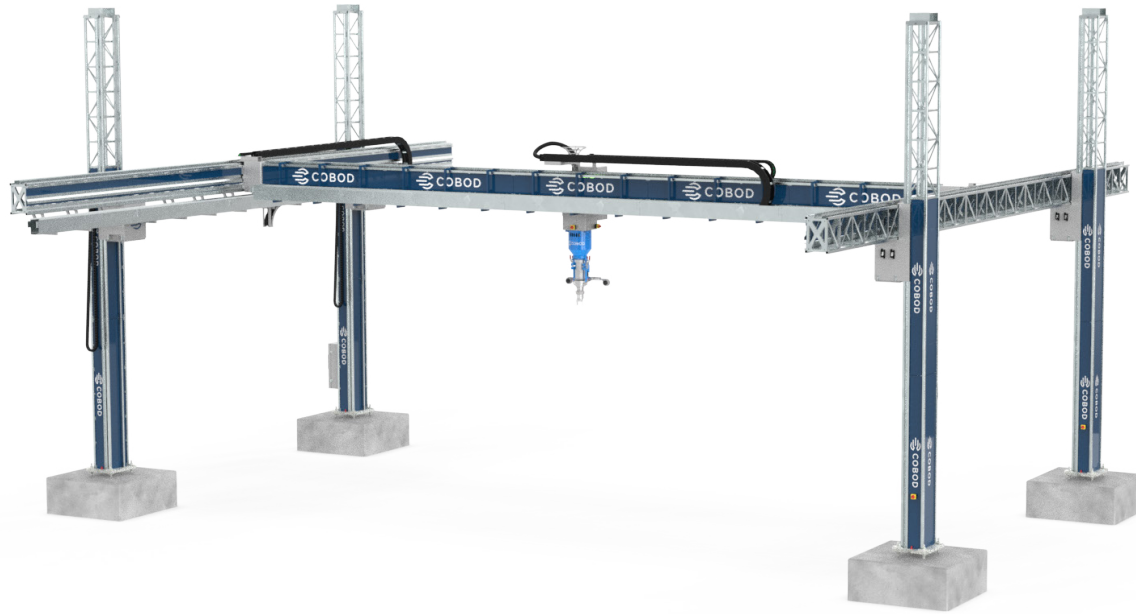


BOD2 3D Construction Printer

Developed for Large, Tall, and Complex Construction Projects

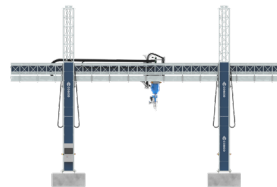


The BOD2 is COBOD's most widely distributed and versatile 3D construction printer, known for its modular gantry design, structural stability, and adaptability across a broad range of project types. Built to meet the demands of real-world construction, it supports both research-scale and full-scale applications, with proven operational record in diverse climates and complex construction settings.

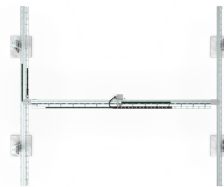
The printer accommodates a wide range of 3D printable materials, but stands out for its ability to print with real concrete, a capability that enhances structural performance, lowers CO₂ emissions, and enables the use of locally-sourced raw materials. With precision extrusion and a highly configurable setup, the BOD2 supports automated construction of both specialized structures and large-scale, multi-story buildings.



Front view



Side view



Top view



High Structural Stability for Tall Designs

The BOD2 provides the dimensional accuracy and structural stability required to print tall buildings and geometrically complex structures. Its gantry system ensures consistent precision at height, making it well suited for multi-story construction, curved walls, and advanced architectural features.



Scalable Configurations for Diverse Project Needs

From compact setups in research labs to full-scale construction deployments, the BOD2 scales easily to meet project demands. Its modular design supports rapid reconfiguration without system changes, ideal for evolving site conditions and varied build scopes.



Flexible Foundation Solutions for Uneven Terrain

The BOD2 can be installed directly on existing foundations or on transportable concrete bases. These bases can be cast at different heights, allowing the printer to stay level on sloped or uneven terrain, without compromising print accuracy or structural performance.



Optional DN65 AHMS for Higher Volume

The BOD2 comes standard with COBOD's DN50 Advanced Hose Management System (AHMS), ensuring continuous and controlled material delivery. For higher throughput needs, it also accommodates DN65, making it adaptable to both research and high-volume construction environments.

Technical Specifications

Mechanical and Operating Parameters

Max. Printable Area (PA)	14.62 m 47.97 ft (X-axis) Unlimited (Y-axis) ¹ 8.53 m 28.00 ft (Z-axis, incl. standard concrete bases) Z-axis measurements include standard concrete bases. The printable height is extendable when using taller bases.
Max. Installation Area (IA)	18.69 m 61.32 ft (X-axis) Unlimited (Y-axis) ¹ 12.44 m 40.81 ft (Z-axis, incl. standard concrete bases)
Weight	Depends on the printer configuration. For further information, please contact your regional sales representative.
Max. Noise Level	70 dB(A)
Recommended Operating Temperature	5 - 45 °C 41 - 113 °F
Emergency Stops (E-stops)	The printer is equipped with a minimum of 7 E-stops for maximum accessibility and safety during operations. The E-stops are distributed as follows: 3 on the Printhead, 1 on each Z-column (minimum of 4 columns), 1 on the Operational Stand, and 1 on the Operators Remote.
Motor Movement System	The system uses electric servo motors with encoders. These motors offer precise control over movement (position, speed, and acceleration) using feedback sensors to ensure accurate and efficient performance.

Electrical Requirements

Current	32 A 30 A
Frequency	50 Hz 60 Hz
Voltage	380 - 480 V (3 phases + N + PE (WYE))

¹ The Y-axis length of the BOD2 3D printer is virtually unlimited. Repositioning and movement of the printer must comply with product specifications, AHMS limitations, and site-specific constraints. For more information, please contact your sales representative.



Printing Specifications

Printer Setup Time	Depends on the printer configuration. For further information, please contact your regional sales representative.
Recommended Team	1 Printer Operator (PO), 1 Printer Operator Assistant (POA) 1 Material Operator (MO), 1 Material Operator Assistant (MOA) (Hand-on helpers are also recommended as supporting team members)
Layer Height ²	Up to 75 mm 2.95 in
Layer Width ²	Up to 500 mm 19.69 in
Max. Aggregate Size	8 mm 0.31 in
Hose Compatibility	DN50 / DN65
Max. Printing Speed ³	500 mm/s 19.69 in/s
Printhead Throughput	1.5–3.6 m³/h 52.97–127.13 ft³/h
Fibers	Fibers can be added to the concrete mix depending on the size of the nozzle.

Control System and Connectivity

Operational Interface	COBOD Web Control Interface
Setup and Calibration Software	SoftNA
Supported Browsers	Microsoft Edge, Google Chrome, Mozilla Firefox, and other browsers compatible with Windows operating systems.
Network Connections	Wi-Fi or LAN

² Layer Height and Width depend on the size of the nozzle.
³ Printer speeds are capped at 500 mm/s (19.69 in/s) by default, but higher speeds can be unlocked upon customer request.