

Delta 900 3D printer operating instructions

Delta 900 with ram extruder

Specifications

Printer type: delta

Print area: cylinder h 440 mm, r 100 mm

Clay container: 7 kg (ram extruder – screw press)



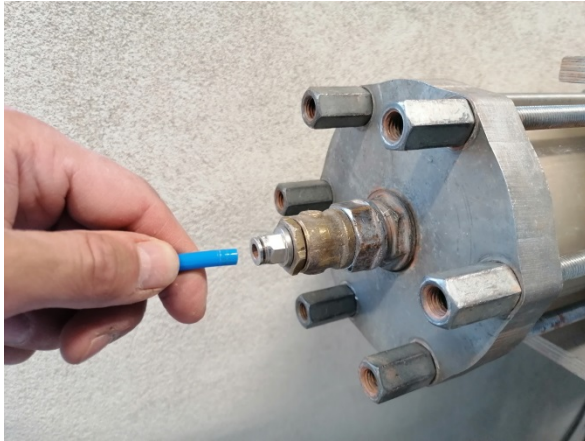
Key elements:

1. Printer
2. Computer
3. Controller box (Arduino)
4. Nozzle holder and nozzle
5. Connecting cables
6. Hoses
7. Ram extruder
8. extruder controller (with switches)

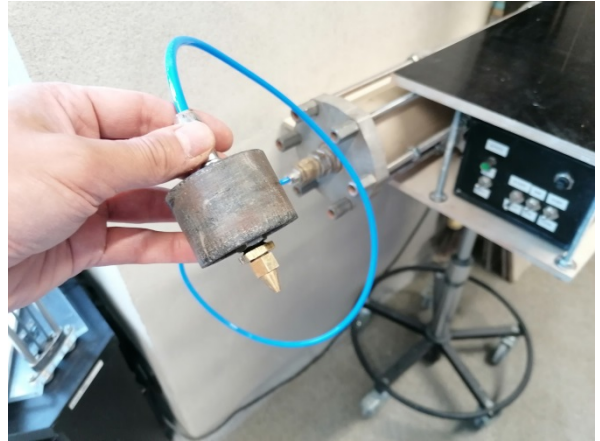
Setting up the printer

1. Connect the printer with the controller (Arduino) box. Plug it in and turn it on.
2. Connect the computer with the controller (Arduino) box using the USB cable
3. Launch Simplify3D

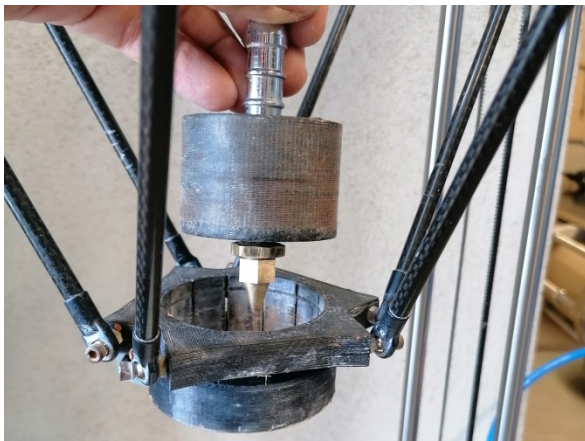
Connecting ram extruder with the printer



4. Insert the hose leading to the extruder's outlet



5. Insert the other hose leading to the nozzle holder



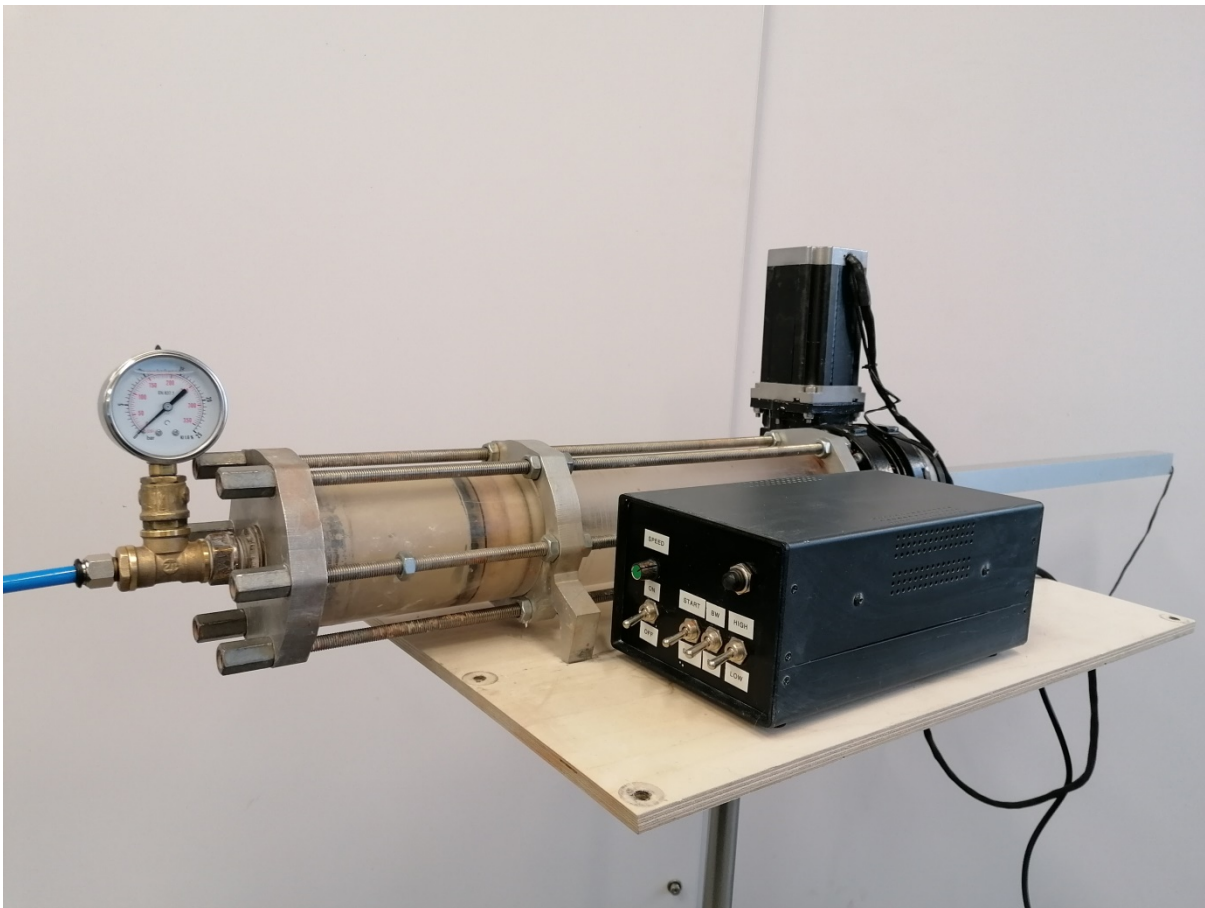
6. Insert the nozzle holder into the printer tube holder collar



Nozzle selection

We have created universal nozzle system for all printers in the workshops of EKA. It is possible to use all the nozzle sizes ranging from 0,5 to 6 mm with every printer introduced in this material. Fine materials (porcelain, clay without or with very fine grog) enables to use smaller nozzles and print with high precision. Rough material needs large nozzle enabling large scale print. Find out the suitable nozzle size by experimenting with different materials.

Ram extruder



Ram extruder (screw press) is a machine that is used to press material into the hose that is connected with the printer nozzle.

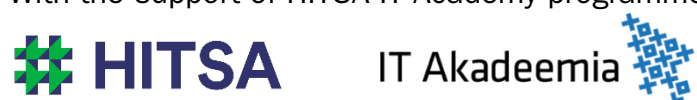
Ram extruder controller



To get the material to flow from the nozzle:

1. Make sure that the extruder's SPEED turn button is rotated to the lowest speed position (to left)
2. Make sure that the direction switch is set on forward direction (FW)
3. Make sure that the speed selector switch is set on LOW speeds
4. Switch on (ON) the main power of the controller
5. Switch on the START switch and the ram starts to move
6. Turn up (rotate) the SPEED button slowly and wait for the material to start flowing from the nozzle.

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