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Instructions for handling Compounder DS 25 – 32 d

Before starting the extruder drive the machine must be heated up to the right melt temperature of your raw material which you want to use or which is still in the machine.

To reach the melt temperature inside of the machine you must wait additional 20 minutes after reaching the set-value temperature displayed at the temperature controllers !

Check the fixing screws of your mould after first time of heat-up, they must be well fixed.
Check the rotation direction of the screw´s first time you start the machine after delivery.

Wrong handling can damage the extruder, specially the screw´s can be broken !!

Only advised technicans can run the machine safety.

Safety instructions : Hot machine parts !
Melt is hot and sticky !
Use glooves for high temperature, safety glasses
and further protection equipment for your body, face and hands !

For cleaning extruder screw and barrel use soft brushes,
made from brass or copper, only.

Starting :

Switch on the heaters and adjust the right temperature at the touch-panel.

Please note : without connected melt pressure sensor it is not possible to start the motor drive !

After heat-up and 20 min waiting time you can switch on the extruder drive at the touch-panel and set a low screw speed of 10 rpm for filling the screw´s with material.
Some minutes later the melt comes out at the die and you can speed up the screw rotations.

Switch-off :

If you like to stop the compounder change the set-value at the touch-panel to „0“ and switch off.

Degassing :

The barrel is designed by different pieces, first part is designed for connection of the hopper further closed parts follows and one degassing part is fitted, also.
The degassing part can be working with open hole or with closed hole.
Materials which need no degassing can be running with closed hole.

Hose adapter :

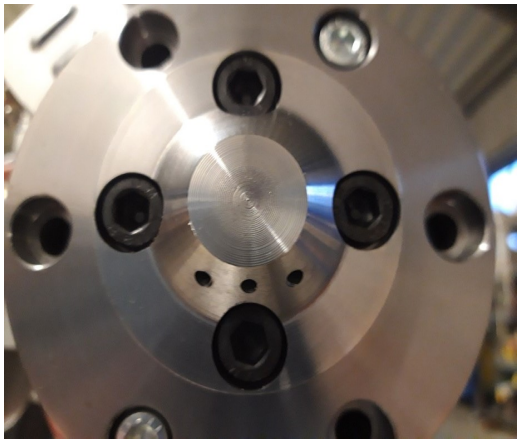
The hose adapter is designed with bores for the 2 screw´s at the one side and the output side is designed with one circular bore for further connections as a mould with strand die.
The hose adapter has one special connection hole for the melt pressure sensor.
The sensor must be fixed everytime during production.

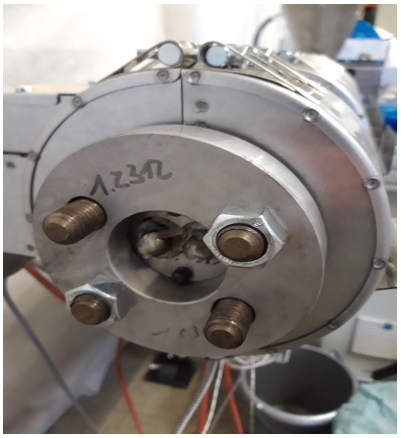
Melt pressure sensor :

For dismanteling the melt pressure sensor make shure that the machine is heated-up.
The melt has contact with the sensitive membrane of this sensor.
If you turn the sensor with cold melt, the membrane will be distroyed immediatley and the sensor is damaged.
Also for fixing the sensor it will be better to heat-up the machine.
Please use for turning and fixing the sensor the hexagonal section, only.

Dismanteling of the screw´s :

For dismanteling and cleaning the screw´s heat-up the machine, dismantle the mould and the hose-plate and fix the separate service plate with M16 nuts, properly.

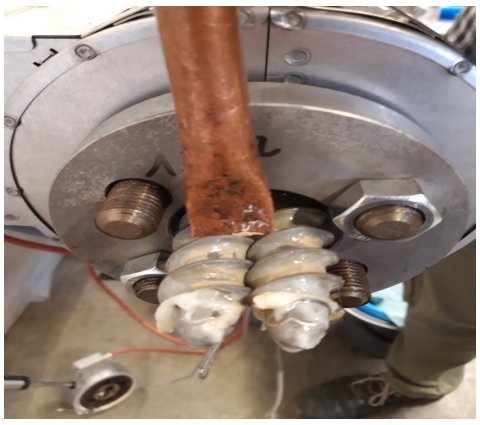




Then open the small screws at the couplings which fix the screw shafts with the couplings.

Now pull out the screw´s in extrusion direction with a copper tool (soft material).



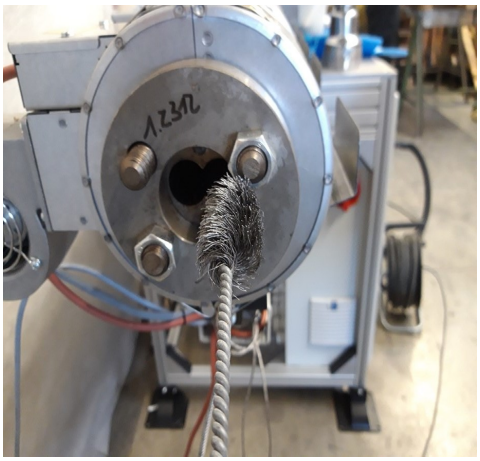


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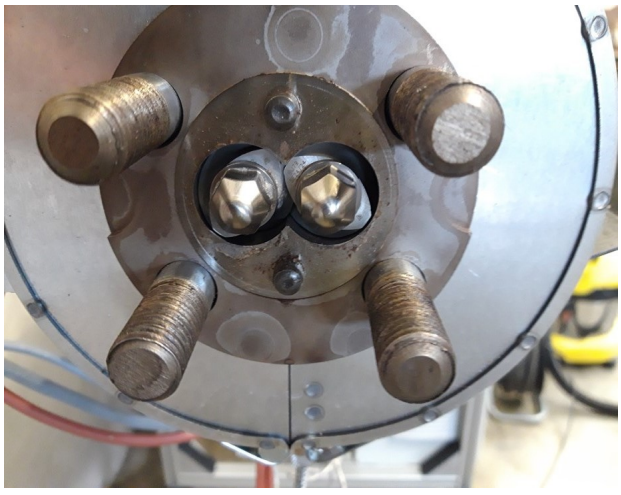
Cleaning of the screw´s :

Clean-up the screw´s immediately by soft brushes (copperl brushes) and clean the barrel inside, also. It´s also possible to clean the screw´s and the die in a special cleaning bath.

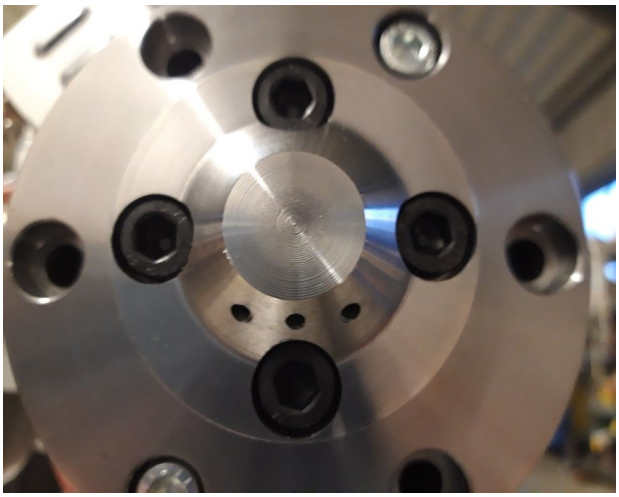




Before you install the screw´s again in the barrel control the barrel hole. It must be clean and free of any parts !
After cleaning put the screw´s together on a desk and check the right position of the screws to each other. Then prepair the screw shafts with some silicone spray and push the screw´s together back in the bores of the barrel. They must easily moving !
To find the exact position for pass into the couplings, turn the screws together a little bit and you´ll find the right position back in the couplings without any force. Fix the small screws at the coupling elements. Now dismantle the service plate.



Fix the hose plate crosswise with the 4 nut´s which you prepaire with special grease for high temperatures. After heat-up and before you start the extruder check the fixing of this 4 screws again to get a seal connection.



Check the plug-connection at the melt presure sensor, all thermo-couples and the heater plug at the mould. If everything is well fixed, heat-up the machine and you can start again.
For filling the screw´s with material, run the machine with small speed (max. 40 rpm)

ATTENTION : During filling the empty machine with material it´s possible to get compressed air in the melt which shoot out powerful and with noises at the mould.
Use protections for hands and face !

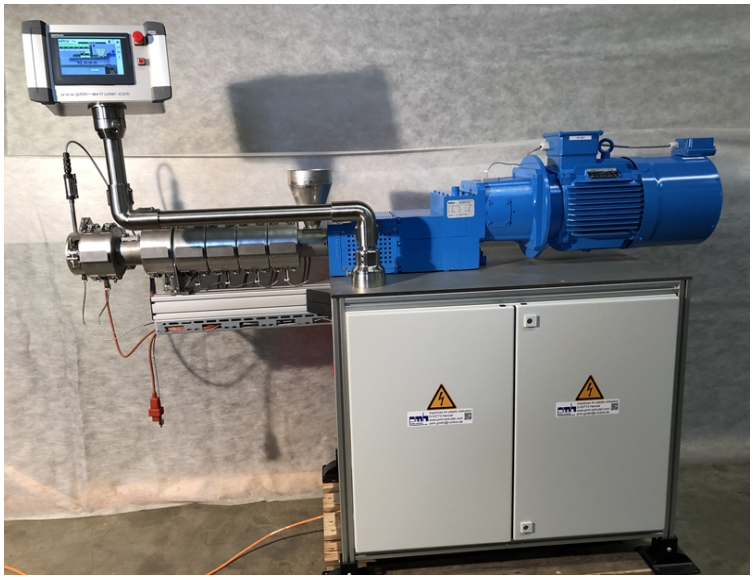
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Technical datas of compounder DS 25 – 32 d

compounder type	:	DS 25 – 32 D
main drive	:	AC-Motor
motor capacity	:	11 kW
screw diameter	:	25 mm
screw lenght (segmented)	:	32 L/D
screw speed	:	400 rpm max.
output torque	:	95 Nm / shaft at 400 rpm
coupling safety switch	:	64 Nm
melt pressure max.	:	150 bar
surface of screw	:	BU 79
surface of barrel	:	1.8519 nitrided
heaters at barrel	:	6
power of barrel heaters	:	1200 Watt / each
cooling fans at barrel	:	6
heaters , additional	:	1 for the hose-plate 1 for the mould
temperature sensors	:	type Fe-Ko, type "J"
melt pressure sensor	:	600 bar

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First works for commissioning



Pick-up the compunder from the pallet and set to the required ground floor position
Take care about the hight machine focus !

Connect power cable with 3 x 400 V + N + PE with pre-fuses 63 A at the terminals 0-X0 inside the control cabinet.

The melt pressure sensor is already installed at the hose-adapter.
Please note : without connected cable at the melt pressure sensor it is not possible to start the motor drive !

The mould with the changeable die for 3 strands is already fitted.
Also heater and thermo-couple are installed at „Zone 8“