

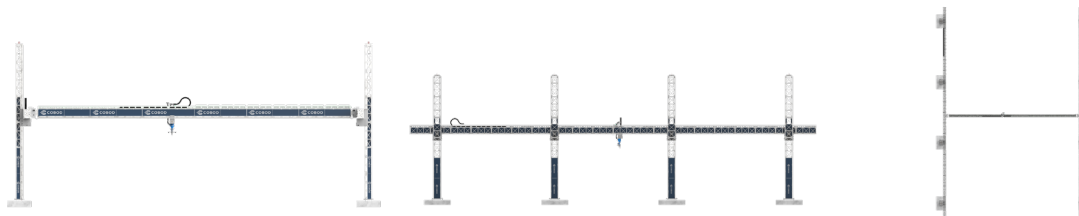
BODXL 3D Construction Printer

Enables Industrial-Scale and Multi-Story 3D Construction



The BODXL is COBOD's largest printer, engineered to meet the demands of large-scale industrial and commercial construction. Built on the same modular gantry concept as the BOD2, it extends the printable area significantly, making it suitable for printing industrial structures, multi-story apartment buildings, office complexes, and larger utility structures - all with the precision and stability required for complex geometries and tall builds.

In addition to supporting a broad range of 3D printable materials, the BODXL is optimized for real concrete, enabling high-performance structures made from locally sourced materials. With the addition of a standalone operational stand, the BODXL provides enhanced oversight and streamlined coordination on complex job sites.



Front view

Side view

Top view



Expanded Printable Area for Industrial and Multi-Story Projects

The BODXL extends COBOD's modular gantry system to support construction of larger and taller structures, including industrial structures, office buildings, and apartment complexes. Its increased reach opens new applications previously constrained by footprint limitations.



Optimized Local Concrete Material Strategies

The BODXL accommodates a wide range of 3D printable materials but is engineered for high-performance concrete printing. This enables use of locally-sourced materials and supports structural demands at industrial scale.



Standalone Operational Stand for Site Efficiency

A separate operational stand allows for improved site oversight, easier access to system controls, and clearer coordination on large-scale jobsites, especially important for high-traffic, multi-structure environments.



Modular Configuration for Flexible Deployment

Despite its size, the BODXL retains full modularity, allowing for adaptable configurations across varied project types and terrains. This flexibility ensures seamless integration into existing site plans and workflows.

Technical Specifications

Mechanical and Operating Parameters

Max. Printable Area (PA)	30.00 m 98.43 ft (X-axis) Unlimited (Y-axis) ¹ 23.86 m 78.28 ft (Z-axis, incl. concrete bases)
Max. Installation Area (IA)	37.30 m 122.38 ft (X-axis) Unlimited (Y-axis) ¹ 27.20 m 89.24 ft (Z-axis, incl. concrete bases)
Max. 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
Corrosion Protection Classification	As a standard, the printer is classified under C3 corrosion class, with C4 class available as an optional upgrade.
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 followed: 3 on the Universal Carriage, 1 on each Z-column (minimum of 4 columns), 1 on the Operational Stand, and 1 on the Operators Remote. The system utilizes servo motors, electric motors that convert electrical power into mechanical power, providing precise control of position, velocity, and acceleration with feedback sensors for high-performance motion control.

Electrical Requirements

Current	120 A
Frequency	50 Hz 60 Hz
Voltage	380 - 480 V (3 phases + N + PE (WYE))

¹ The Y-axis length of the BODXL 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	12 mm 0.47 in
Hose Compatibility	DN75
Max. Printing Speed ³	X-axis: 500 mm/s 19.69 in/s Y-axis: 300 mm/s 11.81 in/s
Printhead Throughput	1.5–3.6 m³/h 52.97–127.13 ft³/h
Fibers	Steel 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 (Duet)
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) on the X axis and 300 mm/s (11.81 in/s) on the Y axis, but higher speeds can be unlocked upon customer request.