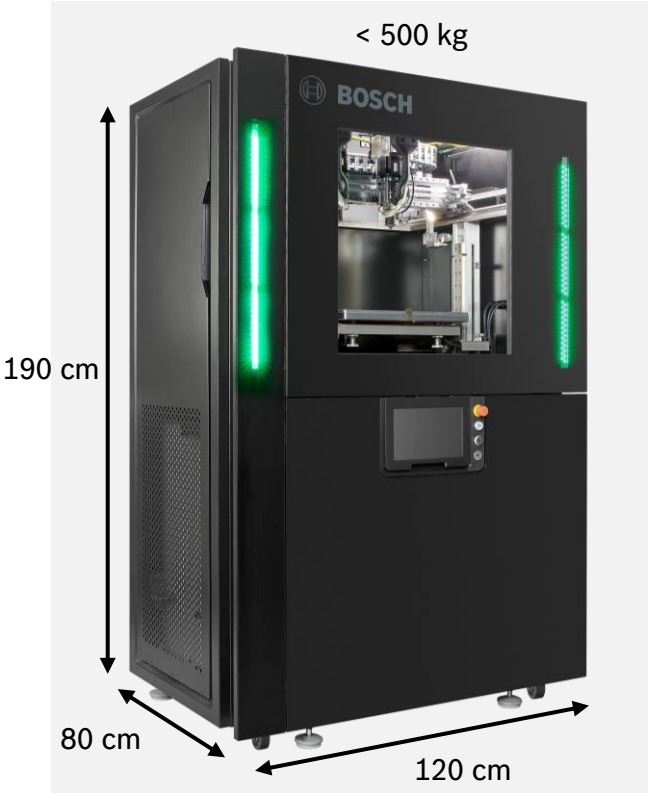
# Bosch Industrial Additive Manufacturing

3D Printer MVP - (Minimum Viable Product)


# Table of contents

# 1. MVP

The Bosch Industrial Additive Manufacturing MVP 3D printer is the next step in industrial manufacturing and has the ability to use industrial granulate directly as printing material. We want to change the future of manufacturing and we have developed our own technology combined with a client-oriented business model. What differentiates us from our competitors is that we enable our clients to dive right into 3D printing using common industrial but sustainable materials.




### 1.1 Description

The MVP will provide features to be usable by early clients who can provide their feedback according to their needs. Do you think your wishes in a viable 3D printer are unheard? Be part of our journey and develop a printer that suits your needs.

# 2. MVP Highlights

### 2.1 Materials & Extruders

The MVP highlights are the features and services the 3D printer already comes with. The MVP will start with reinforced PA6 (injection moulding material). The printer has two extruders, and it can print one material at a time. In the next steps it will be able to print with more industrial materials (e.g. injection moulding material like reinforced PA66). With further development it will handle two different materials simultaneously, adding the possibility to use support material as well.

### 2.2 Build Volume

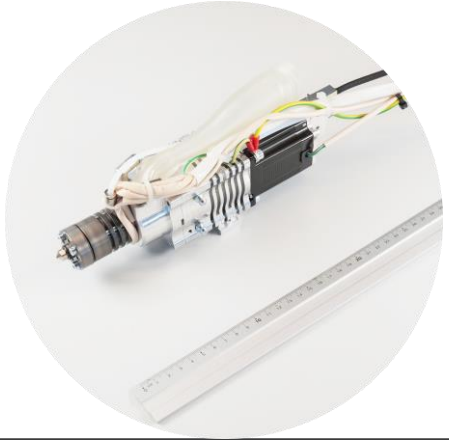
The usable build volume is:
420 mm x 420 mm x 420 mm.

### 2.3 Temperatures

The extruders can reach temperatures up to 350°C and the build plate up to 120°C.

### 2.4 Print Resolution

The MVP starts with a 0.4 mm nozzle. Later, nozzle sizes will vary between 0.2 – 1.0 mm and the layer height can be as little as 0.05 mm.



### 2.5 Build Rate

The build rate starts with 8 cm³/h and is increasing with the next update.

# 3. Feature List

| | | |
|---|---|---|
| **3.1 Printer Performance** | | |
| | Technology | Pellet Toolfree Manufacturing |
| | Usable build volume | 420 mm x 420 mm x 420 mm |
| | Build rate | Starting with 8cm³/h |
| | Layer height | 0.05 – 0.25 mm |
| | Nozzle size | 0.4 mm |
| | Extruder temperature | up to 350 °C |
| | Bed temperature | up to 120 °C |
| **3.2 MVP Material** | | |
| | Granulate | Reinforced PA6 |
| **3.3 Dimensions (WxHxD)** | | |
| | Printer | 1200 mm x 1900 mm x 800 mm |
| | Transport | approx. 1200 mm x 1900 mm x 800 mm |
| | Operation area | 2800 mm x 1800 mm |
| **3.4 Weight** | | |
| | Printer | < 500 kg |
| | Transport weight | approx. 600 kg |
| **3.5 Requirements** | | |
| | Power supply | 400 V, 16 A, 50 HZ |
| | Compressed air | Supply necessary for MVP |

**Bosch Industrial Additive Manufacturing**
grow/PAP
Postfach 30 02 40
70442 Stuttgart
Germany

www.bosch-industrial-am.com