

# ROBOT EXTRUDER



**CCAAD**

Composite Additive Manufacturing

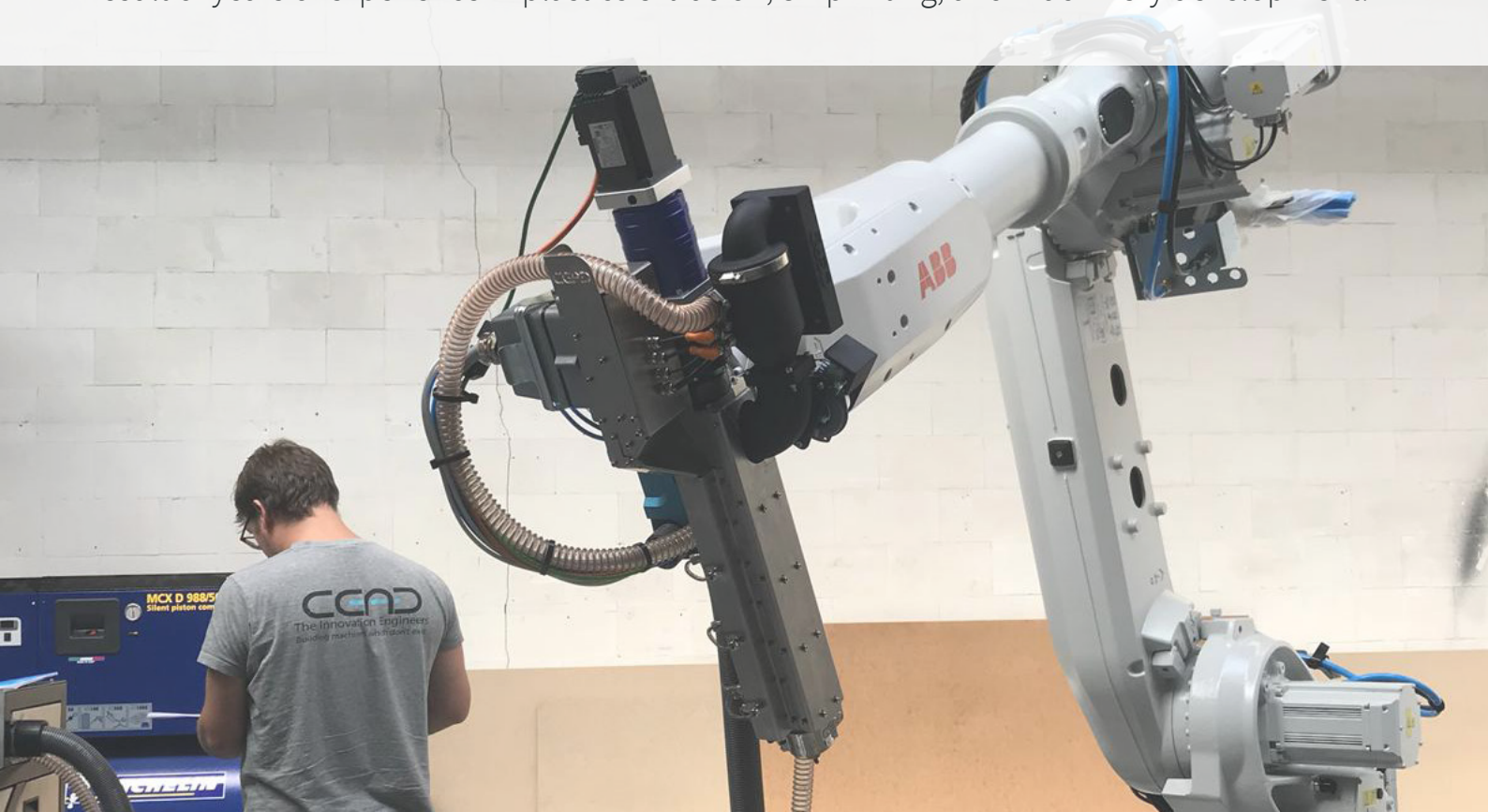
# ROBOT EXTRUDER

---

Do you want to start 3D printing on a large scale with composite thermoplastic materials? Are you already in possession of a robotic arm or CNC machine? This lightweight pellet extruder is one of our solutions to get you started.

## STAND ALONE

The extruder can be operated as a stand alone unit. The whole system is operated through a Siemens touch screen, which runs our specifically designed software. This software is the result of years of experience in plastics extrusion, 3D printing, and machinery development.



## LIGHTWEIGHT & EASY INTEGRATION

The extruder is engineered to be lightweight for the sole purpose of mounting it directly on a robotic arm. With several types of robotic arms available on the market today, we are able to install the extruder on most types. Easy integration and implementation is possible on your robot or CNC machine. Enabling to control the extruder with your robot.

## HIGH PRODUCTION OUTPUT & LOW COSTS

The extruder is able to use a wide variety of thermoplastic materials. By using pellet material instead of filaments for 3D printing, operational and part cost are reduced. Another great benefit of using pellets for 3D printing is the higher output than filament based machines.



# FEATURES

---

This solution includes everything needed for extruding thermoplastic pellet material. Including an extruder, software, electronics, material storage and material handling system.

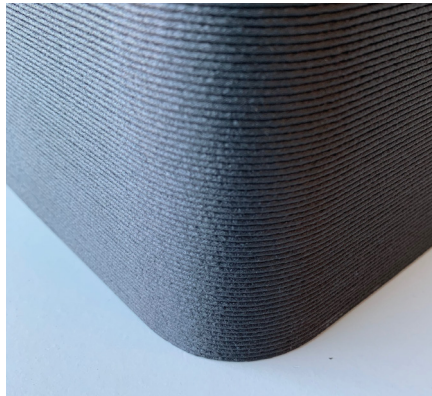
- Weight of extruder is < 29 kg
- Max output of 12 kg/hr
- Nozzle range from 2mm up to 12mm
- High torque 20:1 planetary gearbox
- Siemens servo motor
- Material storage of 25 kg

**rPETG 30% GF**



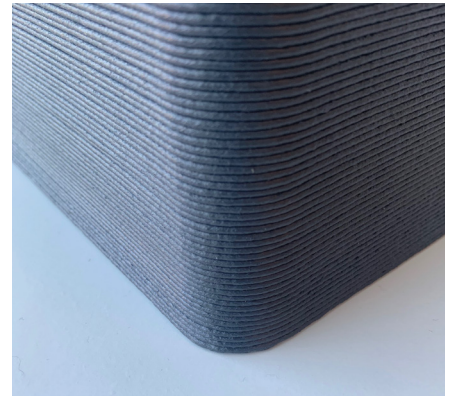
Recycled material, affordable and well suited for use outdoors due to UV stability.

**PET 50% GF**



Extremely stiff and strong. Excellent surface finish after post processing and good thermal resistance with high HDT.

**ABS 20% CF**



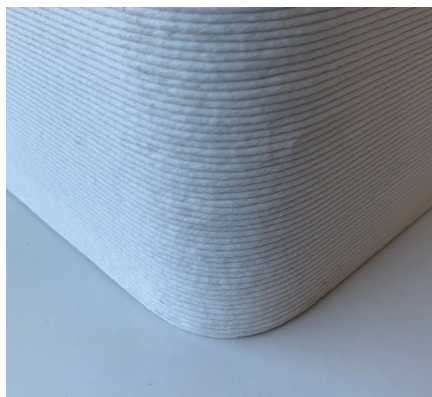
Good mechanical properties, general purpose engineering plastic. Excellent processing.

**PLA/WF**



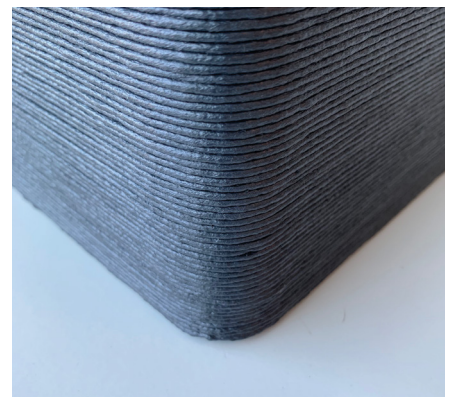
Bio based plastic with cellulose fibres from wood with very good printing quality.

**PP 50% GF**



Commodity material, affordable and excellent chemical resistance.

**PPS 30% CF**

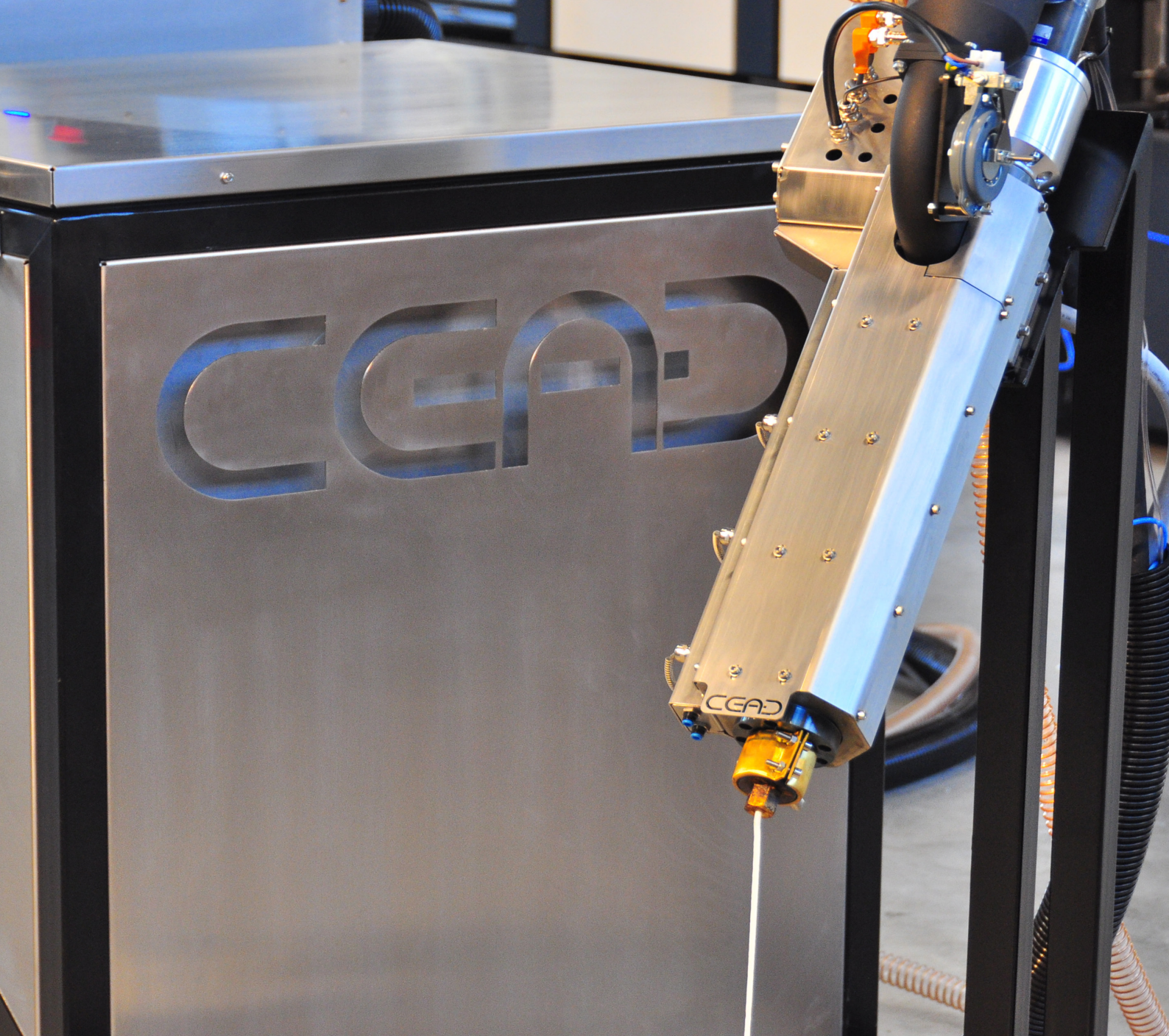


Good mechanical properties and good resistance to chemicals, heat and fire.

**AND MANY MORE**

**Please contact us to discuss possibilities for your applications.**





For more information please visit: **[www.robotextruder.com](http://www.robotextruder.com)**

#### **About**

CEAD is a technology supplier of 3D printing equipment on the frontier of large scale composite additive manufacturing. In 2017 we started the development of our world wide unique and patented Continuous Fibre Additive Manufacturing (CFAM) technology. Which makes it able to 3D print large scale continuous fibre reinforced products with high speed. With passion for technology and innovation, we are driven to find creative solutions for our clients and their applications. Helping them to transform their business activities with our technology.

**CEAD B.V.**

Turbineweg 18 | 2627 BP | Delft | The Netherlands  
+31 (0) 15 737 01 83 | [info@ceadgroup.com](mailto:info@ceadgroup.com)  
[www.ceadgroup.com](http://www.ceadgroup.com)