



X800 / X1200

MEDIUM FORMAT PELLET EXTRUSION 3D PRINTER

Printing large parts too costly? No more.

A robust pellet extrusion 3D printer of an original design, built for low-cost, high-volume polymers and composites. For a machine that can print meters-long parts, it's low upfront and running costs will surprise you — as will its capabilities.

LOW UPFRONT COST

From the very start, this machine is designed to be scalable in a sub-industrial manufacturing environment, with a focus on low upfront costs, low running costs and thus low cost per part.

LOW COST PER PART

Polymer pellets and reclaimed pelletized polymers can radically cut the cost per part compared to other 3D printing methods — savings that accumulate any time you hit print.

LOW RUNNING COSTS

The machine is designed for the real world — most parts are industry standard, everything is bolt-on and accessible. Cut your own printbeds from standard plywood.

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Motion modes and build volume

- Cartesian / swing bed — 0° layers
 - X – 800 / 1200 mm
 - Y – up to 2000 mm / up to 80kg
 - Z – 1000 mm
- manually switchable to
- Conveyor — 45° layers (infinite Y axis)
 - X – 800 mm
 - Y – up to 80kg, part length dependent on printbed length and roller extensions
 - Z – 700 mm (45°)
- Max. toolhead weight: 20 kg

Printing technology & materials

- Fused Granulate Fabrication (FGF)
- Profabb GX5 pellet extruder
 - Pelletized thermoplastic materials
 - Fraction up to 5mm
 - Nozzles 3 mm, 5mm, 7mm
 - Up to 350 °C
 - Up to 5 kg/h
- Custom extruders / toolheads possible
- Built-in pneumatic feeder from internal (12 / 14 liters volume) pellet tank

Machine design and kinematics

- Powder coated steel frame
- Forklift-liftable
- Leadscrew drive on X and Z axis
- Automatic Z axis leveling
- LED illuminated build area
- Mobility wheels
- Closed loop control with overload detection on all motors

Build plate

- Build plate width: 870 / 1250 mm
- Build plate length: 600-3000 mm
- Recommended build plate thickness: 15–25 mm
- Build plate material: coated plywood / other materials possible

Machine dimensions (w x d x h)

- Transport/storage: 1200 / 1650 x 800 x 1750 mm
- Operation: 1200 / 1650 x 3000 x 1750 mm
- Weight: 270 / 305 kg
- X800 fits on an 1200 x 800 mm Euro pallet, when not in use, folded for storage or for transport

Operation and software

- Built-in touchscreen
- Klipper firmware
- Remote monitoring
- Print file format: G-code
- WIFI / LAN connection for print file upload
- USB memory stick support

Power & connection requirements

- 1 phase 230 V 16 A
- Compressed Air min 4 Bar

Regulatory compliance

- CE, WEEE

Ambient conditions

- Operating ambient temperature: 15-35 °C, 10-90 % RH

Optional accessories

- Roller extensions for longer part printing in conveyor mode
- Optional external pellet tank and feeder

Optional services

- On-site installation and training
- On-site maintenance
- Extended warranty / SLA