustable.

The sample holder is moved into the pressing position where it is pressed — the pressure applied to the piston follows a ramp profile. The pressed sample – a tablet or pellet – is then transferred to the sample output/filling position.

The press comes with the option of a mechanical or pneumatically driven sample extraction device, which is available for recycling of the steel rings.

Possible configurations

The P40M Semiautomatic Press is designed for side-by-side operation with the M100M Semiautomatic Mill. Together, the machines provide a complete X-ray sample preparation solution.



Specification

Sample material	Various minerals, slag, ores, cementitious and raw materials etc., < 100 µm
Sample quantity	8 – 12 cm^3
Hardness	Max. 9 Mohs
Processing programs	16
Pressure force increase time	5 - 180 sec.
Pressure force maintenance time	5 - 180 sec.
Pressure force decrease time	5 - 180 sec.
Pressure force	40 - 400 kN
Pressing tool for ring	51.5 x 35 x 8.6 / 40 x 32 x 14 / 40 x 35 x 14 mm or Aluminium cup 40 x 7 mm
Power supply	3 x 380 – 500 V; 50/60 Hz; 1.8 kW
Operating conditions	Temperature: 5°C to 35°C Humidity: 20 – 80 %, non-condensing
Compressed air supply	0.6 – 1.0 MPa (Quality 2.4.2 as per ISO 8573-1) for option ring cleaning
Weight	Approx. 430 kg (P40M)Approx. 30 kg (Ring cleaning)
Dimensions (W x D x H)	680 x 700 x 1,270 mm

FULLER® TECHNOLOGIES

fuller-technologies.com

Copyright © 2026 FULLER Technologies. All Rights Reserved. FULLER is a registered trademark of FULLER Technologies. This brochure makes no offers, representations or warranties (express or implied), and information and data contained in this brochure are for general reference only and may change at any time.

C 05-26 800-5-ENG