MAASSEN PRESSTECHNIK

Instruction manual
Maassen Die Set – 10 ... 50 mm

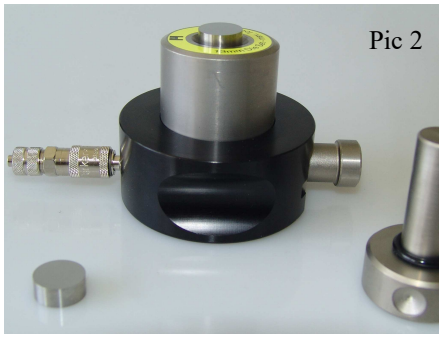
This Die set is made for use with a standard hydraulic lab press, either manual or motorized.

Before first use: Please clean all parts with an organic solvent to remove all oil which may be left from manufacturing. And please check the scope of delivery according to the picture and list at the back side of this manual.


Pic 1

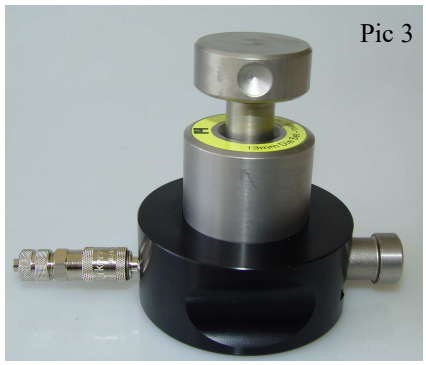
Quick and easy handling „Upside Down“

1. Take the die set out of the box. When assembled, it will look like shown in pic. 1 (all sizes of die sets have the same shape). If you need to connect a vacuum pump, please use the adapter for quick release: connect one side to the die set and the other to the vacuum hose.


Pic 2

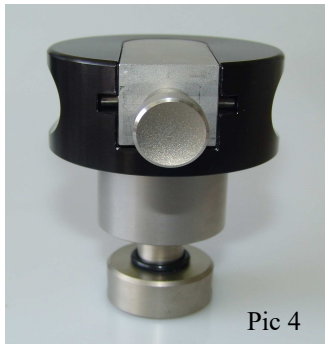
2. **Preparing:** Please push the pressure plate into the back mount all the way to the stop. The vacuum holes have to look upwards! Then you will see the vacuum connector inside the small hole on the back.

3. Now install one press plate with the polished side upwards into the cylinder (pic. 2). As they are precisely fitting, please put them in carefully, otherwise the edges may get damaged. If they get stuck, remove the slide bar and use the plunger from the other side to remove them.


Pic 3

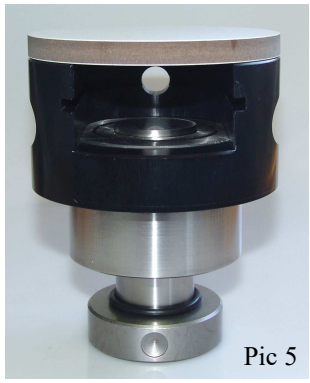
4. Now fill in your sample and take care that the surface is plain. Take the second pellet and install it with the polished side downwards. Maybe an air buffer will make it difficult to put it in completely, then just use the plunger to push it down. Now the die set looks similar to pic. no. 3.

5. Now flip the die set upside down like in pic. 4 (attention: you need to fix the plunger manually to prevent from falling down!) and insert it in the press. Take care of the maximum pressure your die set can take (depending on the used size, see reverse side).


Pic 4

6. Then fix the die set inside the press and start pressing. Hold the pressure as long as you need and release the pressure slowly. Quick pressure release will cause the sample to break.

7. Now pull out the slide bar and leave the die set inside the press. The sample is now inside the cylinder.

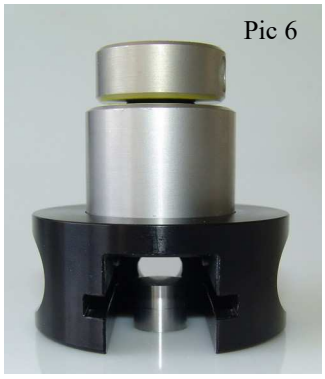

Pic 5

8. Take the pressure plate and put it on top of the die set like shown in pic. 5. Then press again slowly until the cylinder and holder will fall down and you can see your sample between the two press pellets

9. Finally take your pellets and your sample and don‘t forget to clean all parts before storage! Salts are very corrosive and may damage the die set irreparable

Also possible: standard handling

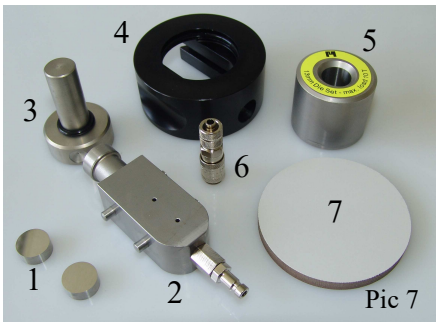
1. Prepare the die set as written before (point 1 - 4).
2. Now insert it into your press and fix it
3. Start pressing
4. After soft pressure release, simply pull out the slide bar, press again a bit and the pellets will fall down onto the press cylinder (pic. 6).
5. Remove everything and don‘t forget to clean the die set before storage!


Pic 6

Hint for 13 mm die sets: This die set includes a wooden spatula. This spatula can be placed into the socket after removing the slider. Then the pellets will fall down a bit softer and it's easier to remove them.

Scope of delivery

1. Press pellets, 2 pcs., polished on one side
2. slide bar with knob and vacuum connector
3. Plunger with O-Ring
4. black holder for slide bar and cylinder
5. cylinder with O-Ring at the bottom
6. Connector for vacuum hose
7. pressure plate for Upside-Down handling



Pic 7

All items can be ordered separately in case something gets damaged. Please contact your distributor or the manufacturer for order information.

Important informations:

- Never scrape the press plates with sharp or hard items. Scratches on the polished side only grind out with paper (like blotting or filter paper).
- Important notice for using the Die Set with motorized presses: when pressing out the pellets, please immediately stop the press after the pellets or if used upside down, the Die Set itself falls down. Otherwise the Die Set can be damaged.
- This manual has to be stored near the die set to make sure that everyone who needs to work with it, knows exactly what to do. Damages resulting of disregarding this manual are not warranted.
- We always recommend to use safety glasses and gloves when handling with hazardous material or high pressure!

Pressure Chart

Size (mm)	Max. load	Size (mm)	Max. load	Size (mm)	Max. load
10	8 tons	**20**	24 tons	**40**	40 tons
13	10 tons	**25**	30 tons	**50**	45 tons
16	15 tons	**32**	30 tons		

MAASSEN PRESSTECHNIK

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