Manufactured and distributed by:

Cosmos LAB

3D CONCRETE PRINTING SYSTEM

PROFESSIONAL TECHNOLOGY. MAXIMUM VERSATILITY

COSMOS LAB is a 3D printing solution designed for **technology centers, universities, research laboratories, and companies seeking to develop materials, experiment with new applications, and manufacture parts through additive manufacturing**. Its compact design and adaptability to different mixing and pumping systems allow for configuring a solution tailored to each project's needs.

Technology	3D printing of cementitious materials
Printing area - X Axis	2,500 mm
Printing area - Y Axis	1,500 mm
Printing area - Z Axis	1,500 mm
Printer weight	500 kg
Nozzles	Interchangeable
Control and electronics system	B&R Industrial Automation
Mixing and pumping system	Configurable according to application*

APPLICATIONS

Technology centers and universities

Applied research, technical training, process experimentation, and validation of additive manufacturing technologies.

Materials research and development

Testing of new formulations, technical mortars, sustainable mortars, special cements, and mixtures with additives or recycled materials.

Circular economy and sustainable materials

Study of formulations with recycled materials, alternative aggregates, and industrial by-products, subject to technical validation.

Precast industry

Development and validation of new products, production of molds, special formwork, and short runs of concrete parts.

Batch manufacturing of parts

Production of precast elements, construction components, architectural pieces, and customized products.

Architecture and design

Go straight from design to production. Prototyping, decorative elements, urban furniture, and organic complex geometries.

CONFIGURABLE MIXING AND PUMPING SYSTEM

COSMOS LAB allows integrating different material preparation, mixing, and pumping solutions, depending on each client's requirements.

Configuration options:

- Independent pumping systems.
- Combined mixing and pumping systems.
- Specific solutions for research, material development, or part production.

M-TEC® P20	M-TEC CONNECT® P20 3DCP	M-TEC® DUO-MIX 2000	M-TEC CONNECT® DUO-MIX 3DCP+
Compact mortar pumping system. *Click for more info.*	Smart pumping system for 3D printing. *Click for more info.*	Continuous mortar mixing and pumping system. *Click for more info.*	Smart mixing and pumping system for 3D printing. *Click for more info.*

The choice of the mixing and pumping system will depend on the required material, granulometry, and flow rate, and must be validated by the COSMOS 3D technical team. The machine image is indicative. The final design may vary.