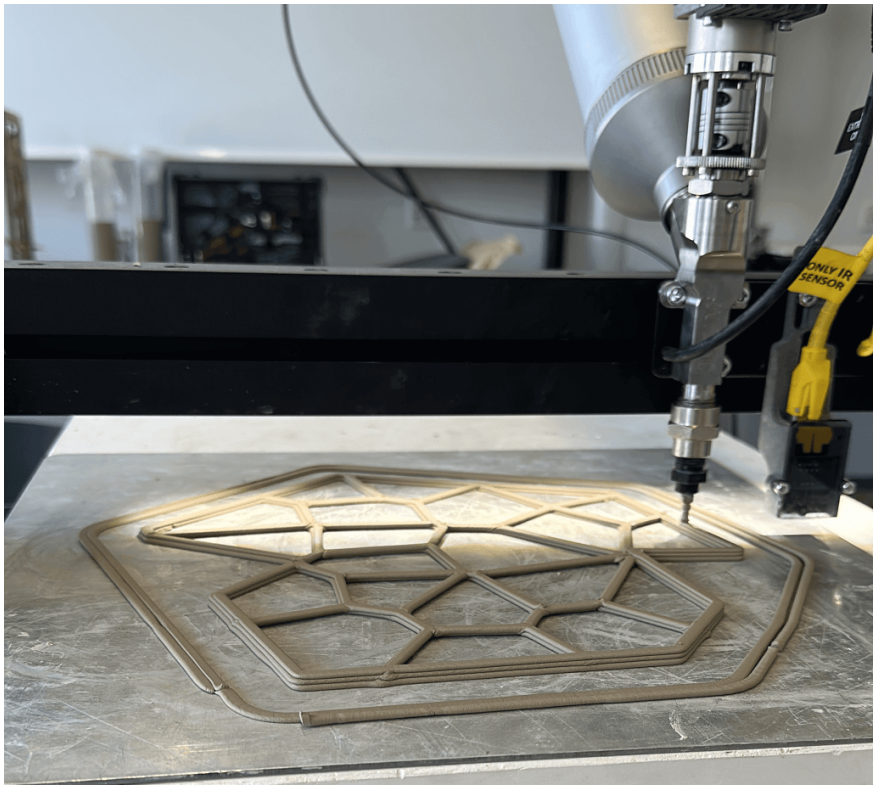
Pewter Meets Ceramics: The Creative Process of Zinnterlace

In the realm of artistic expression and sustainable material research, the Zinnterlace project stands out as a pioneering endeavor. This innovative project combines the traditional materials of pewter and ceramics, pushing the boundaries of what can be achieved through digital fabrication.

DESIGN PHASE: FROM CONCEPT TO CUSTOMIZATION

The Zinnterlace project commenced with an in-depth exploration of materials and a se



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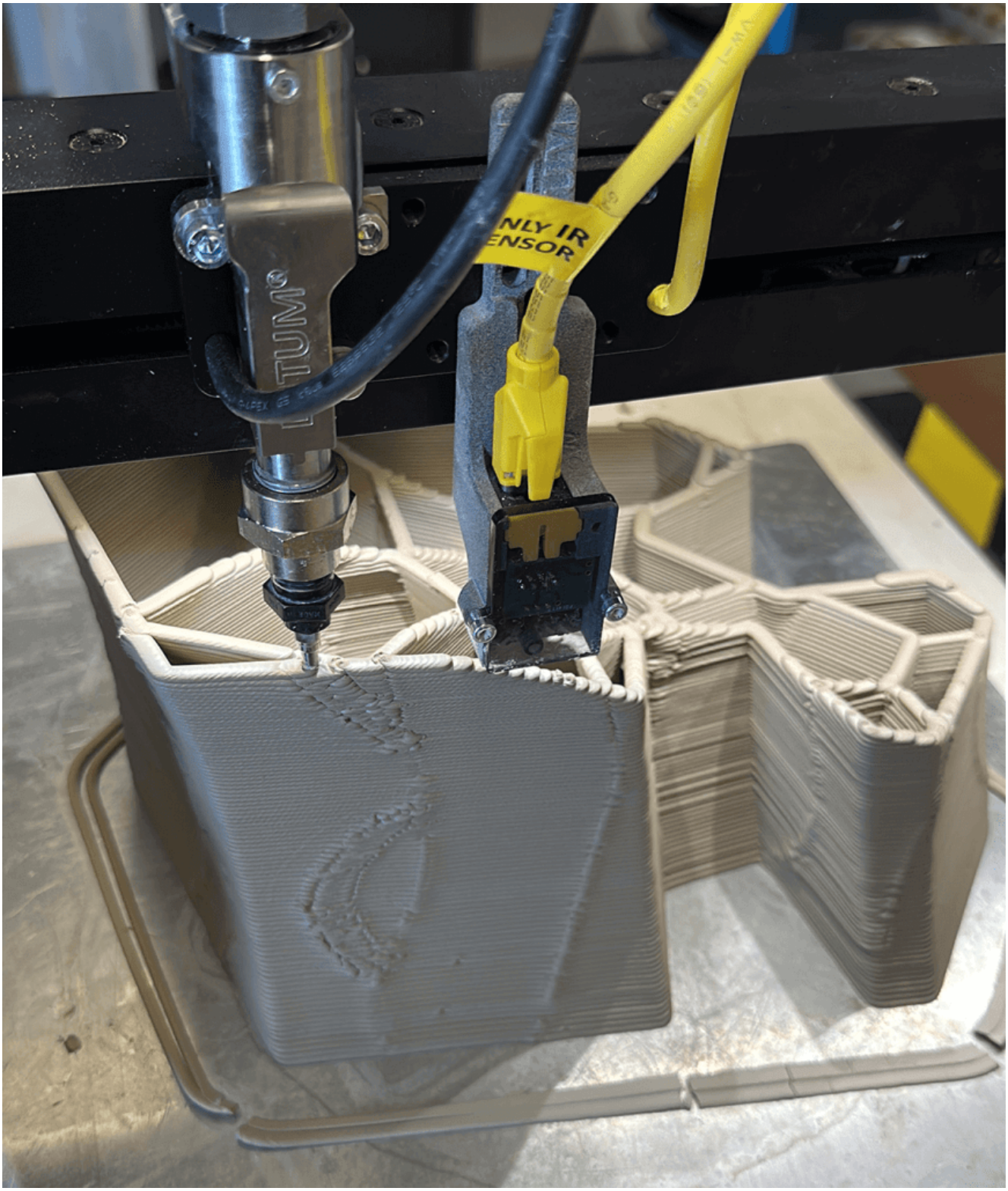
The design is based on two Voronoi patterns, which are extruded along two distinct double-curved curves. This complex form is brought to life through parametric 3D construction in Rhino–Grasshopper, allowing for customization and extension.

The resulting structure is versatile and capable of serving as a customizable facade that can be repurposed as a coral reef base, emphasizing sustainability and adaptability.

PRODUCTION PROCESS: CRAFTING THE HYBRID STRUCTURE

The production process of the Zinnterlace project is as intricate as its design. Initially, reusable forms for the connecting elements were produced. These forms facilitated the casting of the connectors with tin, which were carefully separated from the clay.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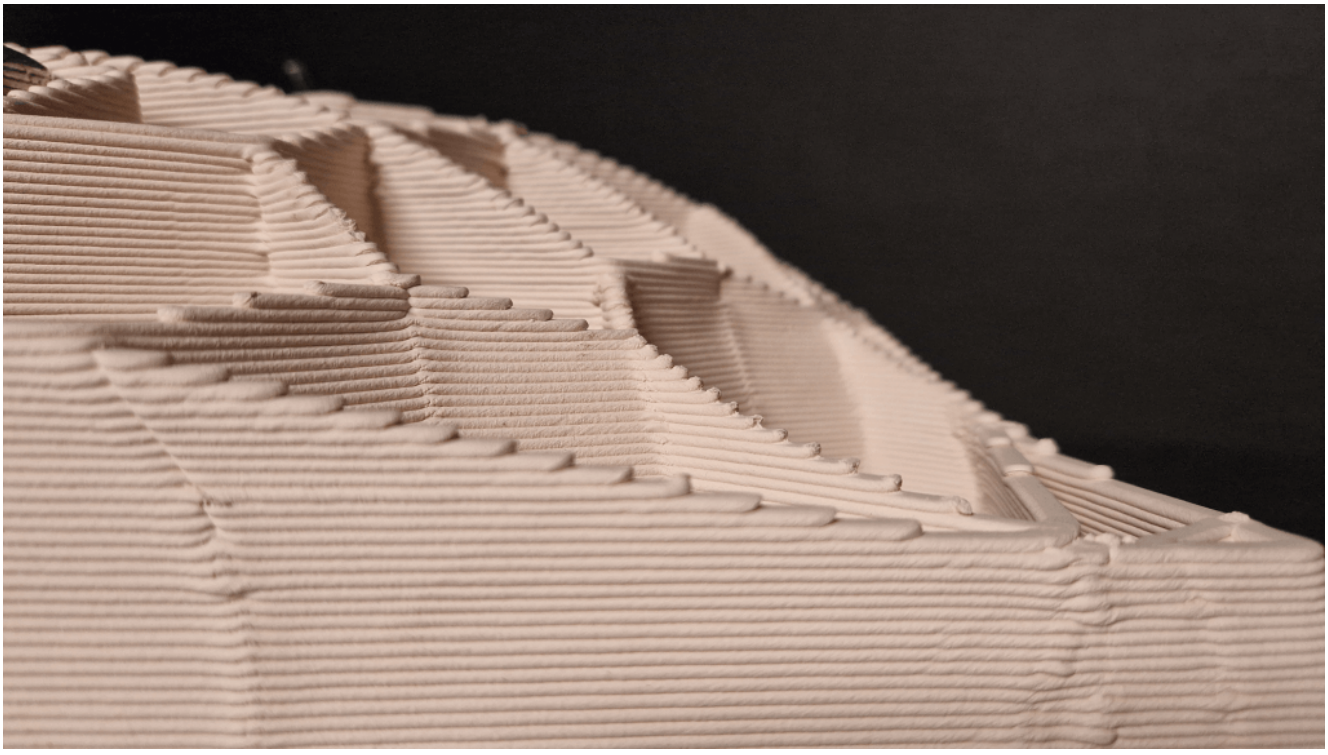
The main clay components were then crafted layer by layer, ensuring precision and consistency. After drying, these components were fired at high temperatures to solidify them, ensuring durability and strength.

To achieve a striking visual contrast, the pewter connecting elements were securely attached to a sleek black MDF board. The printed clay elements were then meticulously aligned between the pewter parts, creating a harmonious blend of materials that showcased both the robustness of the pewter and the delicate artistry of ceramics.

TOOLS & COLLABORATION

The Zinnterlace project utilized advanced software and tools, including Rhino+Grasshopper and the LUTUM5-3D clay printer. The project was a collaborative effort, with Arrigo Burgener leading the printing process, Christian Fredi Bucher overseeing design and programming, and Sämi Bättig ensuring security and construction integrity.



Guidance and expertise were provided by lecturers Oliver Zirkelbach and Miro Bannwart. The project was supported by the HSLU – Lucerne University of Applied Sciences and Arts and highlights the importance of academic and industry partnerships in pushing the frontiers of material research and artistic innovation.

See Also

SUBD IN RHINO 7 & 8

The Zinnterlace project exemplifies the fusion of traditional materials with modern technology to create sustainable and customizable art. By combining pewter and ceramics through innovative digital fabrication techniques, the project not only highlights the potential of these materials but also emphasizes the importance of sustainability in contemporary art and design.

The collaborative effort and the use of advanced tools underscore the significance of interdisciplinary approaches in achieving groundbreaking results.