

Digital Carpentry

Adaptive technologies for the timber industry



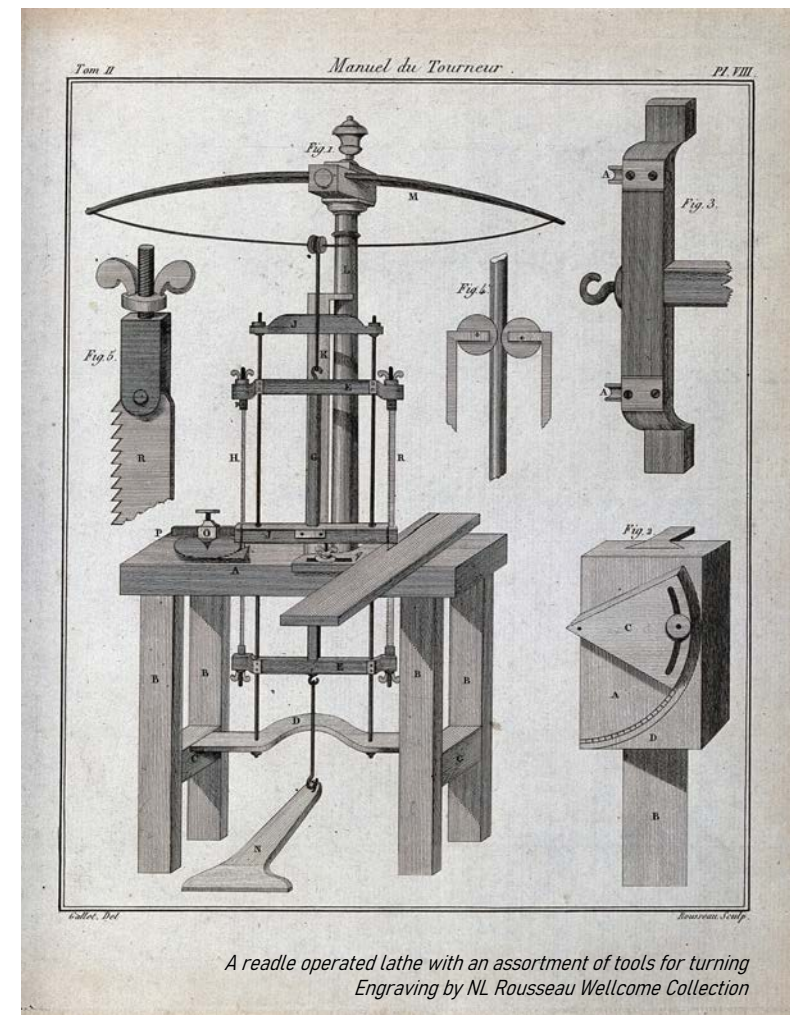
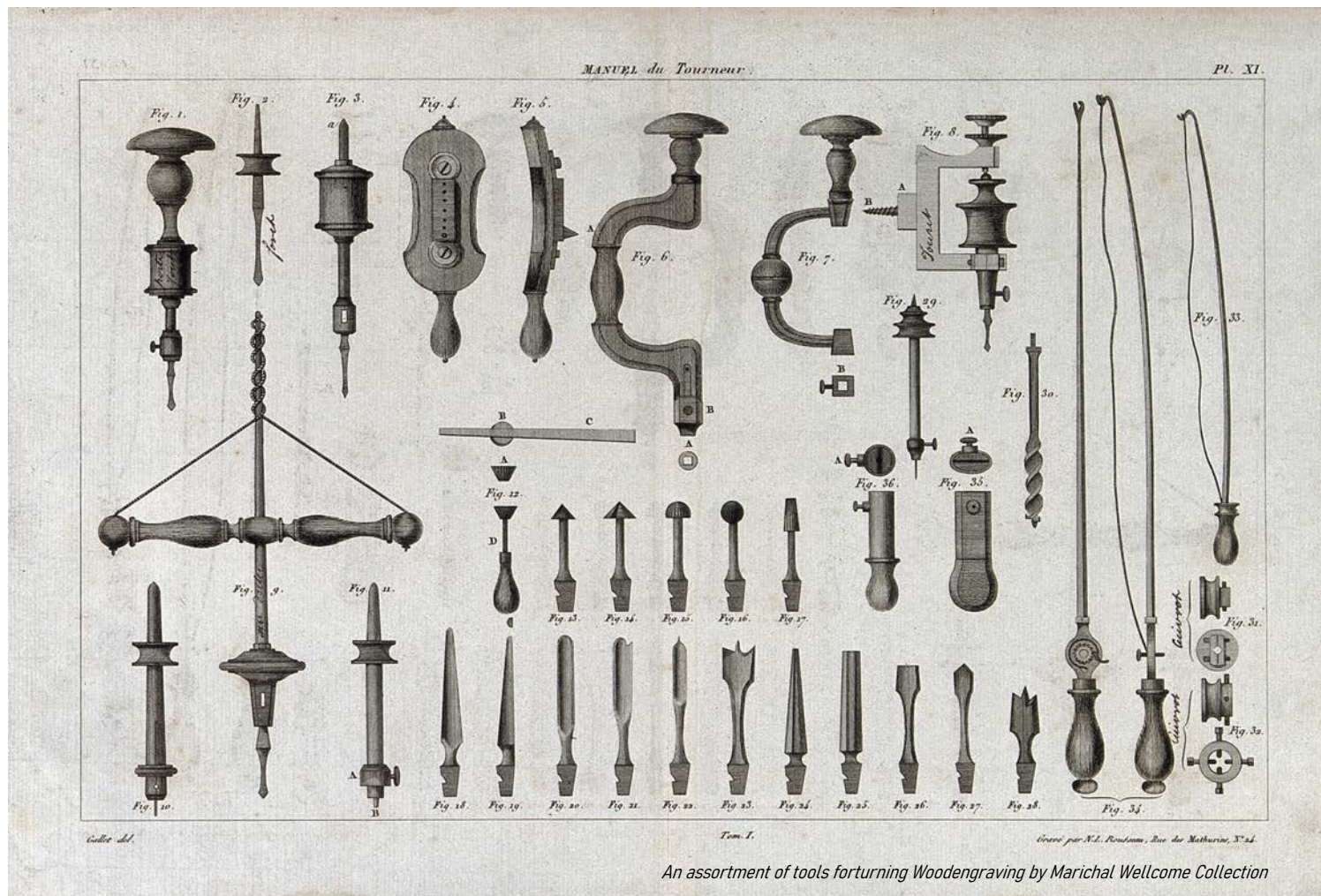


MADlab

Material Design Laboratory



What we Had



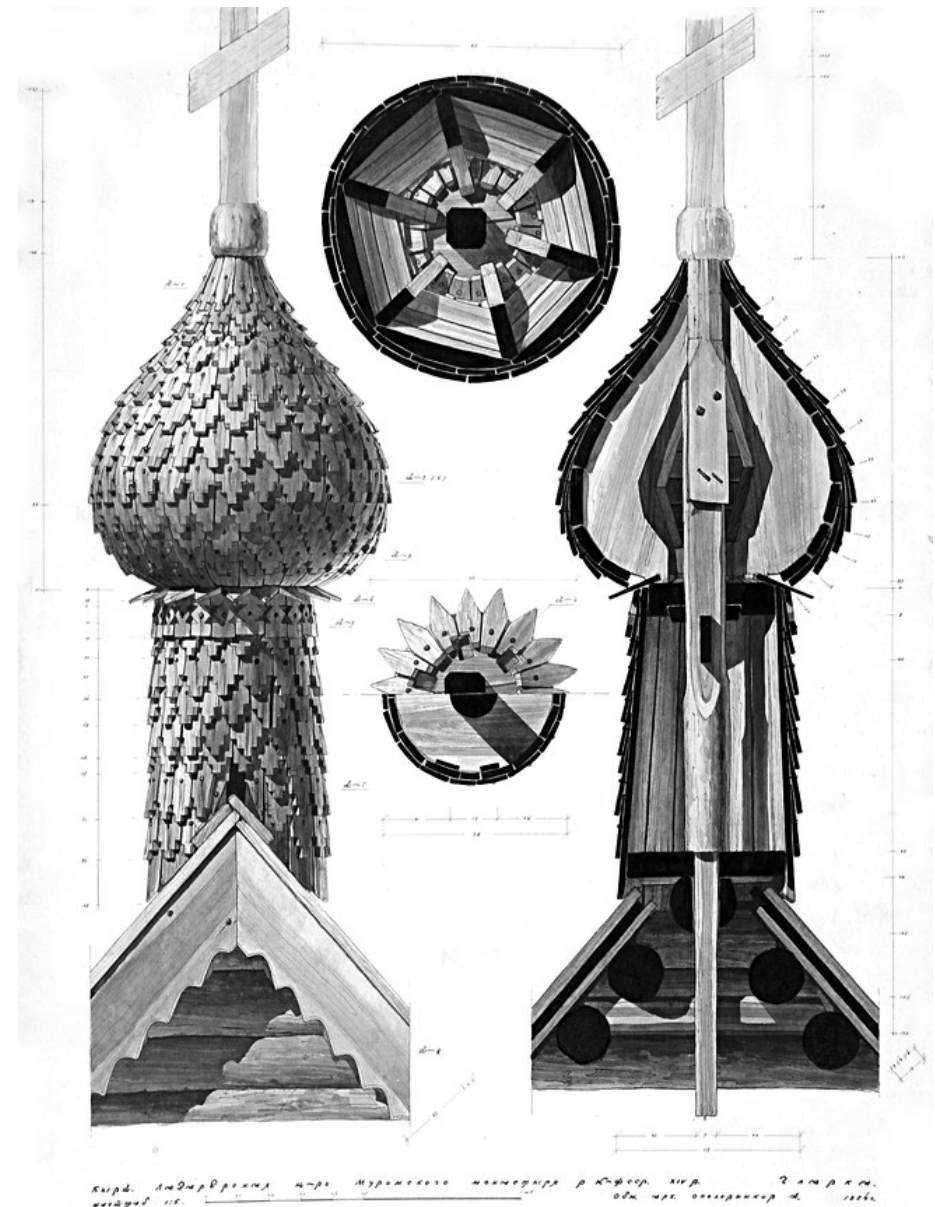


Pl. 101.

Marine.

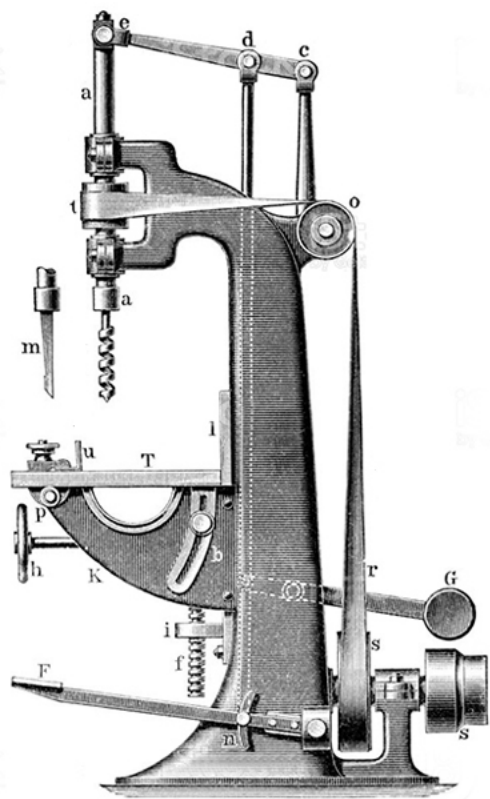


Church of the Transfiguration Kizhi Island, Russia





What we Made



Holzbohrmaschine

Drilling machine for Wood
"Meyers Konversations-Lexikon" 1896

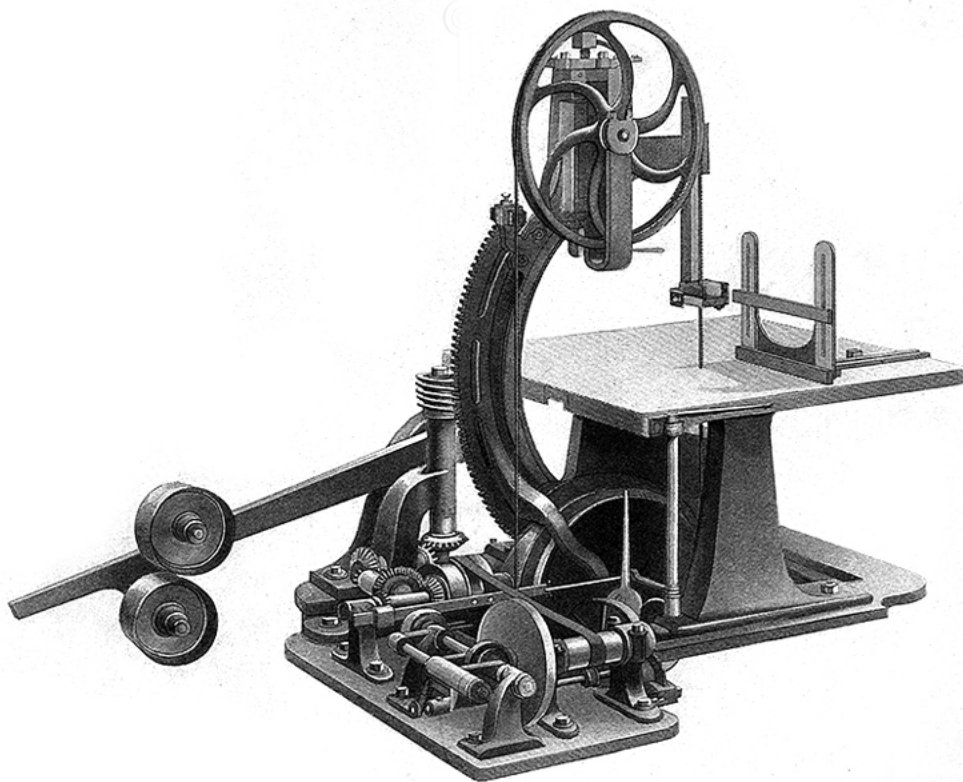
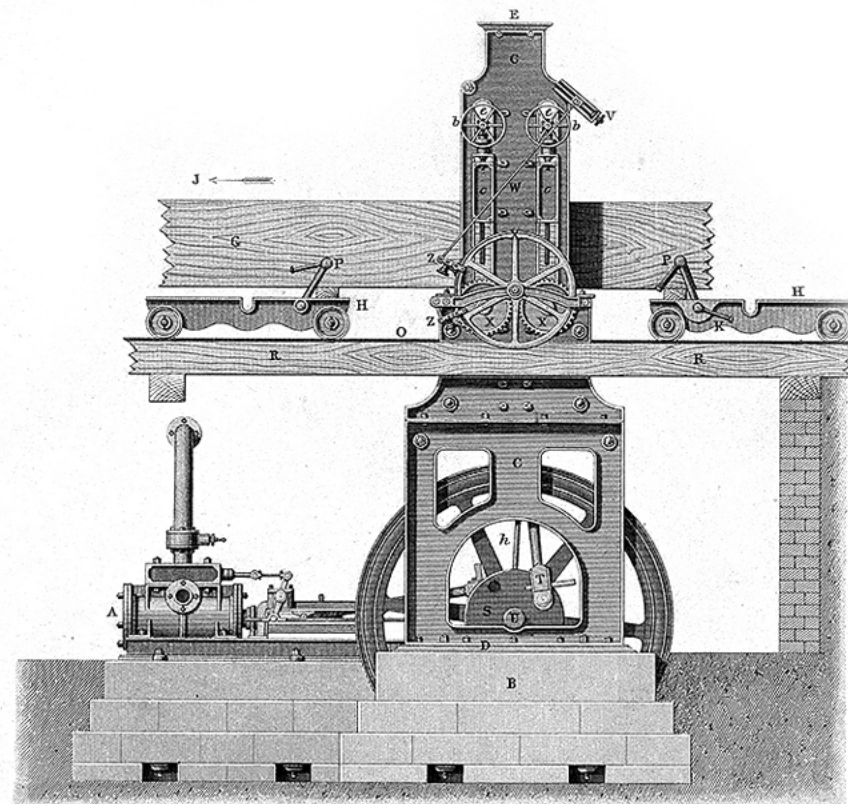


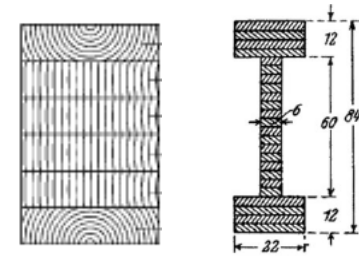
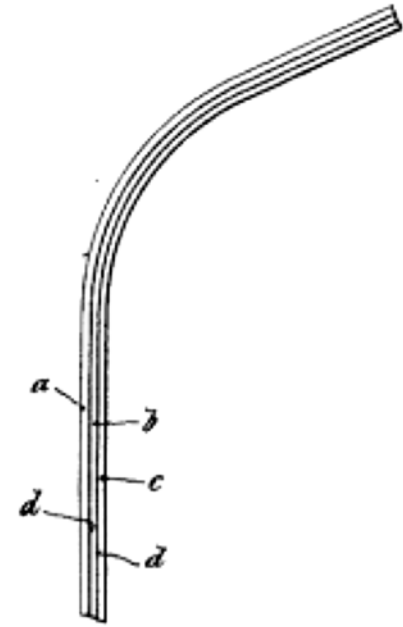
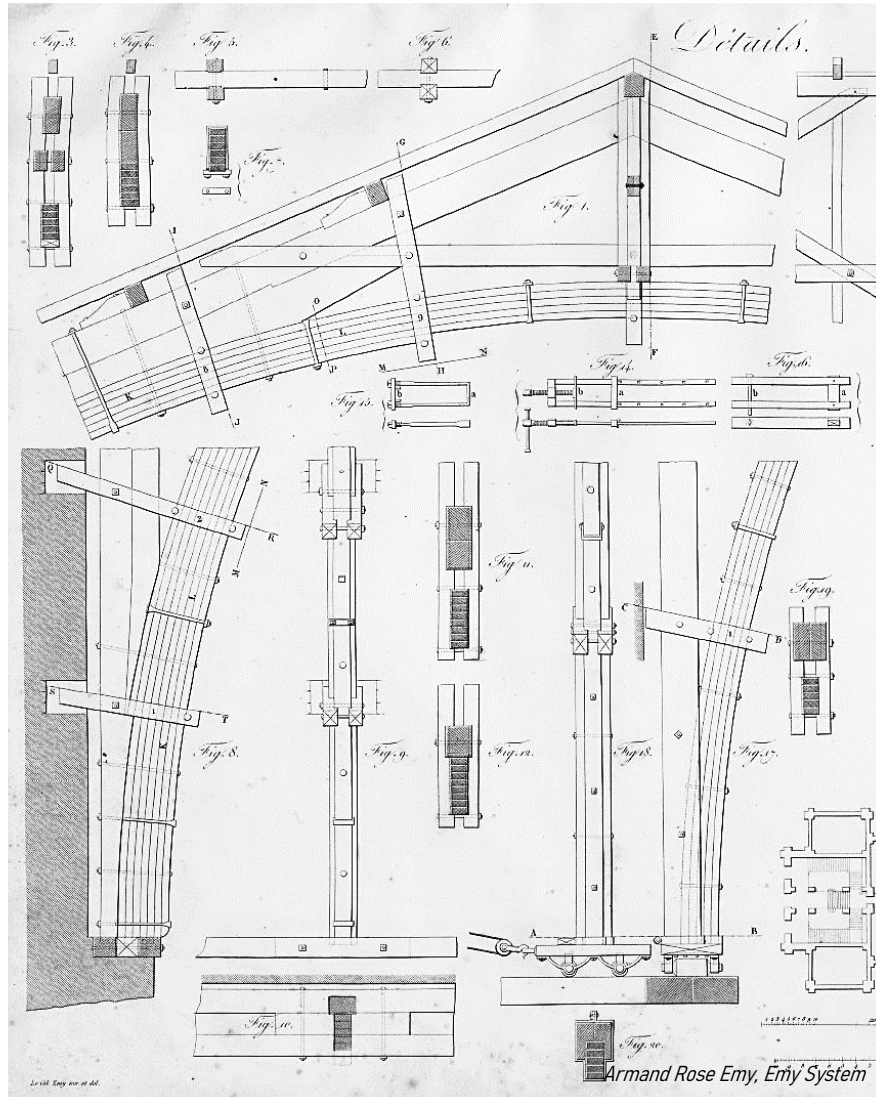
Fig. 1. From a Photograph.

A mechanical band-saw
Engraving after a photograph, Wellcome Collection



Side elevation.

A mechanical bandsaw
Engraving by JW Lowry, Wellcome Collection



Otto Hetzer, Patent Drawings



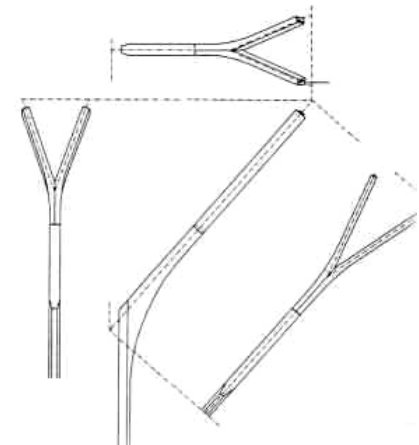
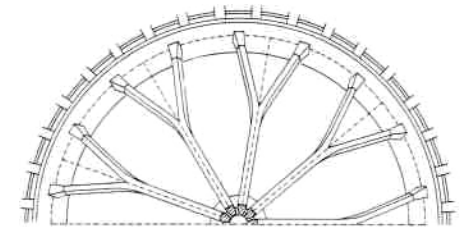
Structural arches for the festival hall in Aarau 1933





What we Have

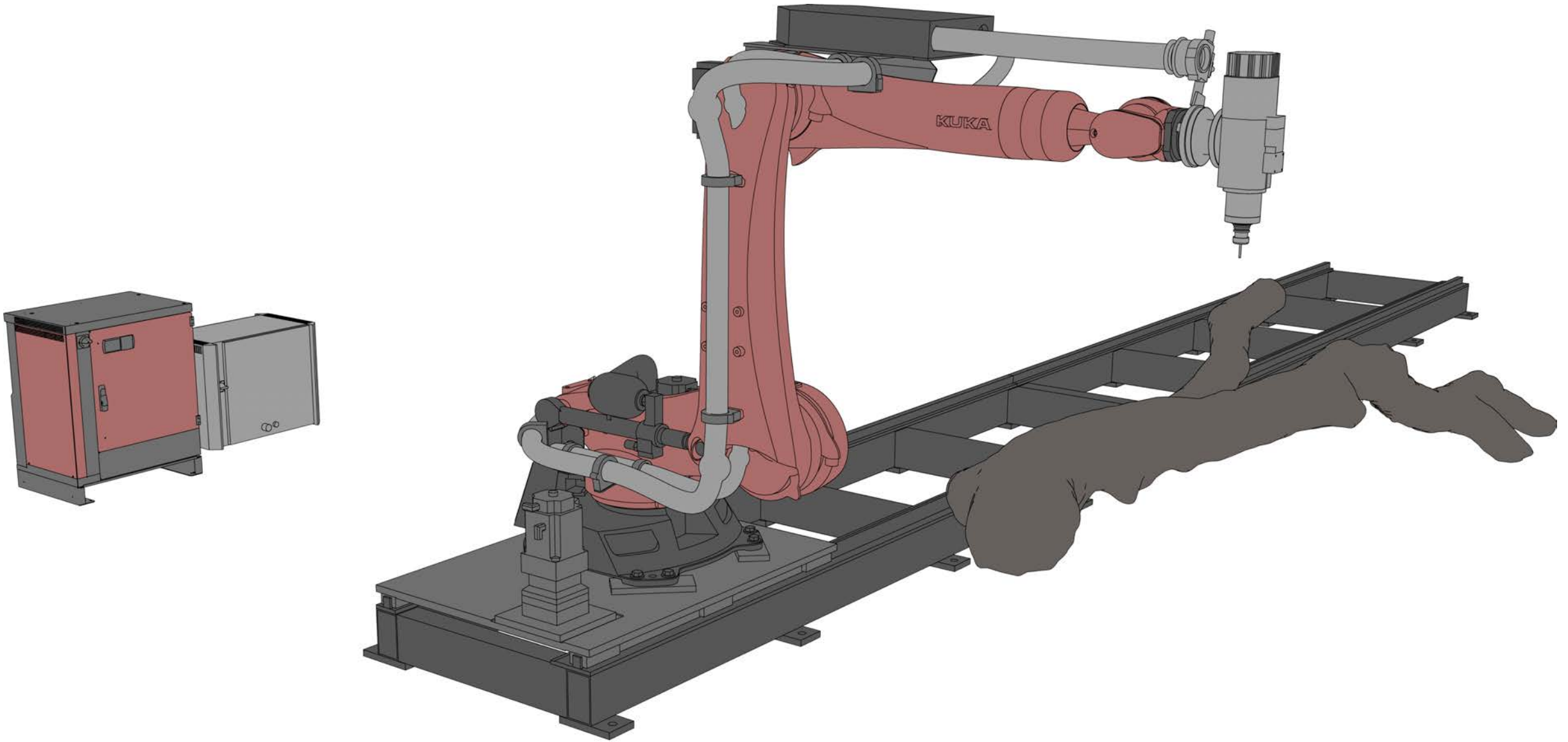
Solemar Brine Baths, Bad Dürkheim Germany

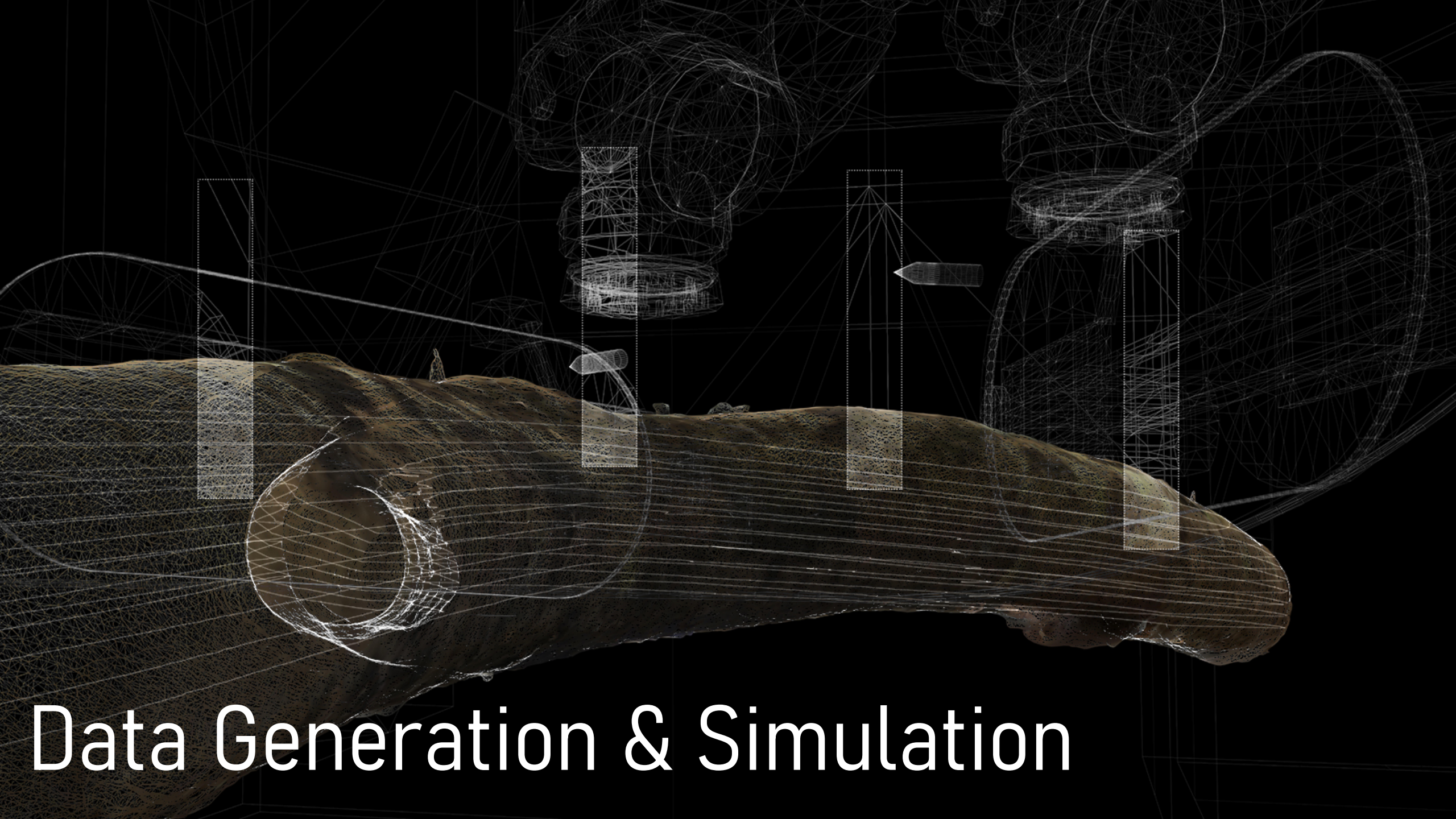






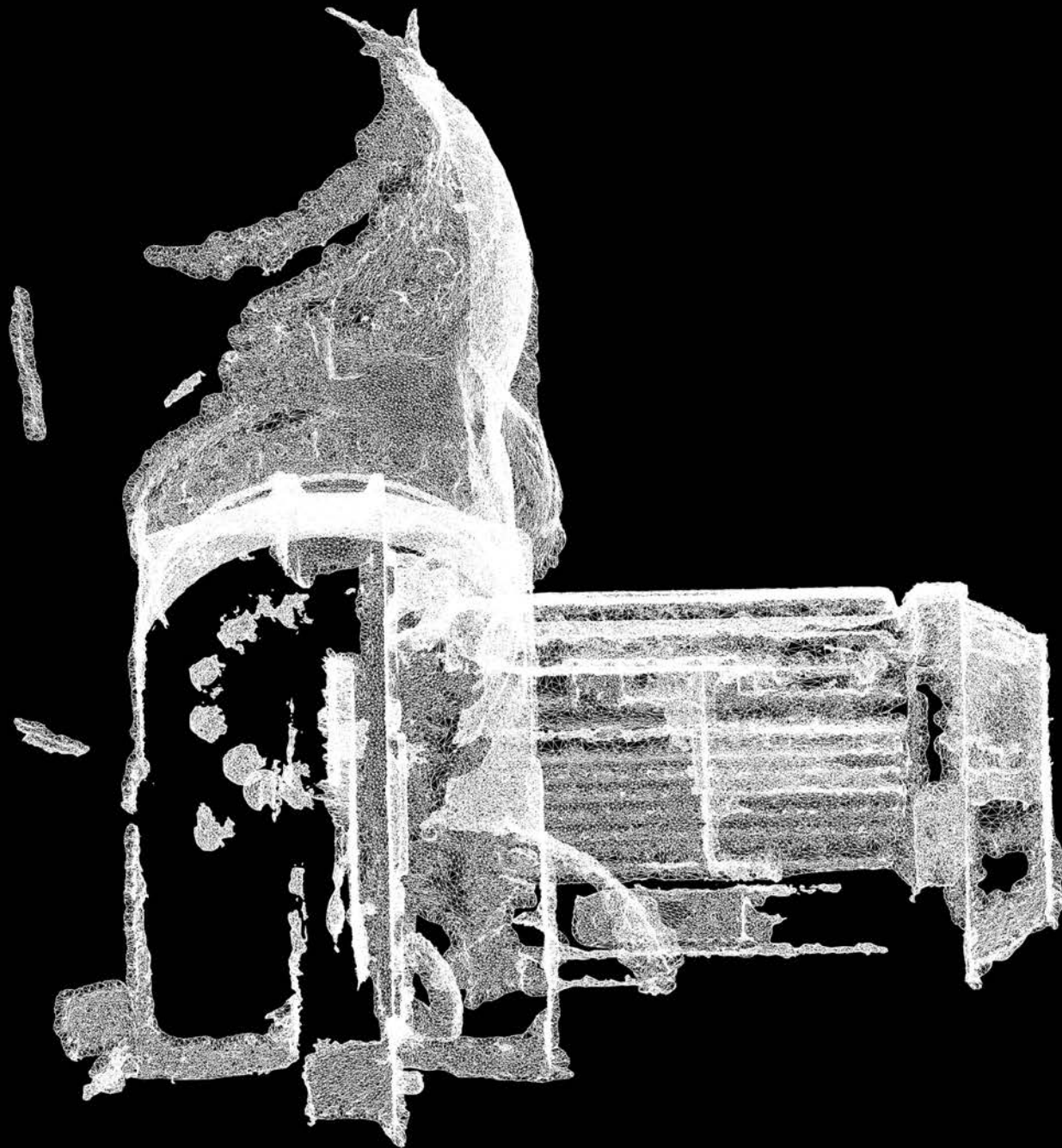
Robotic Systems





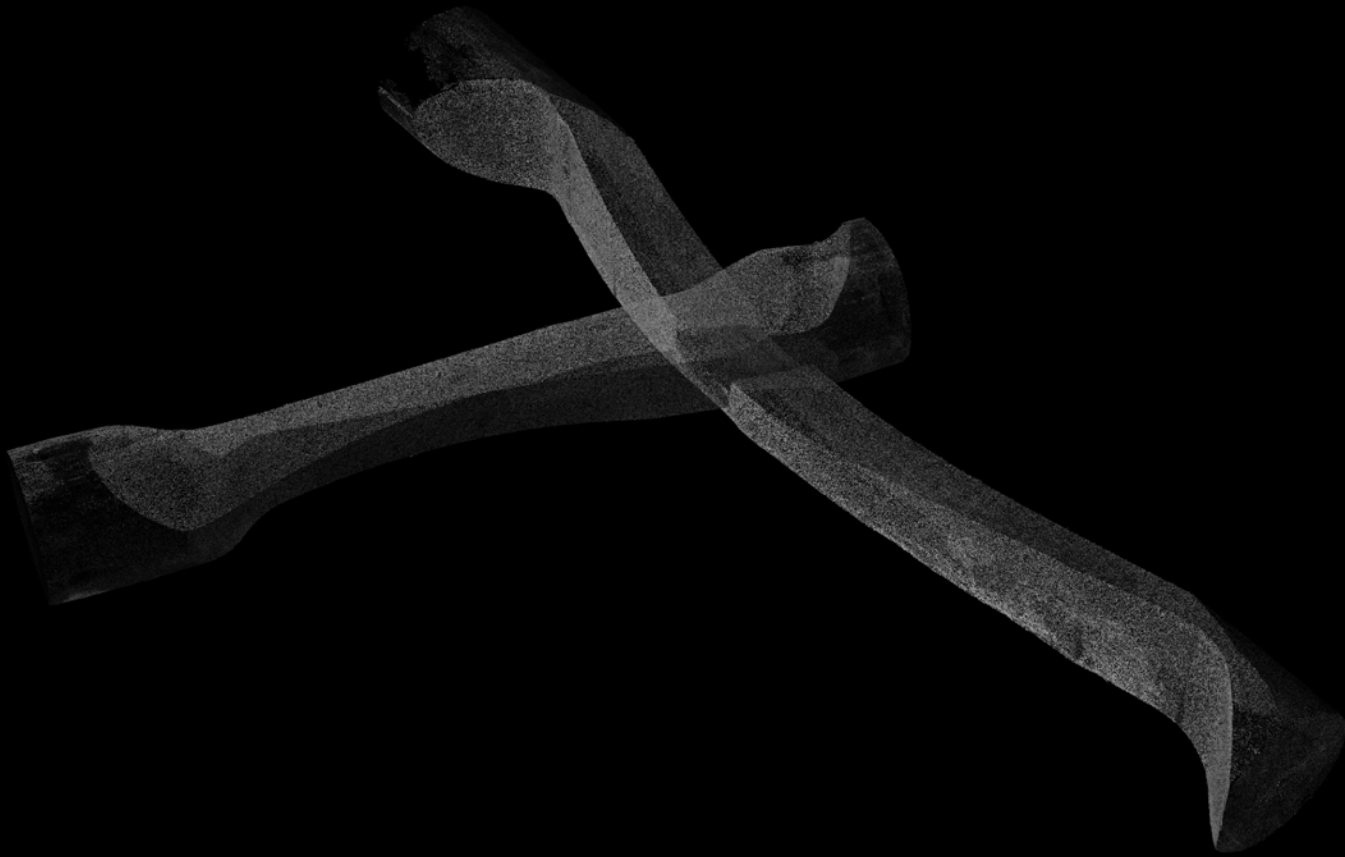
Data Generation & Simulation

Data Collection





Data Execution



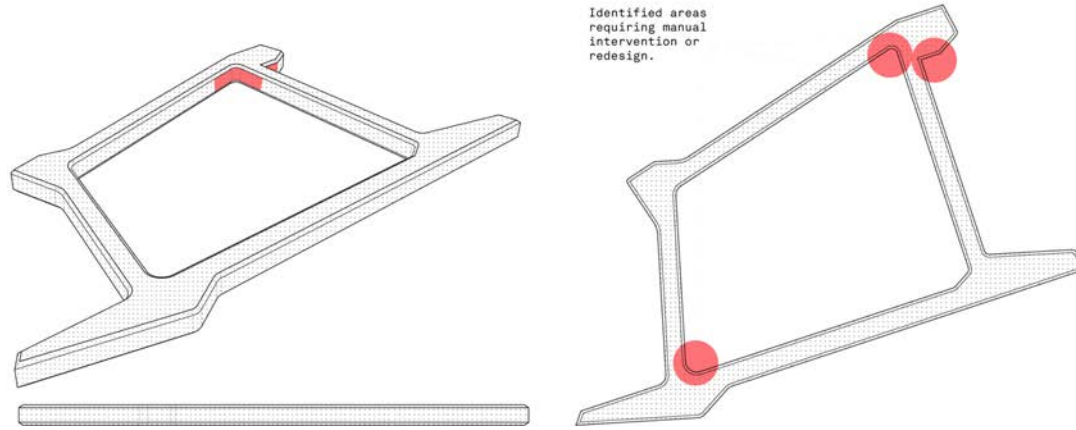
Data Visualisation

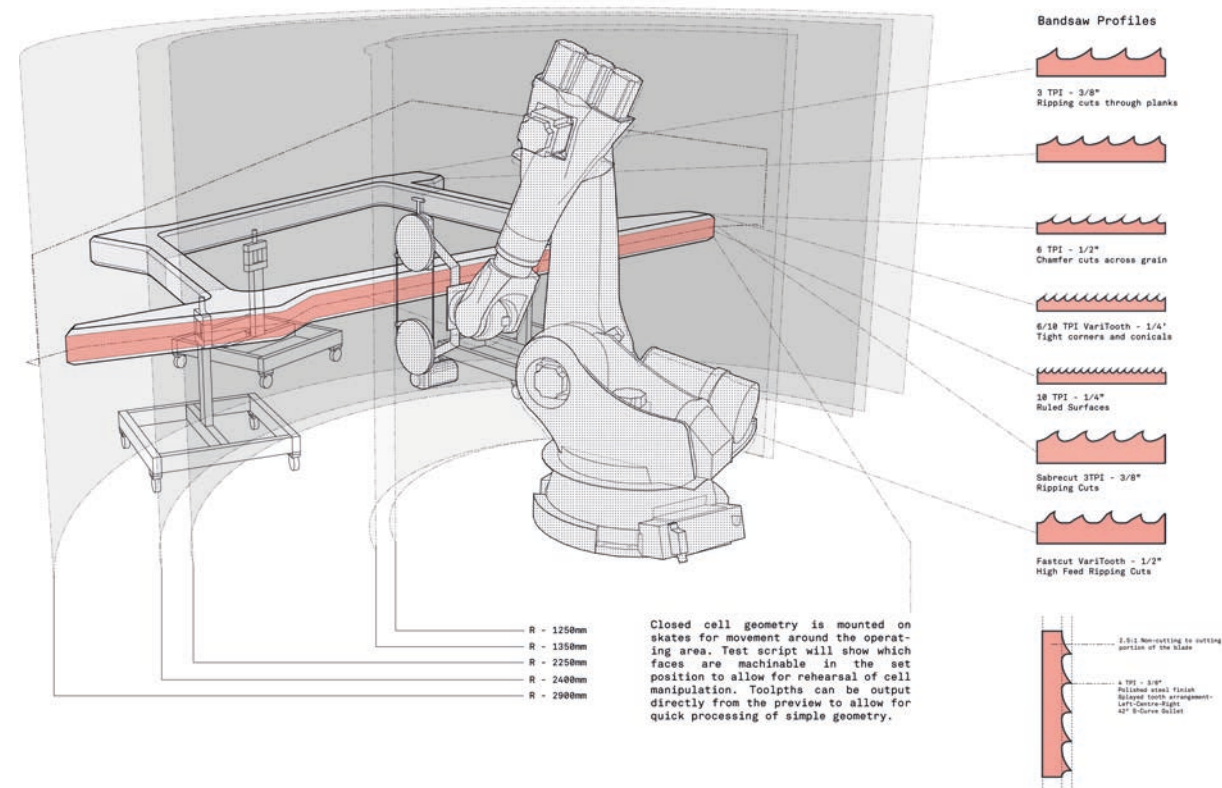
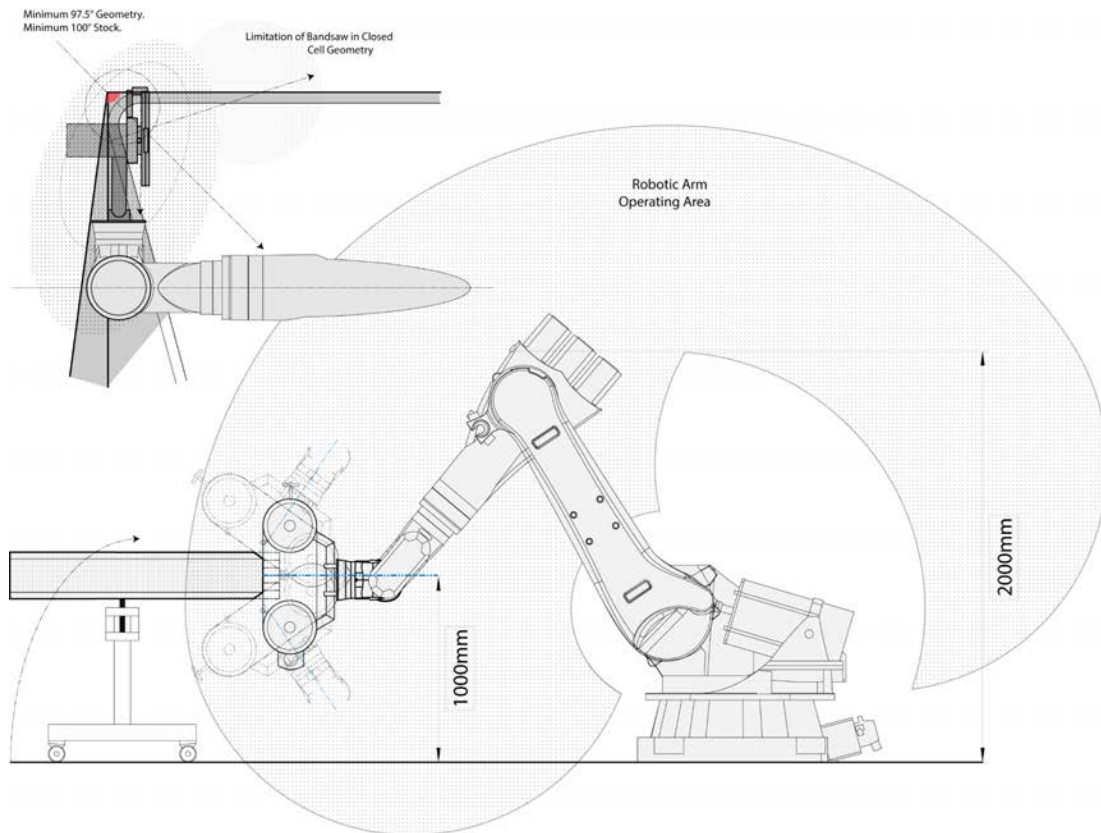


Applications

Wakeford Hall

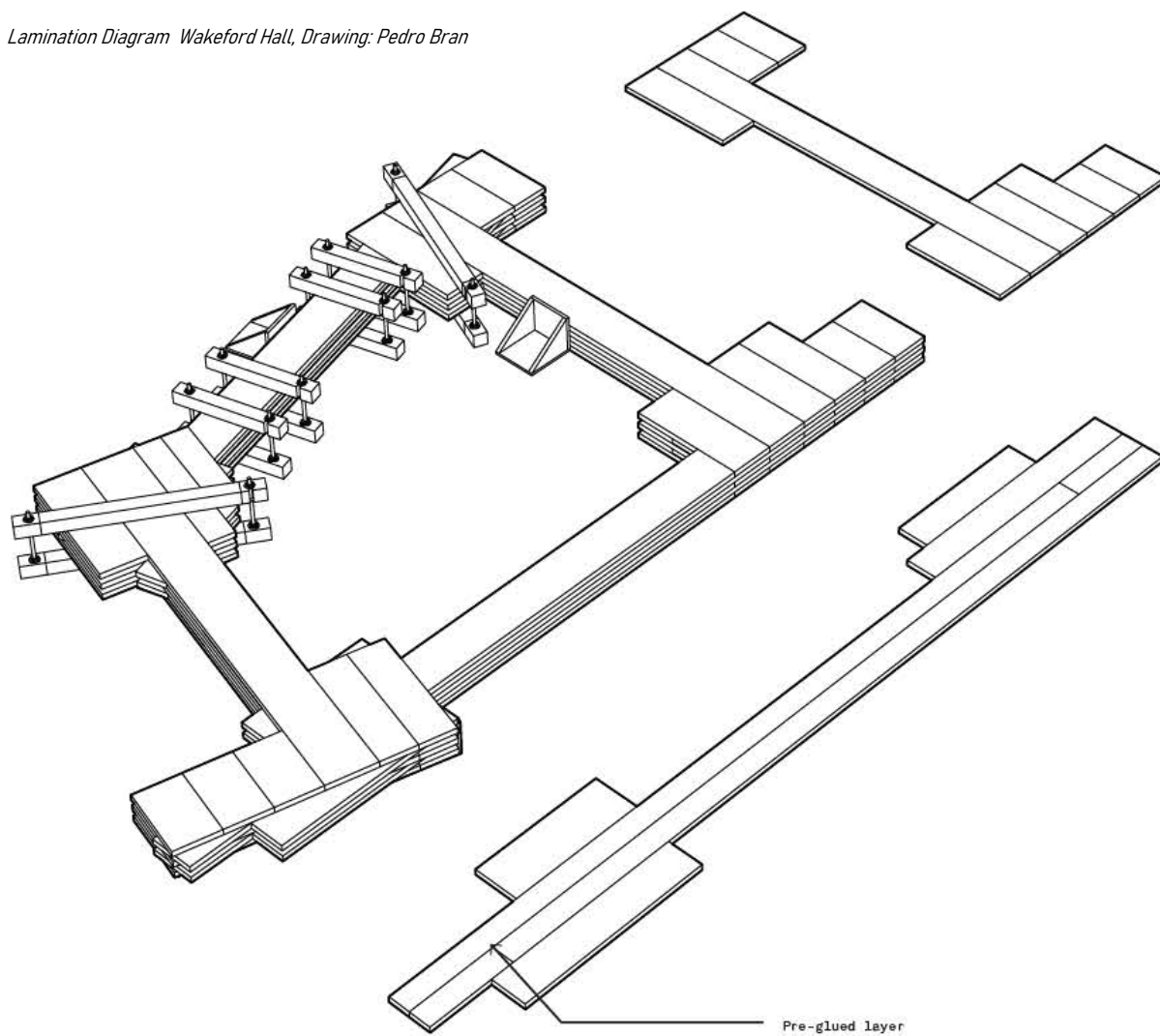




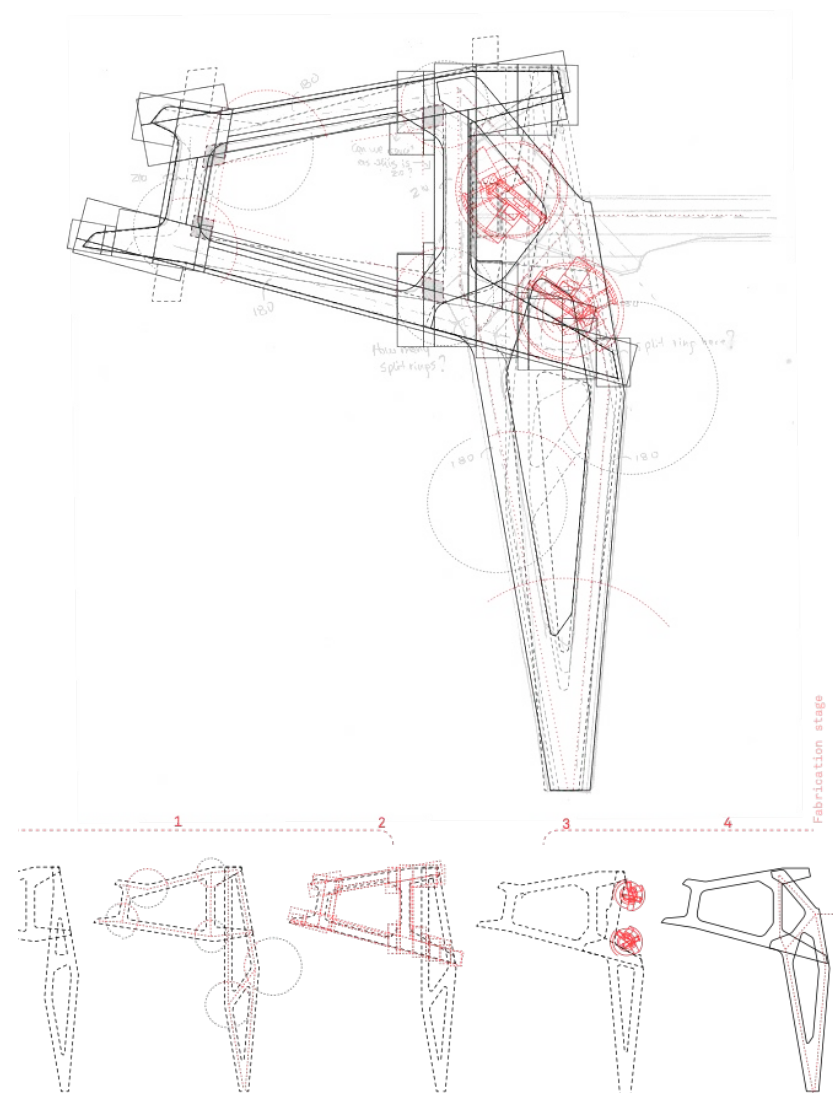


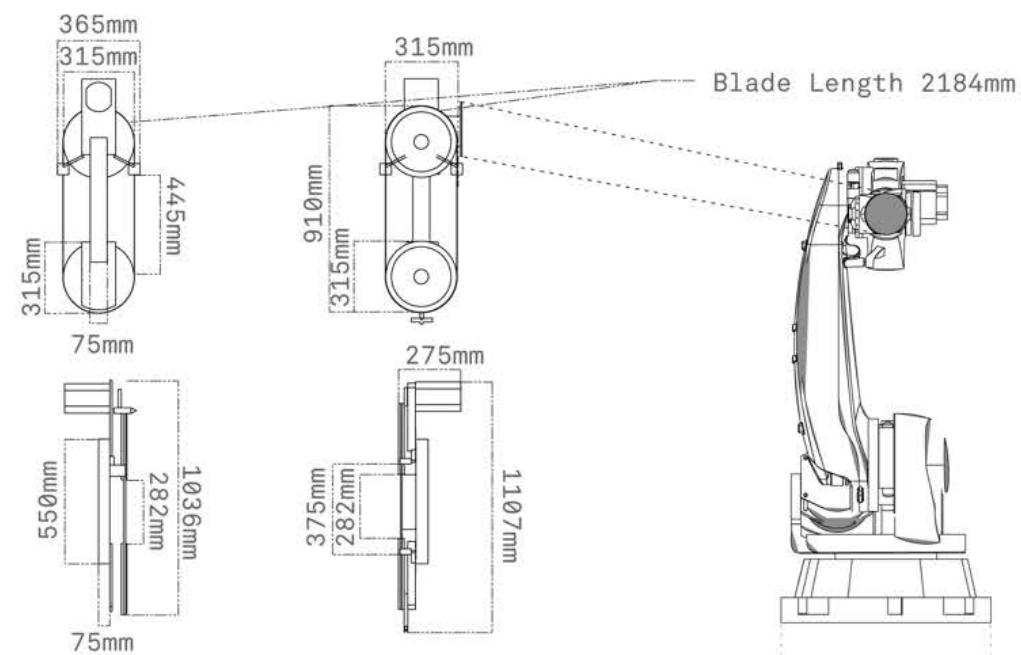
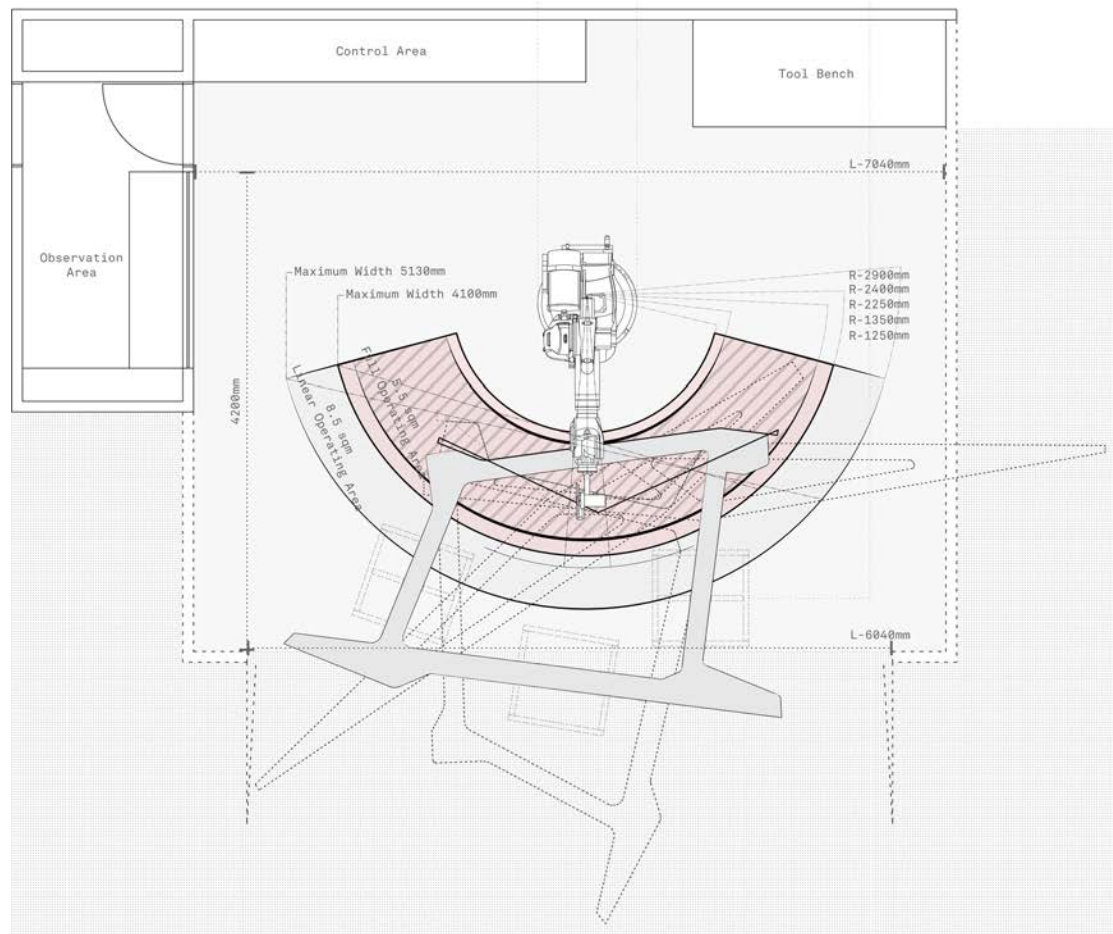


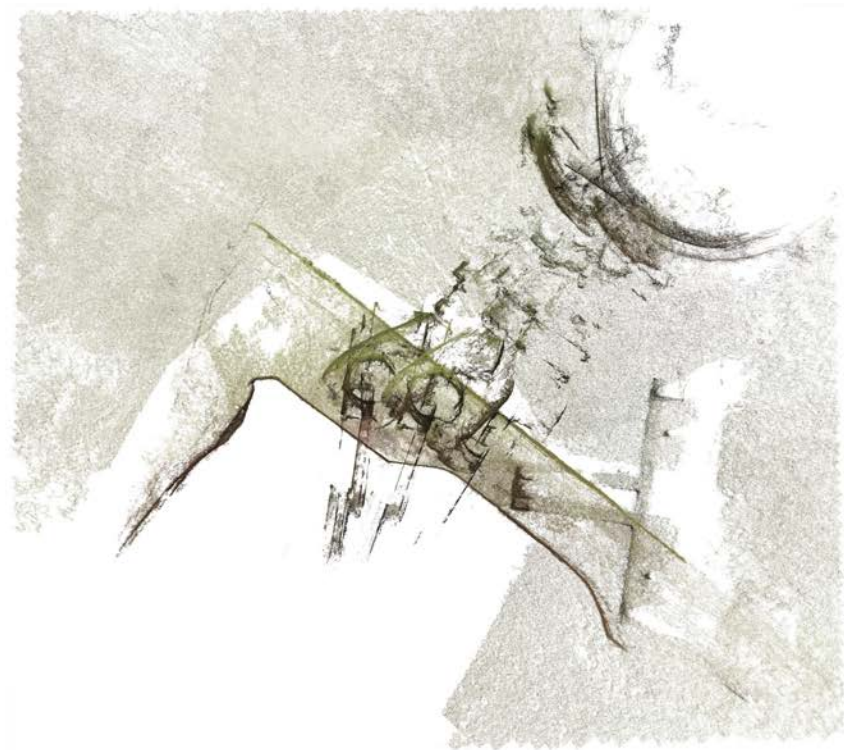
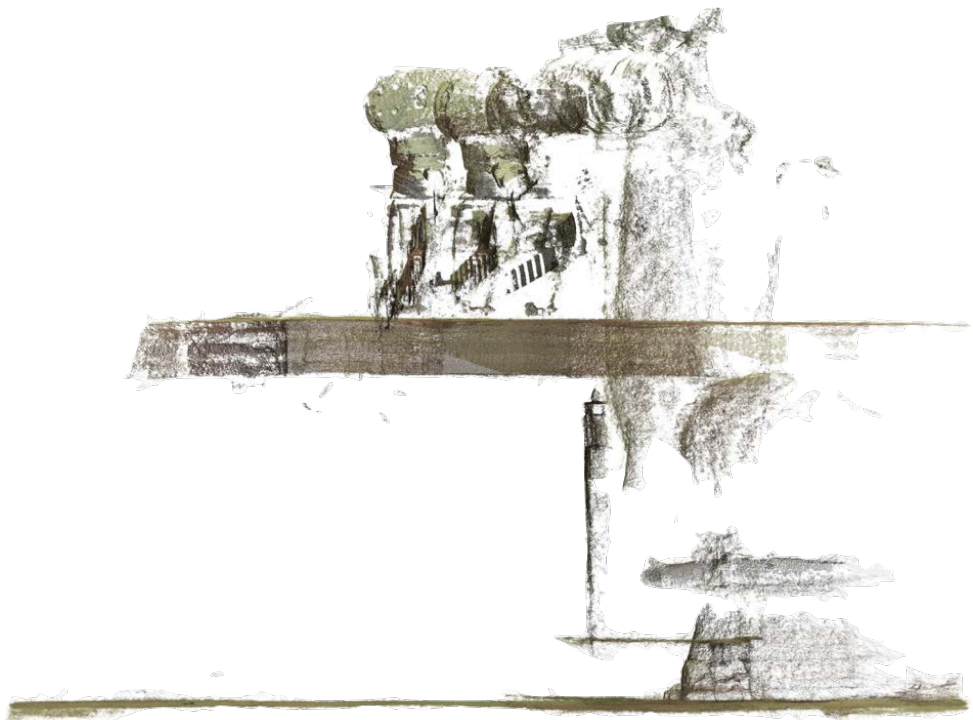
Lamination Diagram Wakeford Hall, Drawing: Pedro Bran



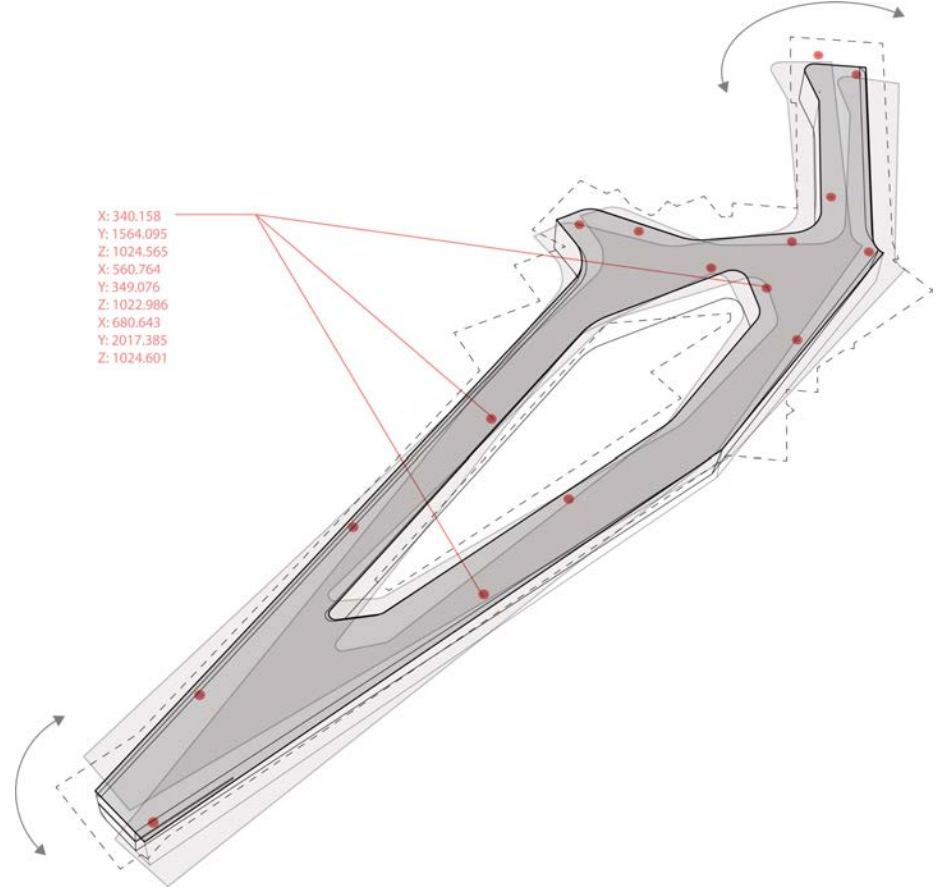
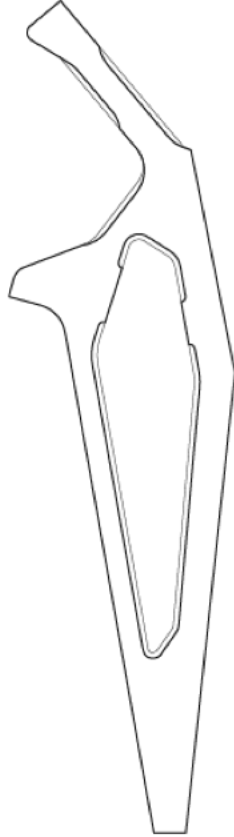
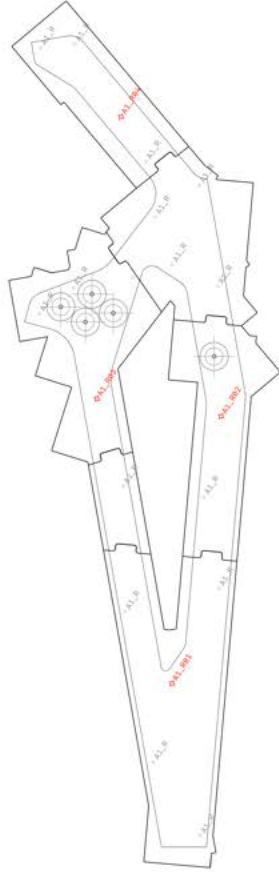
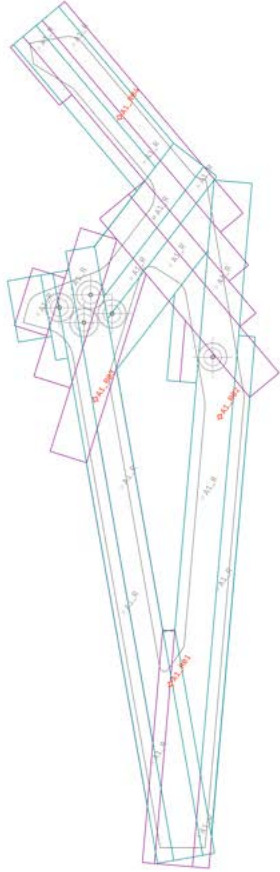
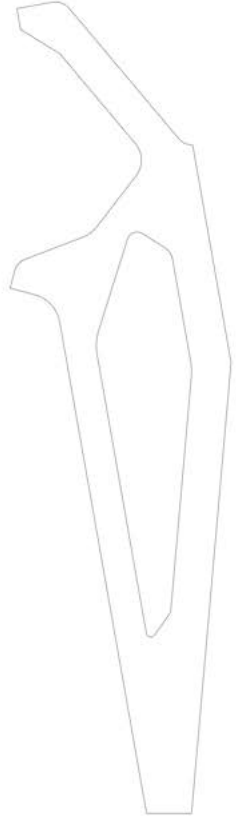
Frame 1 + Leg A1







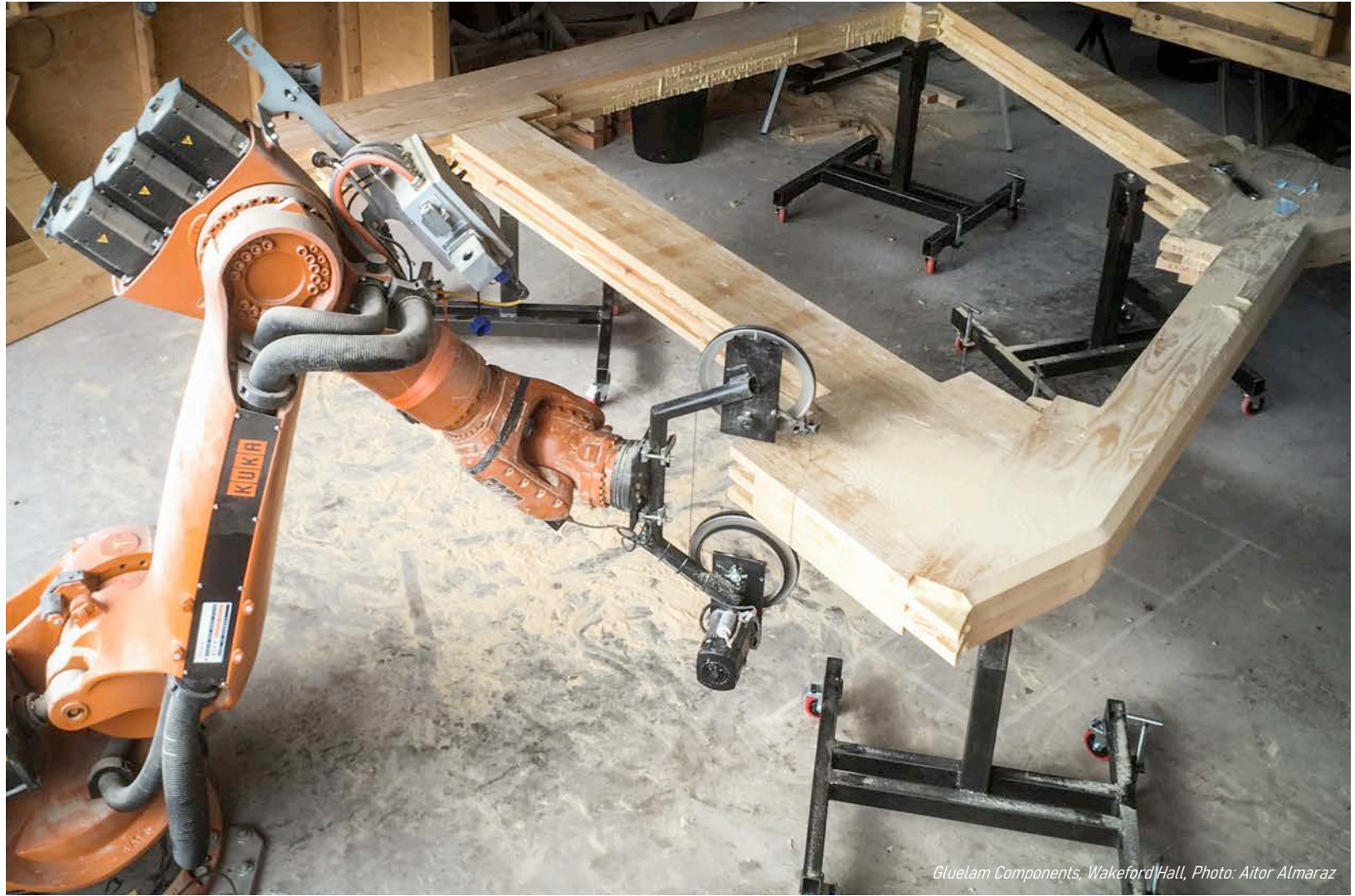








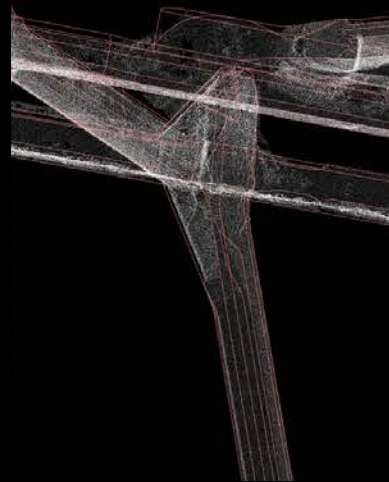
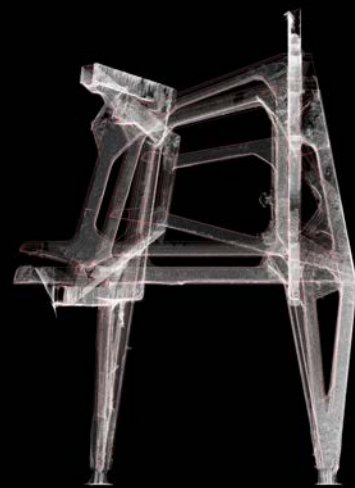
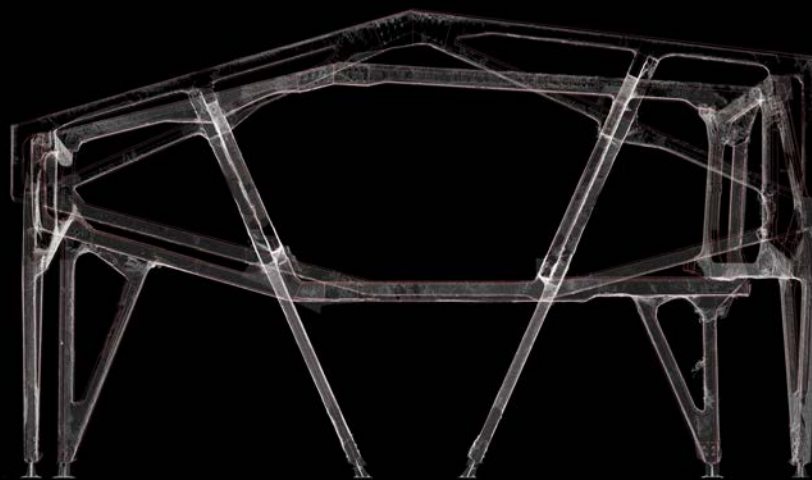
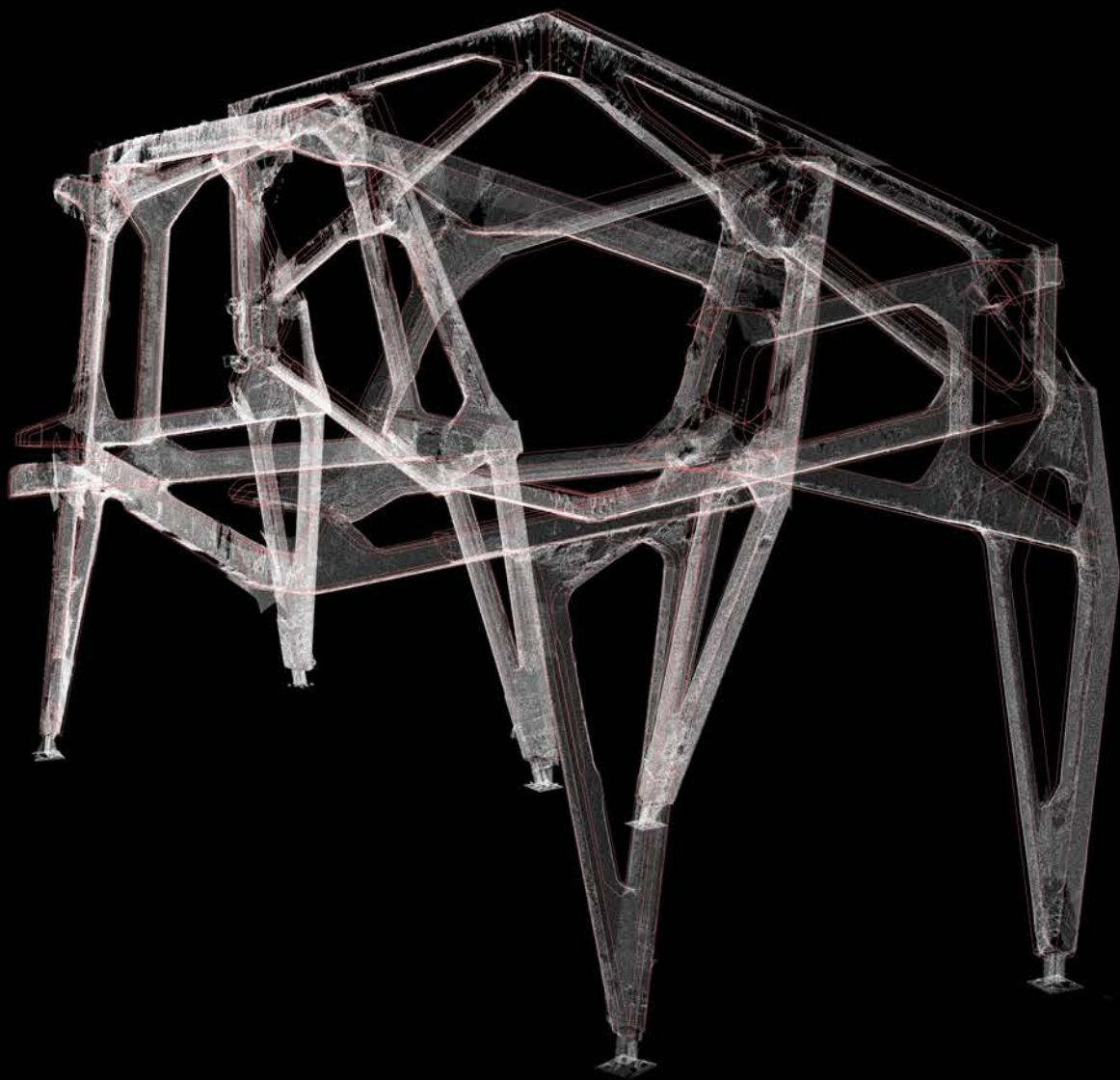
Gluelam Components, Wakeford Hall, Photo: Aitor Almaraz

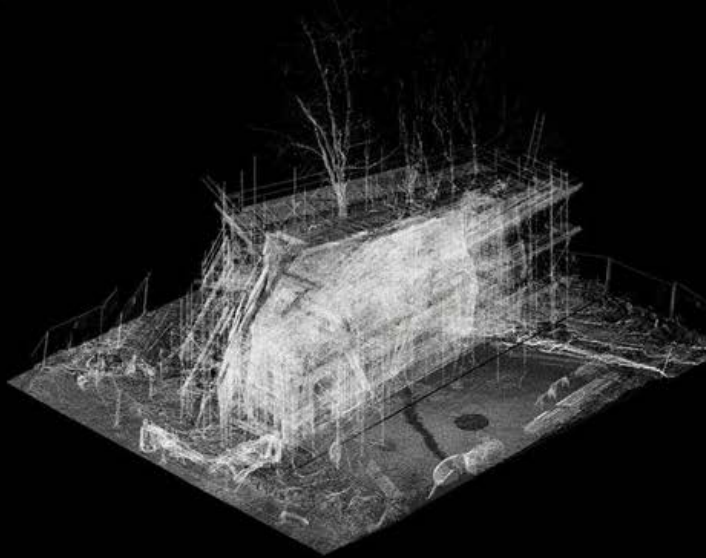


Gluelam Components, Wakeford Hall, Photo: Aitor Almaraz











Wakeford Hall, Hooke Park, Photo: Zachary Mollica



Wakeford Hall, Hooke Park, Photo: Francisco Adiazola



Wakeford Hall, Hooke Park, Photo: Zachary Mollica



Wakeford Hall, Hooke Park, Photo: Francisco Adiazola

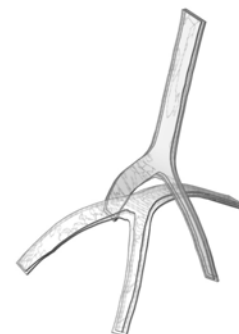
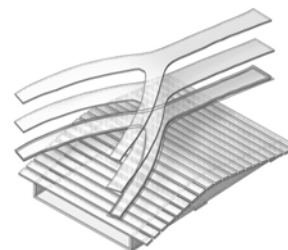
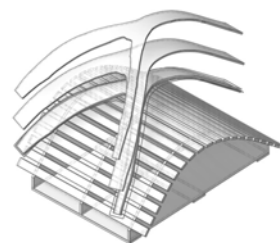
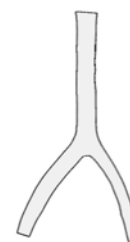
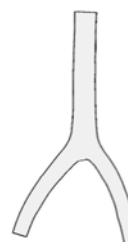
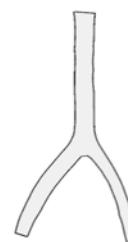
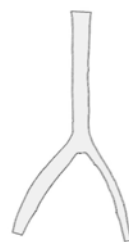
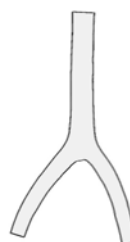
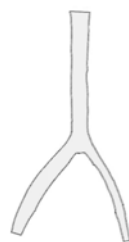


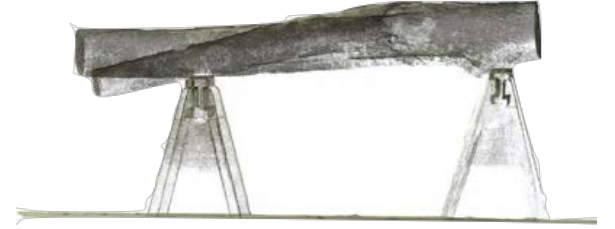
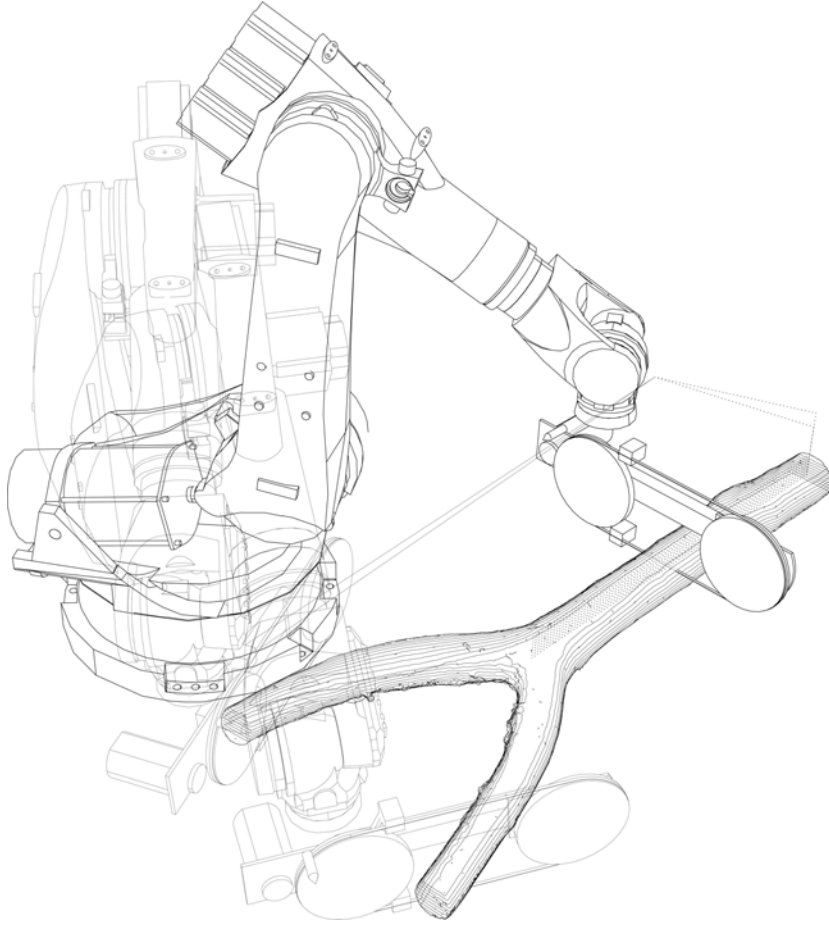
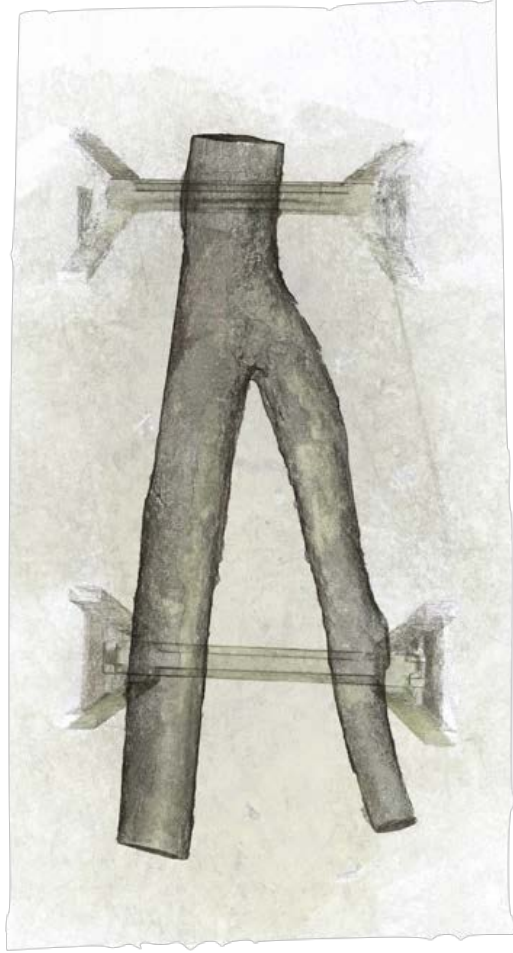
Material Domestication



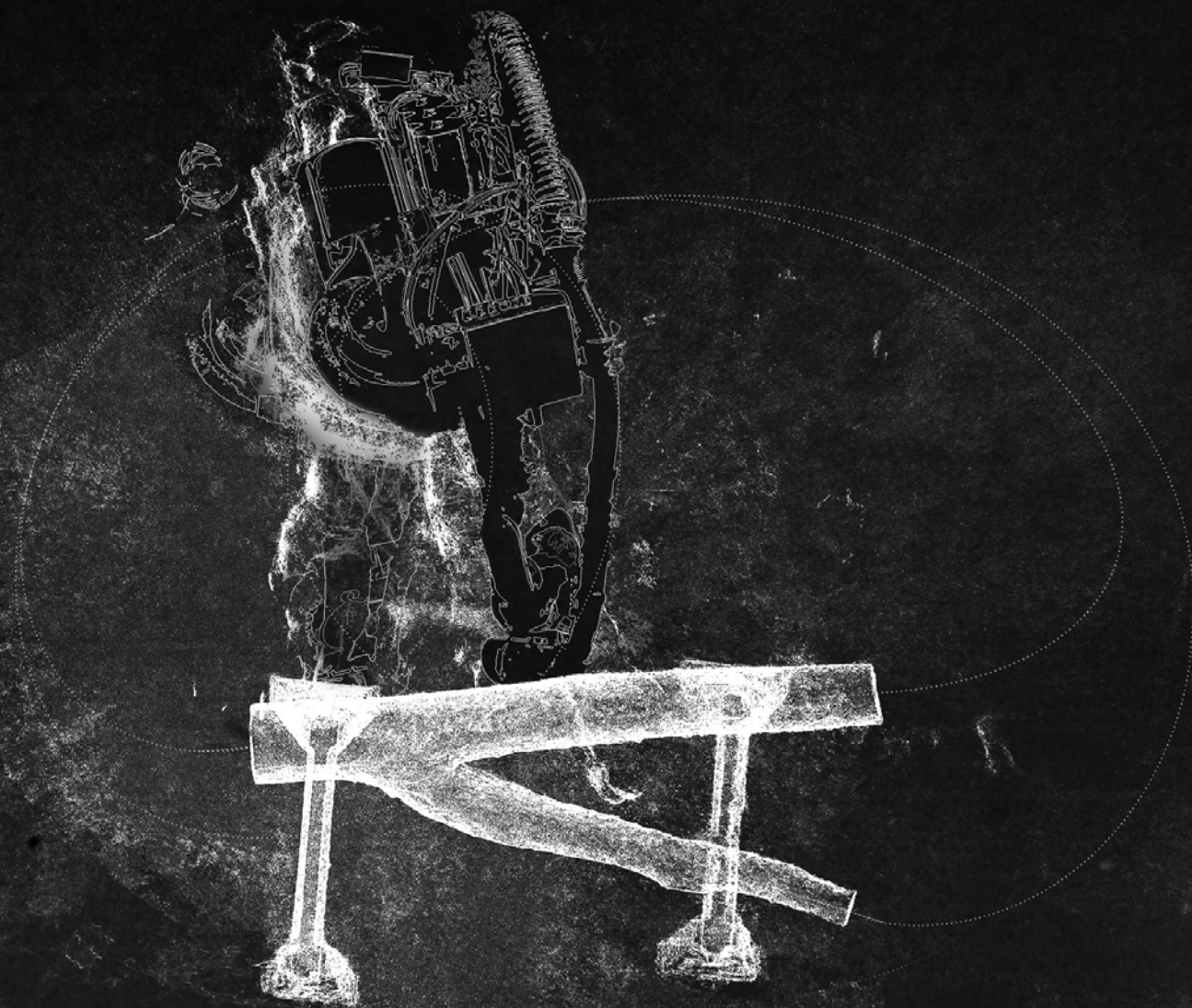


















What Next