

3D Concrete Printing for Agriculture



X-Hab 3D brings advanced mobile 3D Concrete Printing (3DCP) technology to the agricultural industry, enabling sustainable, cost-effective, and rapid construction of essential farm structures. Our solutions empower farmers to build smarter, faster, and stronger with unmatched versatility and efficiency.

Why Choose X-Hab 3D for Agricultural Applications?

- **Faster Construction:** Build essential farm structures on-site in a fraction of the time.
- **Cost Efficiency:** Minimize labor, material, and waste costs with automated construction.
- **Durability:** Fireproof, weather-resistant, and pest-resistant structures built to last.
- **Flexibility:** Print custom designs directly from CAD software, even on uneven terrain.
- **Remote Capabilities:** Operates in off-grid locations using onboard power.



Revolutionizing Farm Infrastructure

Key Features & Capabilities

- **Real-Time, On-Site Printing:** Print large farm structures like barns, silos, and stables directly on location.
- **Vertical & Flatwork Printing:** Capable of precision vertical construction and flatwork pouring for floors and troughs.
- **Scalable Designs:** Build up to 24 feet high and 14 feet below grade with unlimited width and length.
- **Digital Design Flexibility:** Modify structures mid-build using computer-driven CAD designs.
- **Easy Transport & Setup:** Fully assembled system transportable via heavy-duty pickup and trailer, operational in under 2 hours.

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Applications in Agriculture



Efficient Solutions for Farming Needs

- **Farm Buildings:** Construct barns, stables, feed storage, and housing for animals.
- **Utility Structures:** Build silos, troughs, water storage, and curved barriers.
- **Infrastructure:** Create pathways, drainage systems, and durable retaining walls.
- **Custom Designs:** From simple utility constructions to complex architectural designs, the possibilities are endless.

Dedicated Agricultural Support:

Your Partner in Building the Future of Farming

- **Training:** Hands-on training for setup, operation, and maintenance.
- **Support:** Secure 24/7 virtual technical assistance for uninterrupted operations.
- **Warranty:** Comprehensive coverage for manufacturing defects.

Driving Sustainability in Agriculture

X-Hab 3D supports the agricultural industry's shift toward sustainability with reduced carbon emissions, efficient use of materials, and minimized construction waste. Our technology empowers farmers to focus on what matters most: growing the future.

Examples of 3D Printed Farm Structures



Experience how X-Hab 3D can transform your farm infrastructure:

📍 Website: www.xhab3d.com

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X-Hab 3D: System Specs



Performance			
Print speed	0 to 1.97 feet / s (304 mm / s)	Position location accuracy	1/4 inch (6.4 mm)
Material flow rate	1.8 cubic yards / hr.	Path accuracy	1/8 inch (3.2 mm)
Maximum aggregate size	3/16 inch with M-Tec 3DCP+; up to 3/8 inch with larger mixer / pump	Layer height - range	1/2 to 1.5 inches (12.7 to 38.1 mm)
Printable area	Unlimited width & length; 24 feet height and 14 feet below grade	Layer width - range	3/4 - 3.0 inches (19.0 to 76.2 mm)
Horizontal print reach	16 feet (4.9 meters)	Compatible 3DCP mixes	Designed to work with all types of 3DCP mixes within aggregate limits
Maximum reach height (robotic arm and lift mechanism)	24 feet (7.3 meters)	Time to set up / take down	Approximately 2 hours
Maximum reach below grade	14 feet (4.3 meters)	People needed to set up and operate	2
Material feeding	Standard is manual load bags to silo, compatible with pneumatic options		

Mobile System Dimensions / Operating Characteristics			
Mobile platform	12 x 6 x 8 feet	Maximum travel incline	45% grade
Robot arm axes	6 baseline, optional 7	Operating temperature range	45-90 degrees F.
Mobile 3DCP weight	12,860 lbs.	Maximum operating humidity	90%
Driving speed	3 mph	Transport temperature range	14 - 122 degrees F.
Diesel generator size	38 kW	Remote control	Mobile/mixer/tool path
External power supply	3 phase, 480V, 60Hz	Optional broadband	Secure links
Leveling capability	Self-leveling outriggers		