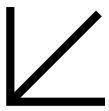


Shape Lab

A.R.G.O.S. 140200

The Shape Lab at the Institute of Architecture and Media at TU Graz conducts research on sustainable building materials and innovative production technologies. The 3D printer for earth-based materials A.R.G.O.S. 140200, which was developed and built by the researchers themselves, is brand new.

Photos: Lunghammer – TU Graz



The project is a collaboration between the Institute of Architecture and Media (Julian Jauk, Lukas Gosch and Milena Stavric) and the Institute of Building and Energy (Markus Bartaky), Jetclay and Esterhazy.



The team is open to collaborations and research projects.

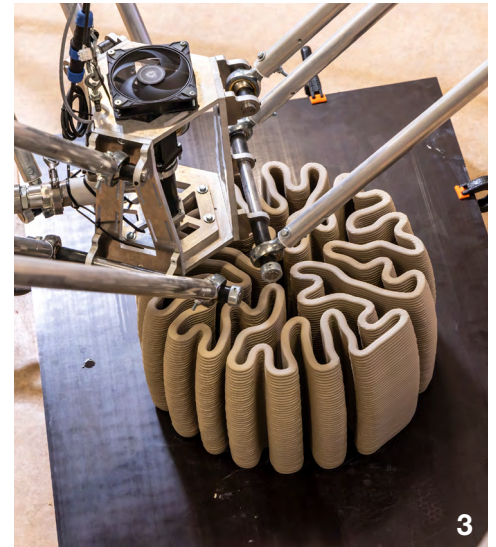
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1 The A.R.G.O.S. 140200 printer can print complex components up to a size of 140 x 200 cm. Earth-based materials such as clay are used for printing.



2 The A.R.G.O.S. 140200 was developed entirely by the team itself. The three flexible guide arms for the print head make precise work and complex structures possible. The aim is to be able to manufacture entire components from sustainable raw materials.



3 Research is also being carried out into the optimum material mix for printing. Experiments are being carried out with clay as a starting material in different compositions and with mycelium inoculation, which stabilises the material.

Video of the printing process

4 The designs that are later implemented with the printer can be designed with conventional software. The print shown creates a coral-shaped side table, which is later completed with a glass top.

