

Maassen Press Die Set 3 ... 8 mm

Instruction Manual

Thank you for buying this Press Die Set! It is meant to be used in combination with a laboratory press to get small pellets with a very smooth surface.

Each Die Set consists of 7 parts:

- Lower cylinder with 8 mm bore depth [1]
- Middle cylinder for sample [2]
- Upper cylinder with 5 mm bore depth [3]
- 2 Press pins (1x short, 1x long) [4]
- Filling tool made of PC, clear [5]
- Extraction Tool to press out pins [6]

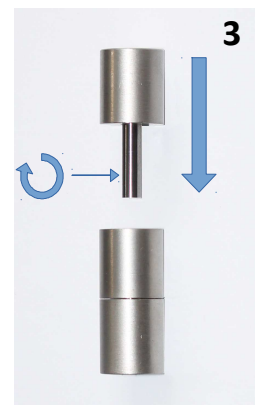
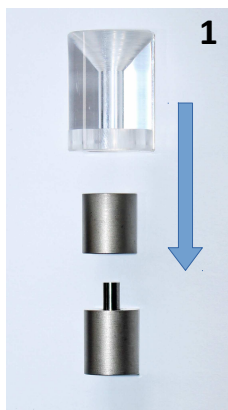


Please clean the die set before you use it the first time.

Take care of the press pins: they are made of KXF (means 90% tungsten carbide), so the edges can get damaged if you tilt them while plugging them into the cylinders.

How to fill this Die Set:

1. The short press pin needs to be placed into the lower cylinder (8 mm hole depth). **Take care that the polished side is facing upwards!**
2. Put the middle cylinder over the pin and the filling tool on top (see picture no. 1).
3. Fill in your sample and leave 1 – 1.5 mm space to the top of the cylinder. You need this space to position the long pin (see picture no. 2).
4. Remove the filling tool and put the press pin with the polished side downwards into the cylinder. Rotate the pin between your fingers while sticking in.
5. Put the press cylinder on top (see picture no. 3).



Now you can place the filled press tool inside your lab press (see picture no. 4). For Maassen lab presses you can get a centering tool for easier handling.

This is the maximum pressure you can put on your die set:

| | |
|--------------|----------------------|
| 3 mm: | max. 1.5 tons |
| 5 mm: | max. 4.0 tons |
| 8 mm: | max. 6.0 tons |



Keep the pressure on your die set for at least a few seconds, then slowly release it.

How to connect a vacuum pump:

If you need to evacuate your sample, you need a 13 mm press die set with vacuum connector and put the filled press die set into the 13 mm bore. We recommend to put one 13 mm pellet into the die set, so the middle cylinder is high enough to seal it with an O-ring outside (see picture no. 5).



How to get the pellet out of the die set:

Depending on the sample material, the pellet can be pushed out by hand or you need the filling tool to help. Remove the lower cylinder with the short pin, put the filling tool on top and place it again into the lab press (see picture no. 6). Push the cylinder down very careful (for motorized presses: do not use the motor!).

If the long pin gets stuck inside the middle cylinder, you need to use the extraction tool. Put the middle cylinder with the pin into the filling tool and the extraction tool on top. Place it into the press and turn down the spindle until the pin falls down (see picture no. 7).

Important: Please clean all parts after usage. Hygroscopic material can cause permanent damage.

