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Purpose This research investigates the possibility of adapting industrial fabrication methods to produce mass customized ceramic components for complex tectonic systems. The aim is to bring the practice of building ceramic structures close to the contemporary production context by proposing a revision of a well-established production method – clay extrusion – and informing it with deep computational design and robotic fabrication techniques[1-8]. **Method** The envisioned industrial scenario is emulated by fabricating a series of ceramic prototypes through the use of a 6-axis robotic arm equipped with a wire-cutting tool, developing ruled-shaped interlocking clay units for the creation of innovative load-bearing walls. A systematic workflow allows for the direct stream of information from a parametrically-discretized input surface to the generation of cutting paths for shaping clay bodies through the robot. **Results & Discussion** The combination of high-tech computational design and robotic fabrication processes with low-tech onsite assembly allows for the generation of serialized mass-customized ruled-geometry ceramic units for hybrid structures, such as doubly-curved loading-bearing walls with enhanced structural performances. The result is a fast, economic, and efficient way to fabricate highly differentiated ceramic components with the use of robotic technologies.

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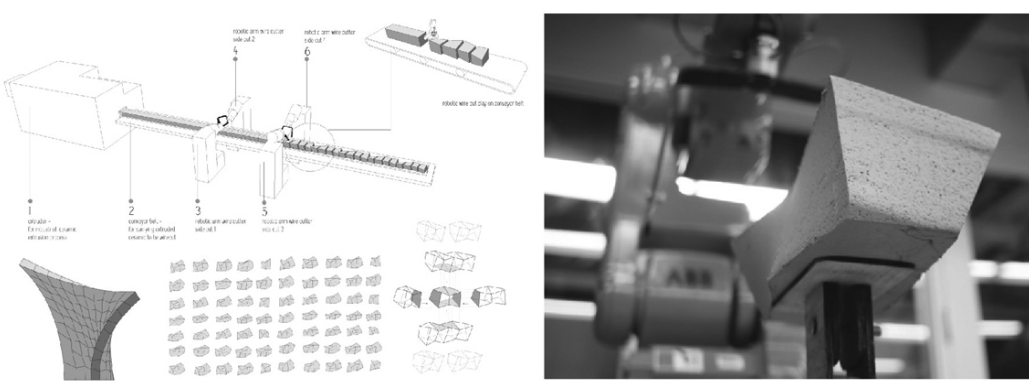

Figure 1. Mass customized robotic fabrication of wire-cut ruled-geometry clay elements for complex ceramic structures