PELLET PRESS PP 40

Solid, high-quality pellets are an important precondition for reliable and meaningful XRF analysis. With the PP 40, RETSCH offers a pellet press which produces strong **pellets with a smooth surface.** The PP 40 features an **individual pressure force regulation in the range of 5 to 40 t.** Besides controlling the pressure force, it also determines the time of build-up, holding and release of force during pressing. This reduces the inner tensions of the sample and ensures that **even difficult materials are pressed perfectly.**

APPLICATION EXAMPLES

cement, minerales, ores, raw materials, slag, ...

PRODUCT ADVANTAGES

- individual pressure force adjustment up to 40 tons
- pressing in steel rings, aluminium cups and free
- automatic pressure force control
- pressing tools for various diameters
- 32 SOPs can be defined and stored for routine applications
- comfortable parameter setting via display and ergonomic 1-button operation

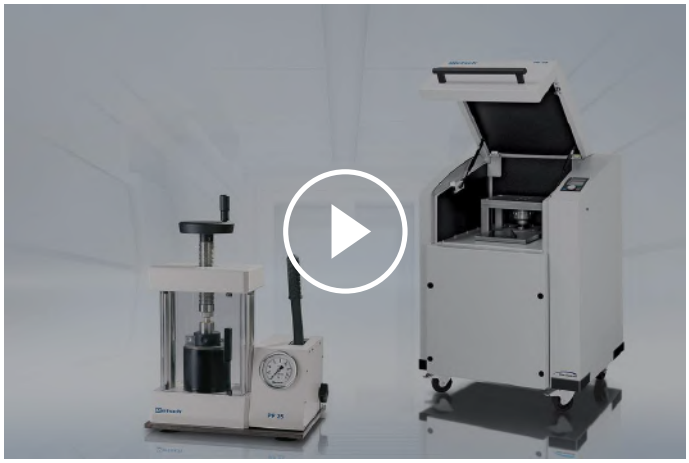
FEATURES

Applications	preparation of pellets for spectral analyses

Field of application	chemistry / plastics, construction materials, environment / recycling, geology / metallurgy, glass / ceramics
Max. pressure	40 t, automatic press
Pressure force	5 - 40 t (50 - 400 kN)
Pressure force increase / holding / decrease time	respectively 5 - 600 s
Parameter combinations	32
Steel rings (external Ø / internal Ø)	51.5 mm / 35 mm 40 mm / 35 mm (max. pressure force 20 t) 40 mm / 32 mm
Aluminium cup (external Ø)	40 mm
Electrical supply data	220-230V, 50/60Hz
Power connection	1-phase
W x H x D	836 x 1220 x 780 mm
Net weight	345 kg
Standards	CE

FUNCTIONAL PRINCIPLE

The steel ring or aluminium cup is inserted in the pressing tool of the PP 40 and filled with the sample material via a hopper. The steel ring is then pushed beneath the pressure plate and the pressing is started. During pressure build-up the density of the powder increases. The pressure build-up in the PP 40 can be adjusted in such a way that the air inside the hollows of the original powder is pressed out which increases the stability of the pellet. The maximum pressure force must be held over a certain period of time to allow full development of the interparticulate adhesive forces thus guaranteeing maximum stability.
The PP 40 provides pre-selection of the pressure holding time over a period of 600 seconds. During the pressing process the axial movement of the particles at the steel ring produces friction which in turn leads to the formation of a multi-axial stress condition. Therefore, it is important to decrease the pressure evenly and steadily as an abrupt release could lead to the destruction of the pellet. The pressure decrease time of the PP 40 can be set in such a way that a uniform release of tension is ensured.



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