

*Large scale printing
with recycled materials*

RECYCLED

3MT HDP



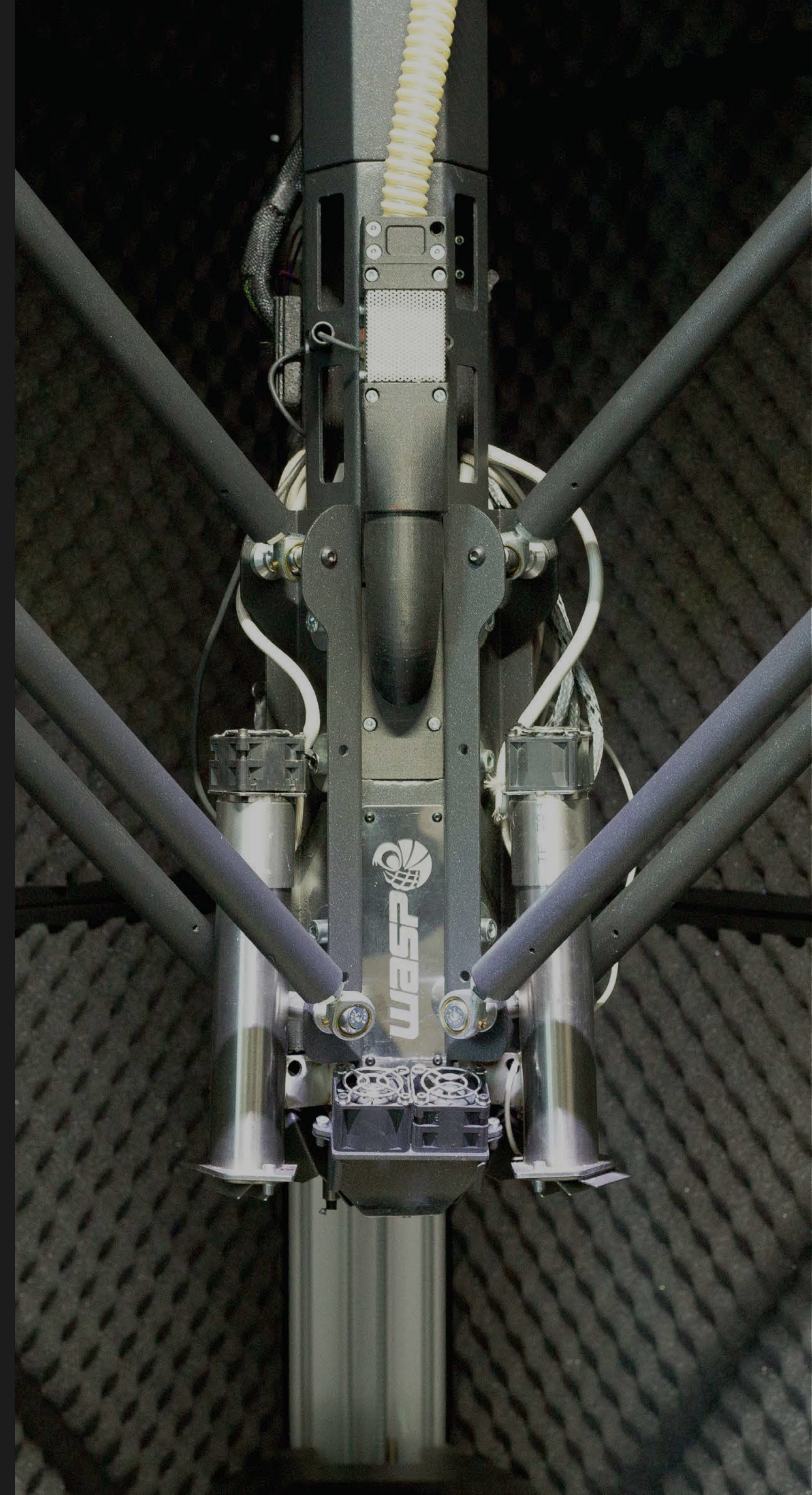
WASP 3MT HDP is a large format 3D printer designed to print objects up to 1 meter in diameter and 1 meter in height using plastic granules. Groundbreaking technology for massive prints.

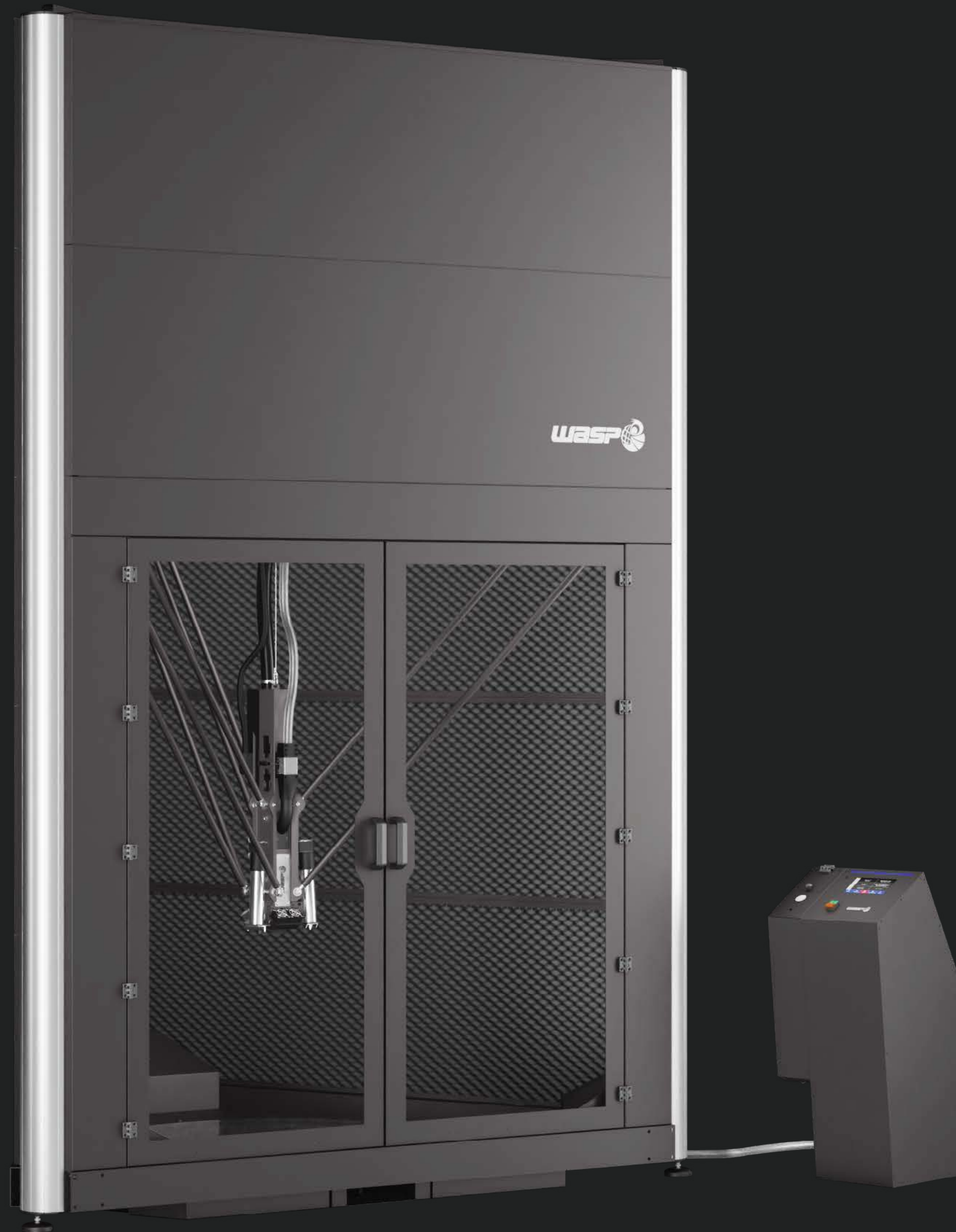
WASP 3MT HDP 3D printer for plastic granules

One of the main innovations of the 3MT HDP is its patented FIRECAP, a moving hot chamber system installed on the effector, capable of reaching 150°C. The FIRECAP system exploits all the heat by introducing it only where necessary, that is, in the highest layers, this allows optimal infra-layer adhesion and excellent surface quality on technical and recycled materials also, whilst reducing energy consumption.

The 3MT HDP features new brushless motors, making it quieter, stronger and more precise. This has made it necessary to include pneumatic brakes, in order to ensure maximum safety in every condition. The chassis is now equipped with a 2B2 class laminated safety glass for thermo-acoustic insulation. WASP 3MT HDP can be connected to the network and then be managed directly via mobile phone, tablet or computer.

A camera has been included inside the printer to monitor printing even from afar. The user experience has been further simplified with the adoption of a new 7-inch TFT touch display and an LED bar located at the top of the printer console, which allows to recognize the working status from afar.





1. Closed loop brushless motors

2. Pneumatic continuous feeding

3. Safety door sensors with instantaneous pneumatic brakes

4. New patent pending heated chamber

5. Steel core precision belts

6. Negative pressure hepa filtration

7. Active vacuum buildplate control

The innovative vacuum retention system VAC (Vacuum Active Control), allows you to replace the printing plate in a few seconds, ensuring the total absence of micro-moves during printing even at high temperatures. The VAC also allows you to use printing plates of different types compatible with the printing material used, ensuring excellent adhesion without the aid of glues. Once the print is over, the VAC automatically releases the printing plate that can be curved manually allowing easy removal of the printed part.

Industrial Line



Recycled materials

Experiment with an incredibly wide variety of customized and WASP official recycled materials.

Localized Hot Chamber

The new FIRECAP system ensures perfect infra-layer adhesion throughout the whole build volume, minimizing energy consumption.

Big prints big savings

Print big object 24/7 thanks the pneumatic continuous feeding system using plastic granules up to 10 times cheaper than filaments.

Fast, strong and quiet

Brushless motors and a new heavy-duty extruder ensure reliability on cost effective processes.

Easily interchangeable printing plates

Easy adhesion and removal of the print with Vacuum Active Control System and dedicated buildplates.

Wi-Fi module

Machine connected to the network for monitoring and control.

The WASP 3MT HDP is equipped with a pneumatically loaded HDP extruder capable of extruding standard, technical and recycled thermoplastics.

WASP HDP XL extruder

A capacitive sensor placed on the extruder body detects the presence of material and independently requests it from the main 20-liter tank located on the side of the printer, interrupting the process in case the material runs out. The main tank is equipped with a pressure regulator with oil/water separation tank. Customer requirement for the operation of the pneumatic loading system is a compressor of at least 8 bar and 50L capacity, with 8mm outlet pipe.





Print directly from plastic granules for art, furniture and automotive applications.

Materials

PELLET: Plastic granules are up to 10x cheaper than filaments, minimize printing time and can be easily recycled.

PLA 100% recycled
PET 100% recycled

Other materials:

PLA wood
ASA
PLASMIX

PRODUCT SPECIFICATIONS

Print volume: Ø 1000 x h 1000 mm
Max output: 2kg/h
Nozzle diameter: 3mm
Layer resolution: 0,3 mm - 1,5 mm
Print speed: 100mm/s
Travel speed: 200mm/s
Connectivity: WiFi, LAN, USB
Hotend temperature: Max 350°C
Chamber temperature: Max 150°C

SOFTWARE

Supplied slicing software: Simplify3D®
Supported slicing software: Cura, Slic3r
File type: .stl, .obj, .gcode
Supported OS: Windows, Mac, Linux

INTERFACE

7-inch TFT touch screen display and 60 LED RGB bar

PHYSICAL DIMENSIONS

Dimensions: 215 cm x 235 cm x 305 cm
Machine weight: 250 kg
The required space for assembly is:
5,5 mt x 2,5 mt x h 3,60 mt

Box A: 310 x 60 x 55 cm
Box B: 227 x 60 x 136 cm

POWER AND COMPRESSED AIR REQUIREMENTS

Input: 220/240 V 50/60 Hz (110V available)
Assorbed power: Max 5Kw
Average power: 1,5Kw
Air compressor: 8bar, 50L. tank, 6x8mm pipe

ENVIRONMENT REQUIREMENTS

Operating temperature: 15-30°C
Storage temperature: 0-30°C

MECHANICS

Frame: aluminum, steel, laminated glass.
Bed: machined aluminum with interchangeable plates.
Movement: nylon wheels on anodized aluminum sliders, PU steel core belts.
Insulation: thermo-acoustic polymer foam.

MATERIALS

WASP: PLA, ABS
Other: 100% recycled PLA, PET, PLA wood, ASA, PLASMIX

Technical Details



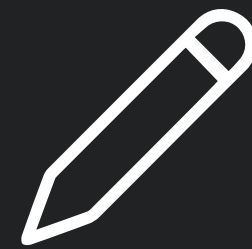
Industry 4.0 compliant technology. 3MT HDP is designed to print large scale objects with plastic granules.



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