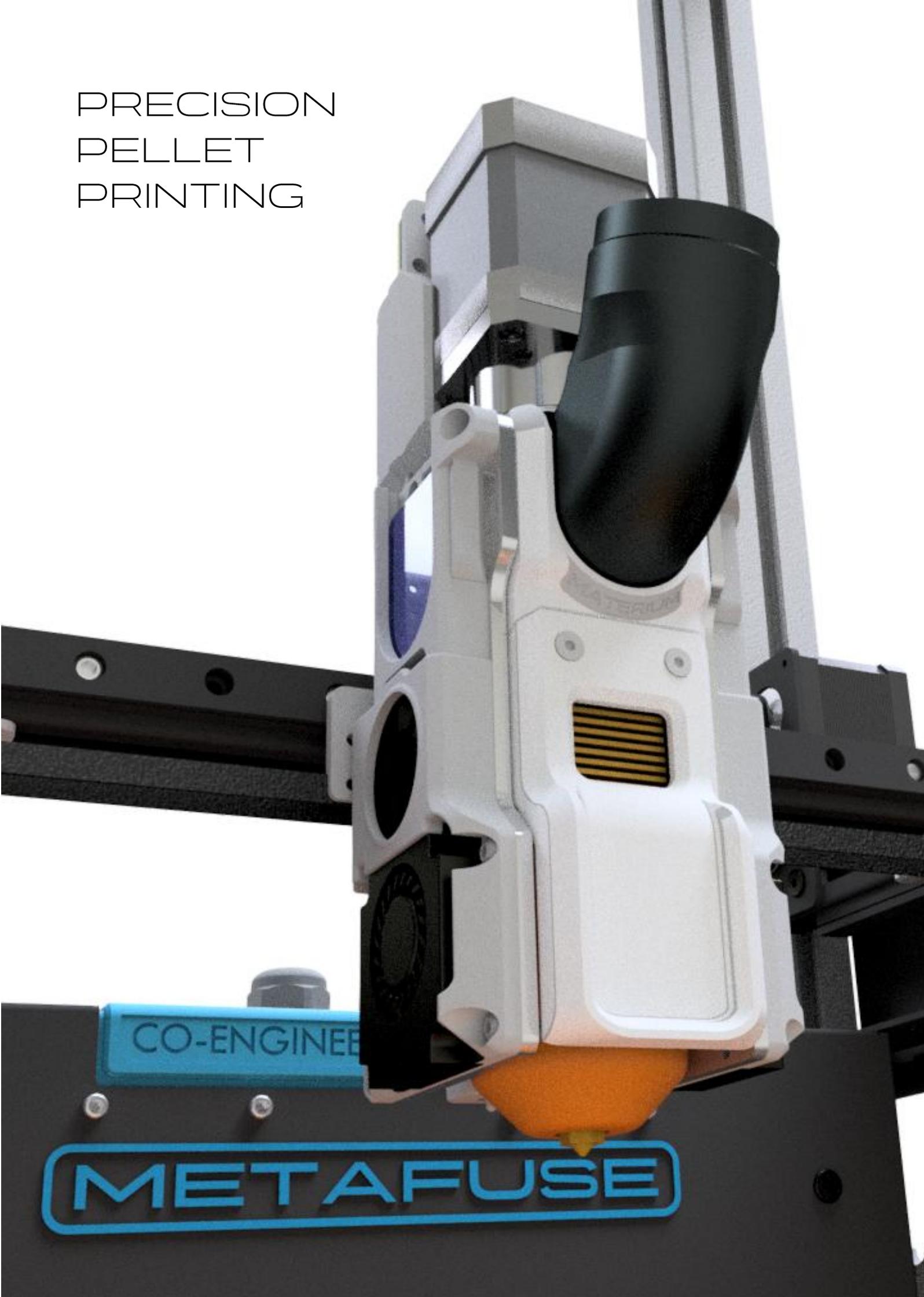


PRECISION
PELLET
PRINTING



CO-ENGINEER

METAFUSE

MATERIUM PELLET EXTRUSION SYSTEM

Precision pellet extruder for 3D Printing and Closed-loop Material Workflows

Physical Characteristics

Weight	1.35kg
Dimensions	80x70x240mm (LxWxT)
Compatibility (mechanical)	MGN12H rail / V-wheel rail
Compatibility (electronics)	Universal (Screw-in Toolboard) / Ender3V3SE (Plug-n-play Toolboard) / Barebone
Screw	Dia.12mm / 3:1 Compression Ratio
Material Size	0.05-7mm pellets/granules/flakes/powders
Nozzle Type	Zenflow Nozzle (Recommended) / E3D v6 Nozzle
Nozzle Size	0.4 - 1.8mm
Barrel	Mass Vectoring Barrel (Brass)
Feeding	Gravity-fed, Passive Vectoring

Thermal Characteristics

Temperature	Max.450C
Heater	300W VAC Coil (0-200C in 50 Seconds)
Sensor	PT1000
Control	24v Signal from controller (Solid State Relay)
Feed Zone Cooling	2x3010 Axial Fans
Part Cooling	2x4010 Radial Fans
Insulation	Silicone Sheath and SUS304 Covers

Volumetric Flowrate Examples

Material	Nozzle	Throughput
Polimaxx ABS	0,4mm	305g/h
Enviplast PLA	0,4mm	367g/h
Recycled PET Re grind	0.4mm	219g/h
Enviplast PLA	0.8mm	662g/h
Generic PP	0.8mm	600g/h

Optional Accessories

MP-30 PP Build Plate
Zenflow Nozzle Bundle
Barrel Maintenance Tool