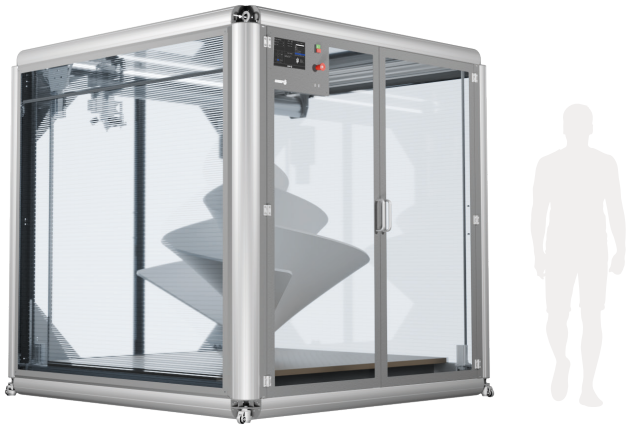
WASP CUBO HDP

TECHNICAL SHEET



PRODUCT DESCRIPTION

WASP CUBO HDP is the new large-scale pellet 3D printer designed for the **design and manufacturing** industries.

It's a compact, **ready-to-use machine** that brings together years of experience and technological innovation.
We designed this printer inspired by four key values: **simplicity**, **efficiency**, **reliability**, and **sustainability**.

Entirely designed and manufactured in Italy in our laboratories, it's built to ensure **maximum productivity and versatility**, even with complex materials and in production environments.

TECHNICAL SPECIFICATIONS

Technology	FGF
Print Volume	1200 x 1200 x 1200 mm
Nozzle diameter	Standard 5 mm, Optional (1, 2, 3, 8 mm)
Pellet size	From Ø 2 mm up to Ø 6 mm
Pellet tank capacity	Esternal (Direct connection to the dryer or the bag)
Layer resolution	Min. 0,5 mm (with a 1 mm nozzle) Sug. 2,5 mm (with a 5mm nozzle)
Print Speed	Max. 100 mm/s
Travel Speed	Max. 200 mm/s
Connectivity	WiFi, LAN, USB port
Hotend temperature	Max. 300°C
Motor	Brushless closed loop
Operating environment	15 - 30 °C
Storage	0 - 30 °C
Kinematic	Cartesian
Supported slicing softw.	Simplify3d, Slic3r, Orcaslicer, WASPslicer, Superslicer, Cura
File type	.stl, .obj, .gcode
Supported OS	Windows, Mac, Linux
Remote control	Web interface

PHYSICAL DIMENSIONS

Printer dimensions	200 x 200 x 200 cm
Printer weight	400 kg
Packaging dimensions	220 x 220 x 220 cm tailored wooden box crate
Weight with packaging	800 kg

POWER AND COMPRESSED AIR REQUIREMENTS

Input	220/240V 50/60Hz
Power consumption	Average 450 w Max. 1 kw (Power-on load)
Compressed air	8 bar, 100 L/min. tank 8 mm pipe

MATERIALS

Officials WASP	PLA, PETG
Recycled	PLA 100% recycled ABS 100% recycled PET-G 100% recycled PLASMIX
Compatibles	PLA WOOD,ASA, ABS, TPU, etc...
RIGENERA 3D	SHREDDED PLA, SHREDDED PETG

Totally developed and made in Italy
WASP s.r.l. | Via Castelletto 104, Massa Lombarda 48024
P.iva IT02673660391

www.3dwasp.com info@3dwasp.com

ENCLOSED BUILT VOLUME

The enclosed build volume ensures thermal consistency and **safer operation**, making it ideal for printing with challenging materials like **PETG** or **recycled composites**.

PRE-ASSEMBLED SHIPPING

Its design supports both **pre-assembled shipping or on-site assembly**, offering unmatched flexibility in installation, with our team providing installation services worldwide.

DESIGNED TO WORK WITH IMPURE MATERIALS

Thanks to its **rechargeable filtration system**, the machine ensures a safe working environment, even in offices and studios. The system is designed to capture and neutralize **fumes and odors** produced during printing, including those generated when using **impure or recycled materials**.

BUILT-IN CONTROL PANEL

The machine comes equipped with a built-in control panel that includes an **integrated slicer**, eliminating the need for an external PC. However, connecting an external PC remains fully supported, offering flexibility for users who prefer to prepare their files with their own software or hardware setup.

BRUSHLESS MOTORS AND BED LEVELING

Motion on the XY axes and extruder is driven by **brushless motors**, delivering greater precision, speed, and silence during operation.

A high-precision **automatic bed leveling sensor** is integrated to ensure optimal first-layer adhesion and to eliminate the need for manual calibration, even on large surfaces. Additionally, a built-in **electronic leveling bubble** continuously monitors the print bed's position, ensuring it remains perfectly level throughout the entire printing process.

AUTO FEEDING SYSTEM

For added convenience and safety, the machine includes an auto feeding system. Material is continuously monitored by a **capacitive sensor** that halts printing if supply runs out.

ABILITY TO PRINT MICROPLASTICS

The **powder recirculation system** always keeps particles in motion, ready for printing without waste. Thanks to this continuous flow, even powders that would be trapped by traditional filters can be used efficiently, maximizing the reuse of recycled material. Thanks to this technology, **you can truly recycle, including even the smallest particles**.

MECHANICAL CLAMPING OF THE BED

The clamping system enables the efficient **production of large parts**, providing a practical and reliable solution for **high-volume printing**. Unlike a heated bed, which on very large surfaces can cause warping, detachment, or uneven heating, the **clamps keep the part perfectly secured** throughout the entire printing process.

MATERIALS

The machine **can print non-proprietary materials**, ensuring maximum versatility. However, for optimal performance, the use of the **WASP material line** already tested and approved by our team is recommended. To assess the printability of non-proprietary materials, a dedicated **service from our R&D** Team is available.

CUSTOMER SUPPORT

We guide you through your journey in the world of 3D printing with a range of services and years of experience:

- Remote assistance
- 3D printing course
- Maintenance contracts and extended warrenty

OPTIONALS AND ACCESSORIES

WASP CUBO HDP is compatible with the RIGENERA extrusion system, which allows to **print directly from in-house recycled shredded plastics**. RIGENERA kit for the WASP CUBO HDP includes:

- RIGENERA shredder
- Dehumidifier

NOTE: all the optionals can be purchased separatly from the order.