

FGX Pellet Extruder

Compression screw extruder
for medium-format FGF 3D printing

Key features

- 3D printing technology: Fused Granulate Fabrication (FGF)
- Layers 0°– 45° relative to print bed

Material compatibility

- Max. heating temp: 400°C
- Pellet fraction: up to 5mm
- Thermoplastic and filled thermoplastic materials, incl. short fiber filled thermoplastic composites

Electrical

- Heating arrangement: 3 zones
- Heating power: 3 x 200 W / 230 V
- Motor: Nema34 with 5:1 reduction gearbox and closed loop control with overload detection
- Temperature sensors: RTD500

Extruder hardware

- Screw diameter: 20mm
- Barrel length: 240mm
- Pellet inlet diameter: 20mm
- Compression ratio: 1:3
- Screw material: Stainless Steel
- Barrel material: Stainless Steel

Supplied nozzles

- Mount thread: M30
- Diameters: 3mm and 5mm
- Nozzle material: Stainless Steel

Part cooling

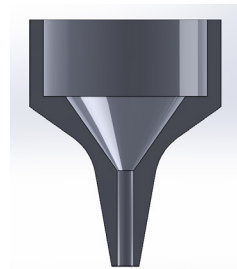
- Part cooling: 2x blower fan (24V)

Dimensions

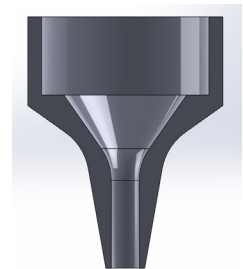
- W x D x H: ~400x250x200 mm
- Weight: 15 kg



Profabb FGX pellet extruder



3mm nozzle



5mm nozzle