

Hydraulic Laboratory Presses

High quality pellets for IR or XRF tests need solid presses for reproducible results. That's why you need to choose our Maassen laboratory presses, made of stainless steel and best quality aluminum. They can be used with most kinds of press die sets between 3 and 50 mm diameter.

Safety Features

We have limited the way the cylinder can move upwards so it cannot move out. A spring inside the cylinder makes sure that it will completely come down to the resting position. There is an integrated a pressure overload valve and we use solid stainless steel columns and a transparent cover for your safety. In addition, the motorized version has an emergency stop button and a door switch to avoid pressing with an open cover.

Easy Operation

You can use almost all die sets which are used for IR and XRF purposes. The common sizes are 13 mm for the 15 tons version or 32 and 40 mm for the 25 tons presses. We also offer more sizes - from 3 mm up to 50 mm diameter. If you have a die set with a vacuum connector, you can put the vacuum tube through the back side of the cover.

Manual Press

For the manual presses, we use a two-step-pump with a slightly smaller piston for high pressure. This makes it much easier to pump up to 25 tons. The minimum pressure to close the hydraulic lines completely is 1 ton. Then the press is able to keep this pressure for several hours. The hand valve at the side of the press controls the pressure release. A gentle pressure release avoids cracks inside your pellet.

Motorized Press

For a large quantity of pellets each day, we recommend to use our motorized press MP250M. It is also equipped with a hand valve to release the pressure gently. The pressure gets set directly at the pressure gauge by turning the front knob – easy and fast!

The next pages show pictures, technical data and special features of each version.

MP150 – manual laboratory press – 15 tons max. pressure

with pressure gauge or digital display
recommended for small die sets up to 18 mm

The standard MP150 has a pressure gauge with 80 mm diameter and a scale of 0.5 tons. This is suitable for many applications, especially with the common 13 mm die sets for IR purposes. Very easy to press.

The MP150D with its digital display shows pressure differences in 10 kg steps (0.01 tons). So you can precisely control the pressure on your die set because of these large red numbers. This is useful for very small die sets which usually don't stand high pressure and are easily overloaded.



The MP150D can be combined with an adjustable pressure limiter (p/n: MP-S1). With this special feature, you can set the maximum pressure you like to have directly at the display. The pressure will then stop at this point, even if you continue to pump. This saves the die set from overload and makes every press process reproducible.

You can also get a serial connector to send the press data to your Computer (p/n: MP-DA1).

Model	MP150	MP150D
Dimensions (H min/max x W x D)	436/538 x 370 x 300 mm	
Width between pistons	150 mm	
Min. / Max. clear height (for die set)	52 mm / 142 mm	
Display / resolution	Analogue, 0,5 to.	Digital four digit, 0.01 to.
Spindle diameter	35 mm	
Max. way of spindle	102 mm	
Cylinder diameter / max. lifting	105 mm / 25 mm	
Net. weight	43,5 kg	43,0 kg
Mains connection	–	Ext. power supply, 12 V
Order Number	54MP150	54MP150D

MP250 – manual laboratory press – 25 tons max. pressure

with pressure gauge or digital display
recommended for die sets up to 50 mm

The MP250 has a pressure gauge with 100 mm dia. and a scale of 0.5 tons. This is suitable for most applications, especially with the common 32 and 40 mm die sets for XRF purposes. Can also be used with smaller die sets. Easy to press.

The MP250D uses the same digital display as the MP150D and shows pressure differences in 10 kg steps (0.01 tons). So you can precisely control the pressure on your die set because of these large red numbers. This is useful for small die sets which usually don't stand high pressure and are easily overloaded. This makes the MP250D a press for all lab needs.



The MP250D can also be combined with an adjustable pressure limiter (p/n: MP-S2) to set the maximum pressure you like to have directly at the display. The pressure will then stop at this point, even if you continue to pump. This makes every press process reproducible. And if different persons are working with this press, they cannot accidentally overload the die set.

You can also get a serial connector to send the press data to your Computer (p/n: MP-DA1).

Model	MP250	MP250D
Dimensions (H min/max x W x D)	497/609 x 370 x 300 mm	
Width between pistons	150 mm	
Min. / Max. clear height (for die set)	73 mm / 185 mm	
Display / resolution	Analogue, 0.5 to.	Digital four digit, 0.01 to.
Spindle diameter	45 mm	
Max. way of spindle	124 mm	
Cylinder diameter / max. lifting	105 mm / 25 mm	
Net. weight	49.5 kg	49 kg
Mains connection	–	Ext. power supply, 12 V
Order Number	54MP250	54MP250D

MP250M – motorized laboratory press – 25 tons max. pressure

with pressure gauge

recommended for frequent use and die sets from 10 to 50 mm

Use our MP250M lab press if you have many applications and a lot of pellets to press. It has a 63 mm pressure gauge with a 0.5 tons scale and an integrated switch to stop the press when reaching the red mark on the scale. This red mark can be moved by turning the knob in front, it will stay at this position even when the press turned off. This will also make every press process reproducible as long as no one changes this mark.

In addition to the safety features of the manual lab presses, this press has safety door switch to prevent pressing with an open cover. And the emergency stop button is illuminated.

The handling is very easy: pushing the green button starts the pressing process and it stops when the predefined pressure is reached. A manual valve releases the pressure gently.



Model	MP250M
Dimensions (H min/max x W x D)	497/609 x 370 x 300 mm
Width between pistons	150 mm
Min. / Max. inner height for die set	73 mm / 185 mm
Display / resolution	Analogue, 0.5 to.
Spindle diameter	45 mm
Max. way of spindle	105 mm
Piston diameter / max. lifting	105 mm / 25 mm
Net. weight	63 kg
Mains connection	230 V / 50 Hz / 250 W
Order Number	54MP250M

MP5M – motorized laboratory press – 5 tons max. pressure

with digital display

recommended for frequent use and small die sets up to 8 mm

This compact laboratory press was especially designed for frequent and intense use of small die sets up to 8 mm. It uses a small electric pump and although it can handle up to 5 tons pressure, this press is able to maintain pressure below 1 ton for hours.

The pressure can be set in 0.01 tons steps at the digital display. The predefined pressure is saved even when you switch off the press. So it is perfectly suitable if you use the same kind of small die sets again and again.

The press starts working by pushing the green button, the blue one releases the pressure gently until the cylinder is back in his resting position. You can also get a manual release valve like the MP150 and MP250 presses have. It also has a safety switch at the front door to prevent pressing with an open cover.



Model	MP5MD
Dimensions (H min/max x W x D)	436/538 x 370 x 300 mm
Width between pistons	150 mm
Min. / Max. clear height	52 mm / 142 mm
Display / resolution	Digital four digit, 0.01 to.
Spindle diameter	35 mm
Max. way of spindle	102 mm
Piston diameter / max. lifting	100 mm / 25 mm
Net. weight	40 kg
Mains connection	230 V / 50 Hz
Order Number	54MP5MD

These presses are perfectly combined with one of our press die sets.
Just take a look at the separate brochure or check online at www.maassen-gmbh.de



AAS | ICP | UV-VIS | XRF | FT-IR

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