

Andrew Werby
ComputerSculpture.com

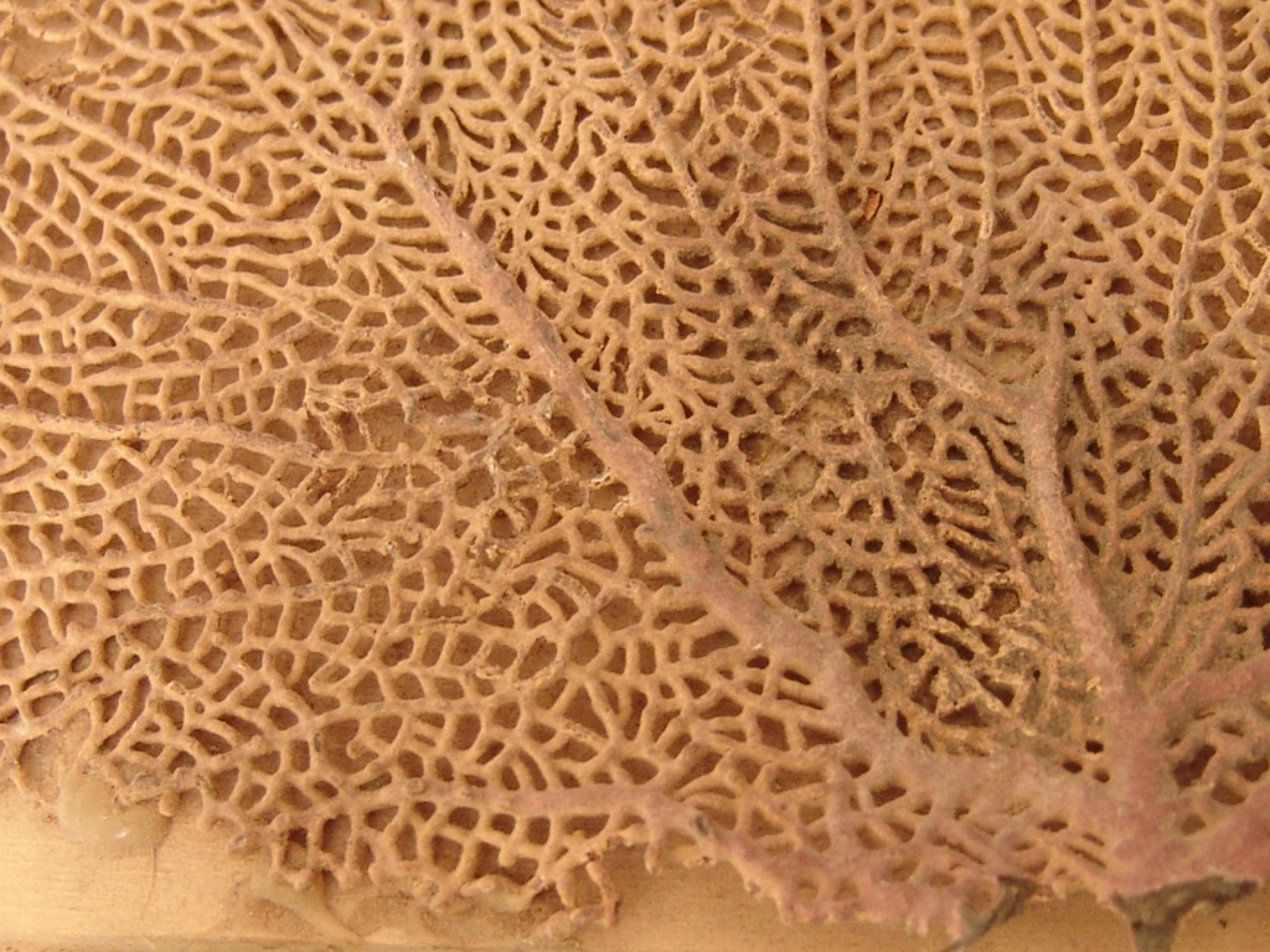
Pre-Digital Work

Molds from natural objects

Wax castings combined for sculpture in bronze

“Juxtamorphs”—close forms

























and Giants are out

Lechler was awful to boot

Tomlinson called 'finest' of all

NFL MONDAY

NFL MONDAY







Juxtapomorphic Explorations

Work extends into ceramics, plaster, paper,
and "Sculpted Paint"

Formation of Juxtapomorphic Art Movement



JUXTAMORPHS

(jŭks' tə môrfs') n. three dimensional montages of natural forms and textures. [juxta- L. "near," "close to," "beside" & morph Gk. "form." Lit. "close forms."]

CAST IN PAPER BY
ANDREW WERBY

September 9 - October 7

Loeb, Rhoades Market Hours Gallery

8th Floor, Transamerica Pyramid
600 Montgomery Street, San Francisco

Reception Friday September 9, 4:30 p.m.





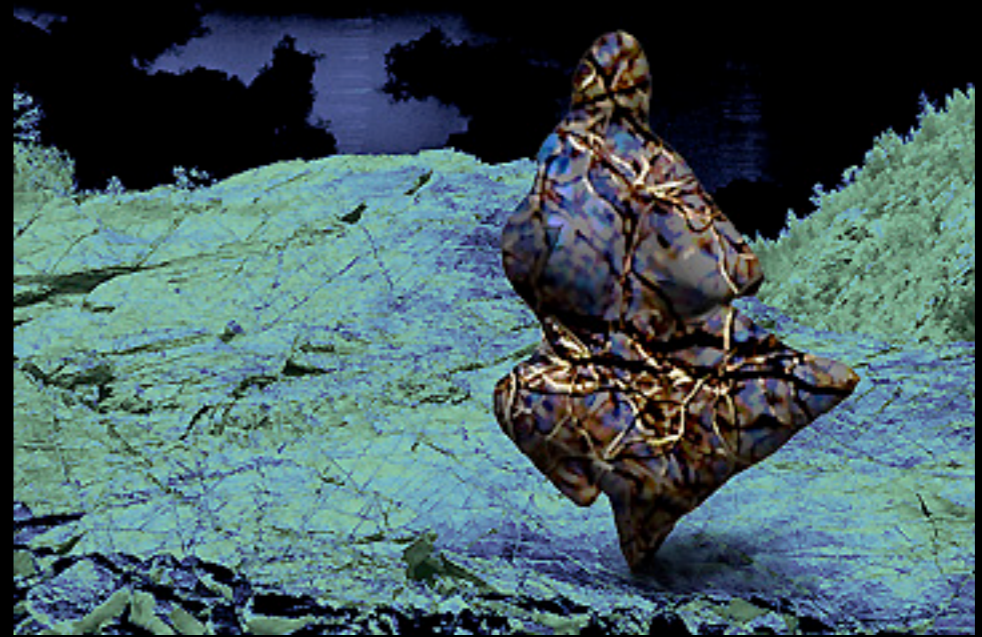
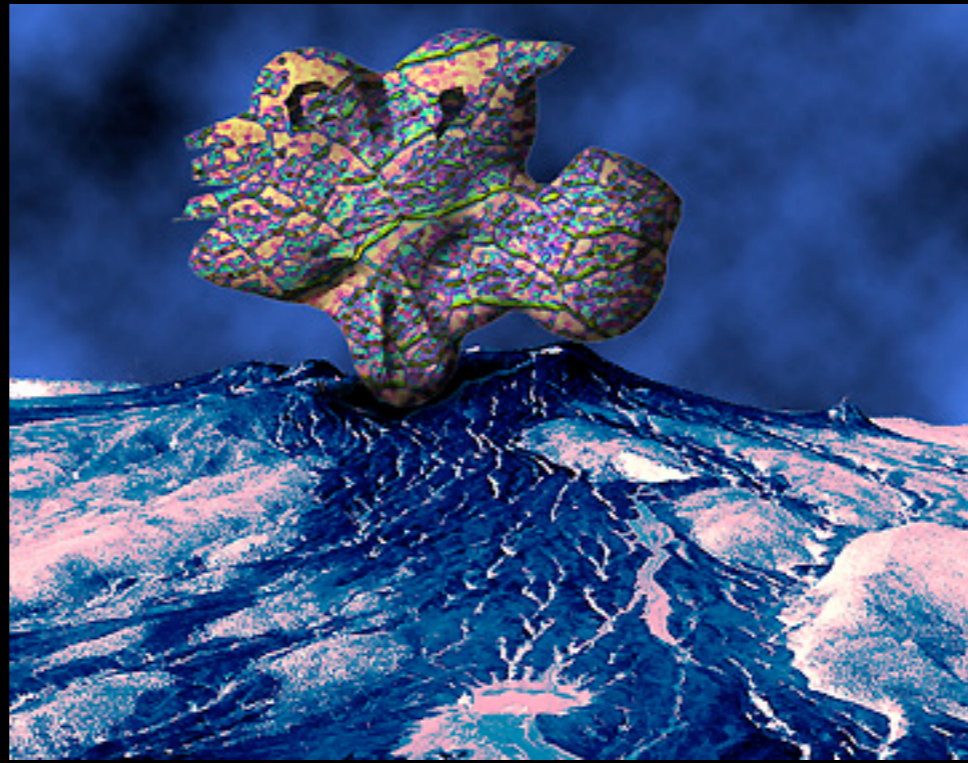




Computers as Collage Machines

Simple 3-D forms with photo textures

Output limited to 2-D prints







3-D Scans Begin to Replace Molds

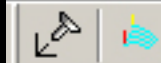
Difficult for early 3-D programs to handle
Height-field programs convert 2-D to 3-D

Sculptures exist only in computer

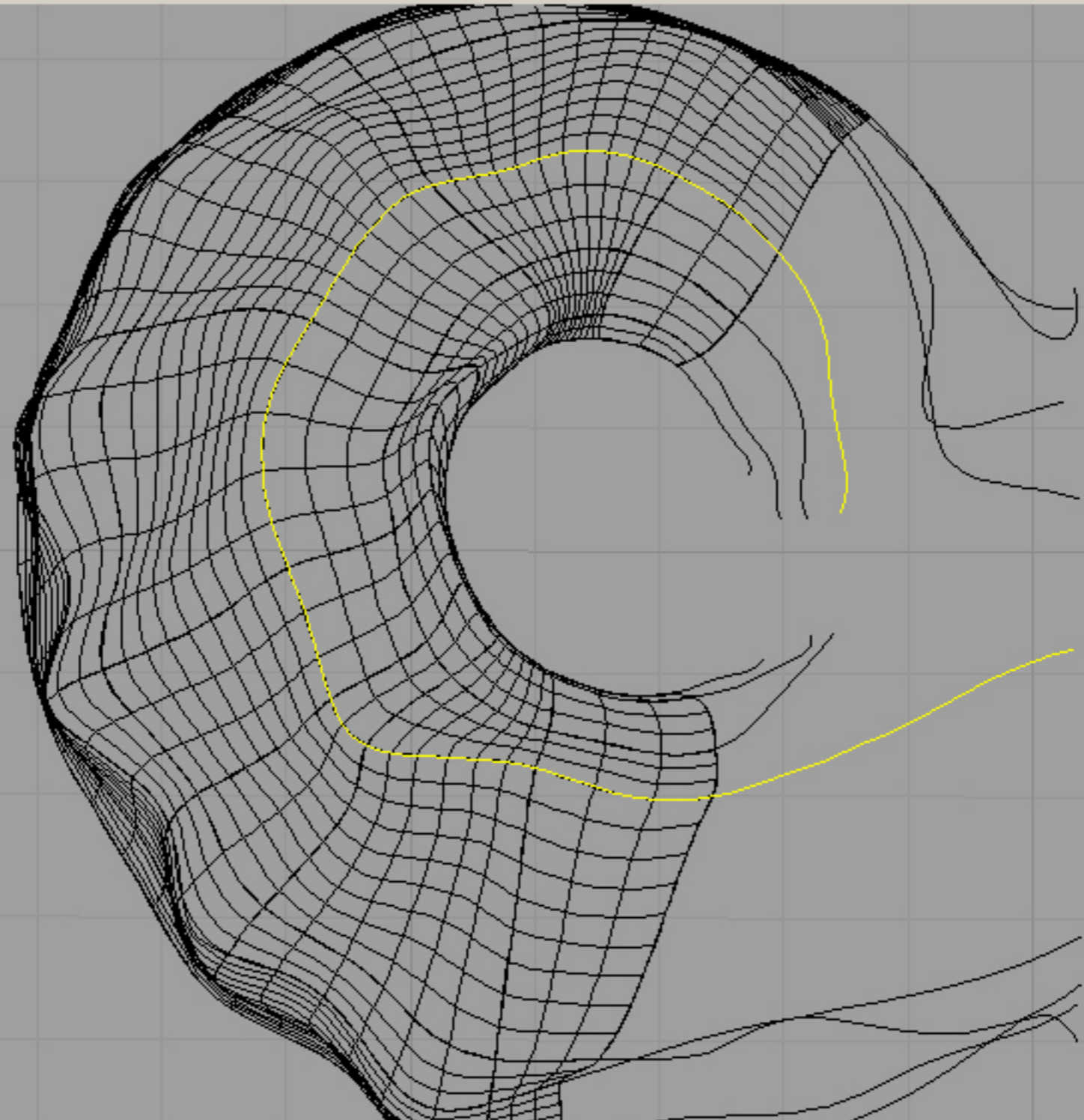
Hand-operated touchprobe scanner



Command: _Undo
Undoing Drag
Command:



Right



End Near Point Mid Cen Int Perp Tan Quad Knot Project Disable

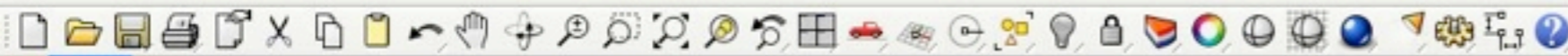
x -12.085 y 3.682 z 0

IGES level 1

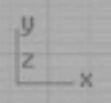
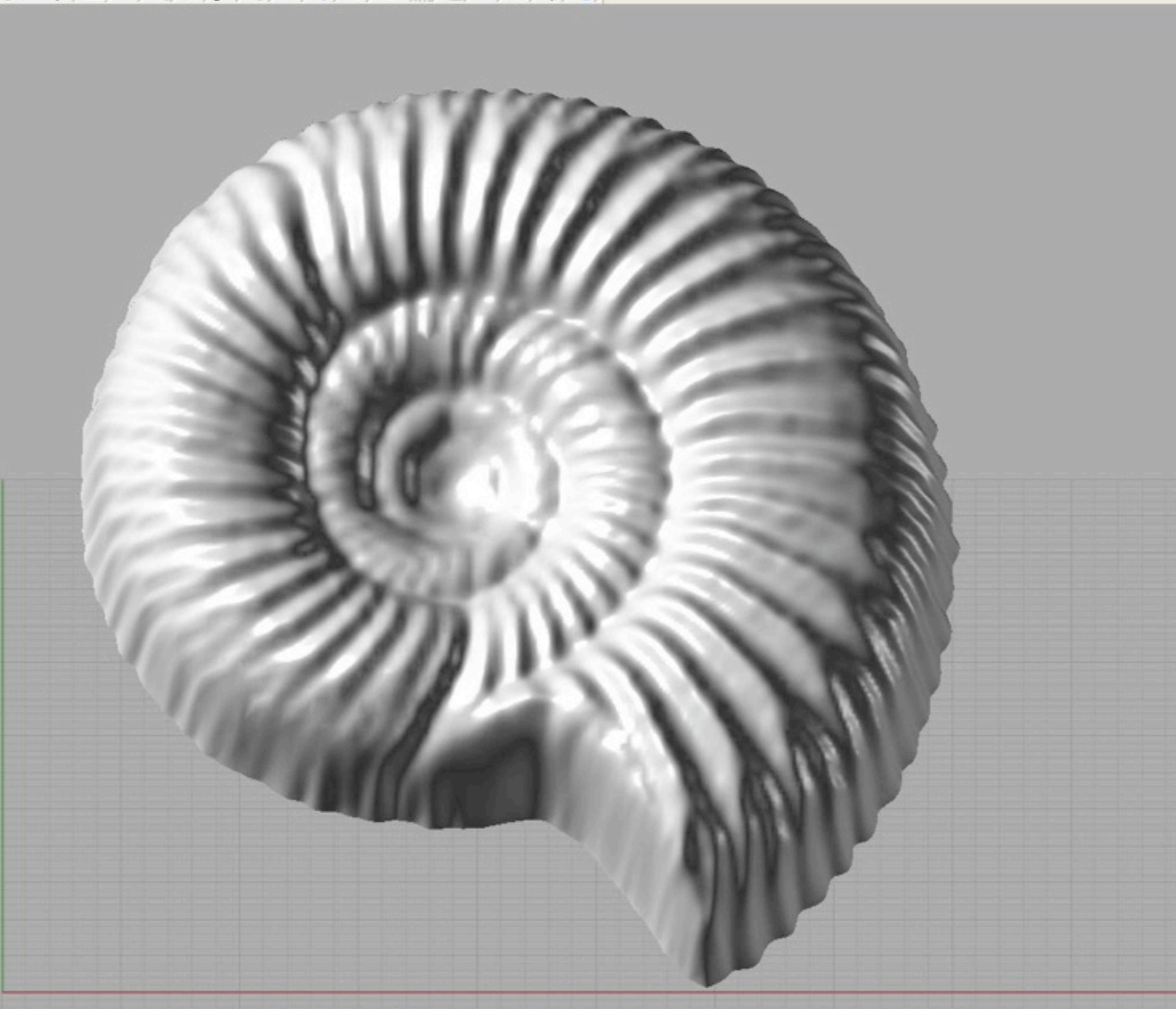
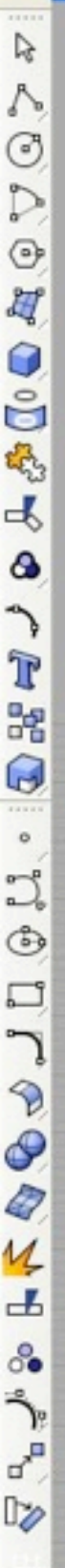


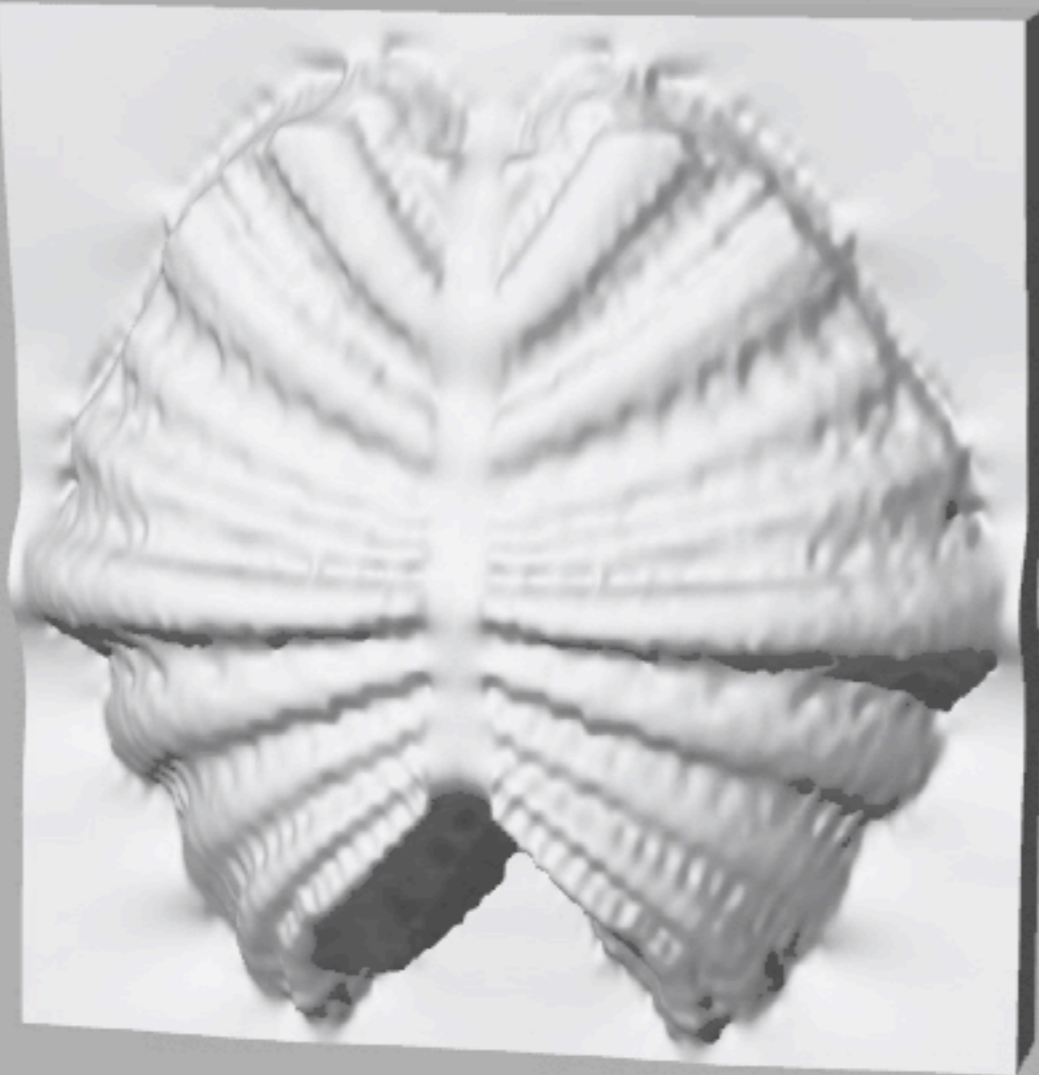
Command: _Shade

Choose Shade settings (DisplayMode=Shaded DrawCurves=Yes DrawWires=No DrawGrid=Yes DrawAxes=Yes):



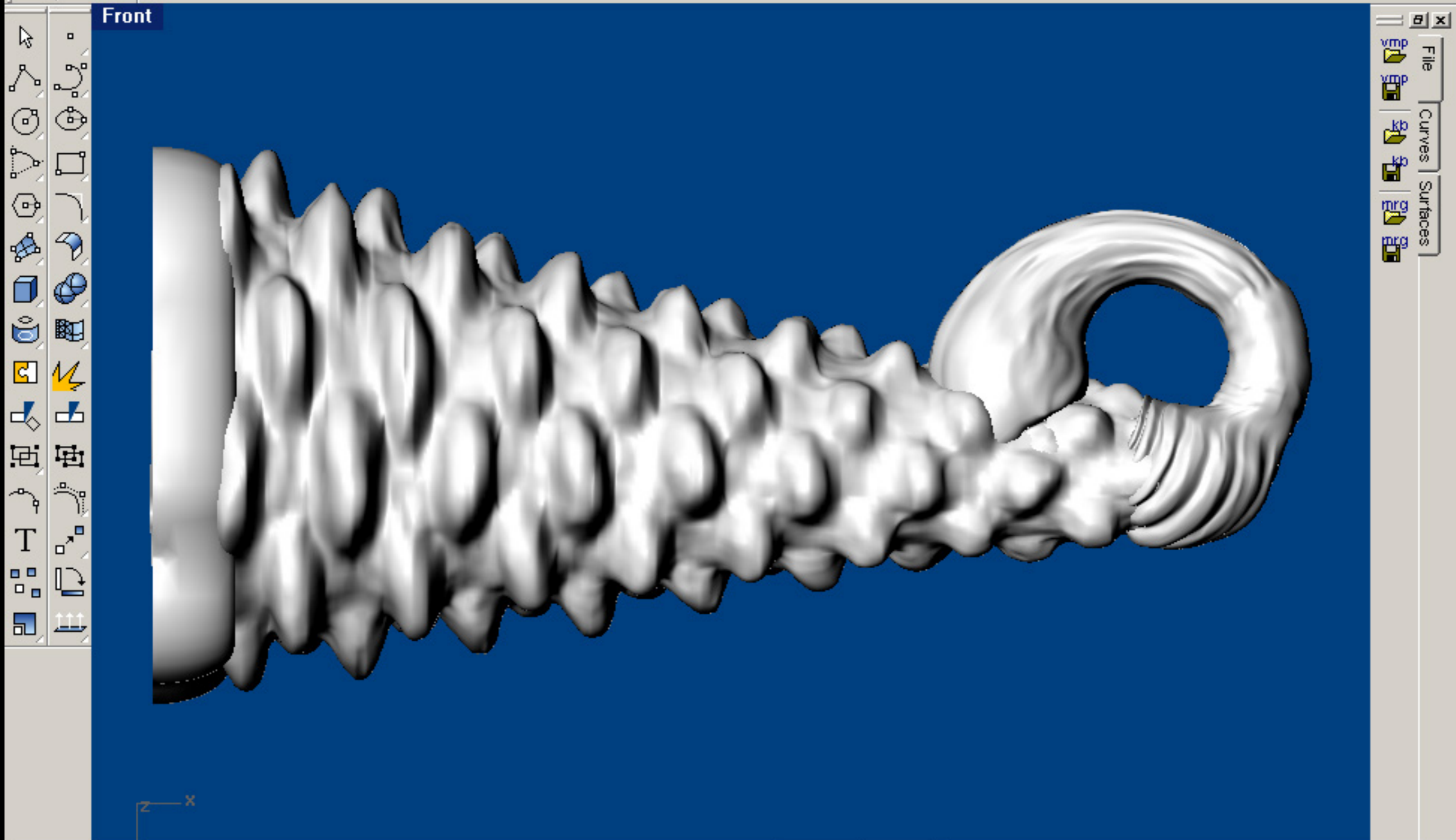
Front





Drag objects:
Command: _Shade

Choose settings (DisplayMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):



End Near Point Mid Cen Int Perp Tan Quad Knot Project Disable

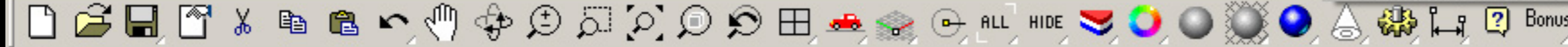
CPlane x 25.147 y -91.761 z 0 Default Snap Ortho Planar Osnap

Creating rendering meshes... Press Esc to cancel

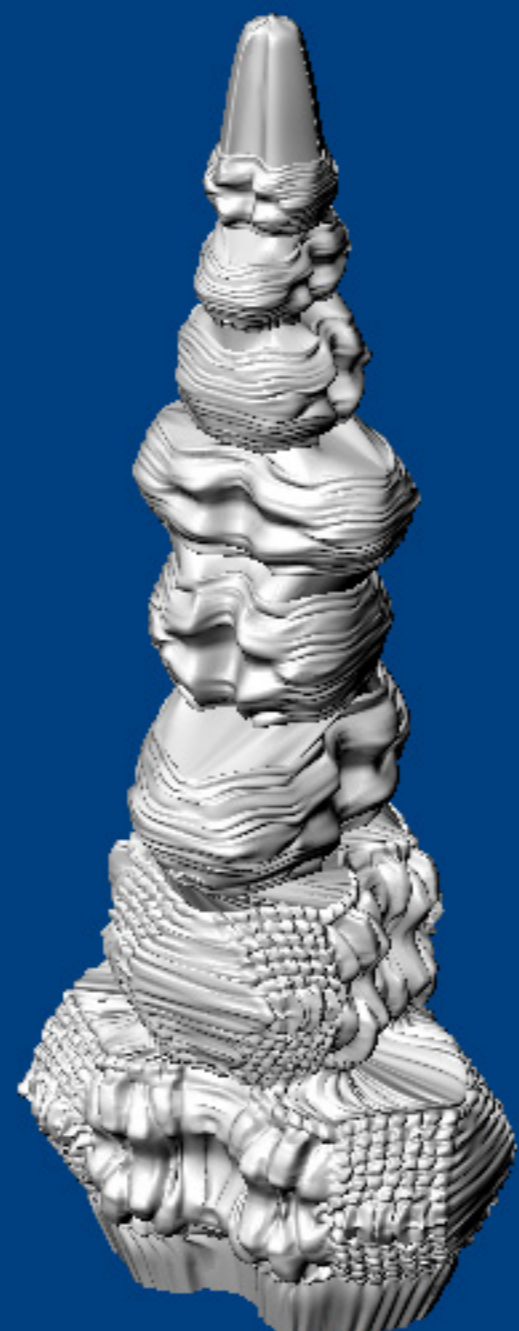
Choose settings (DisplayMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):

Choose sett| playMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):

Adobe Photoshop Album Starter Edition 3.0 - han



Perspective



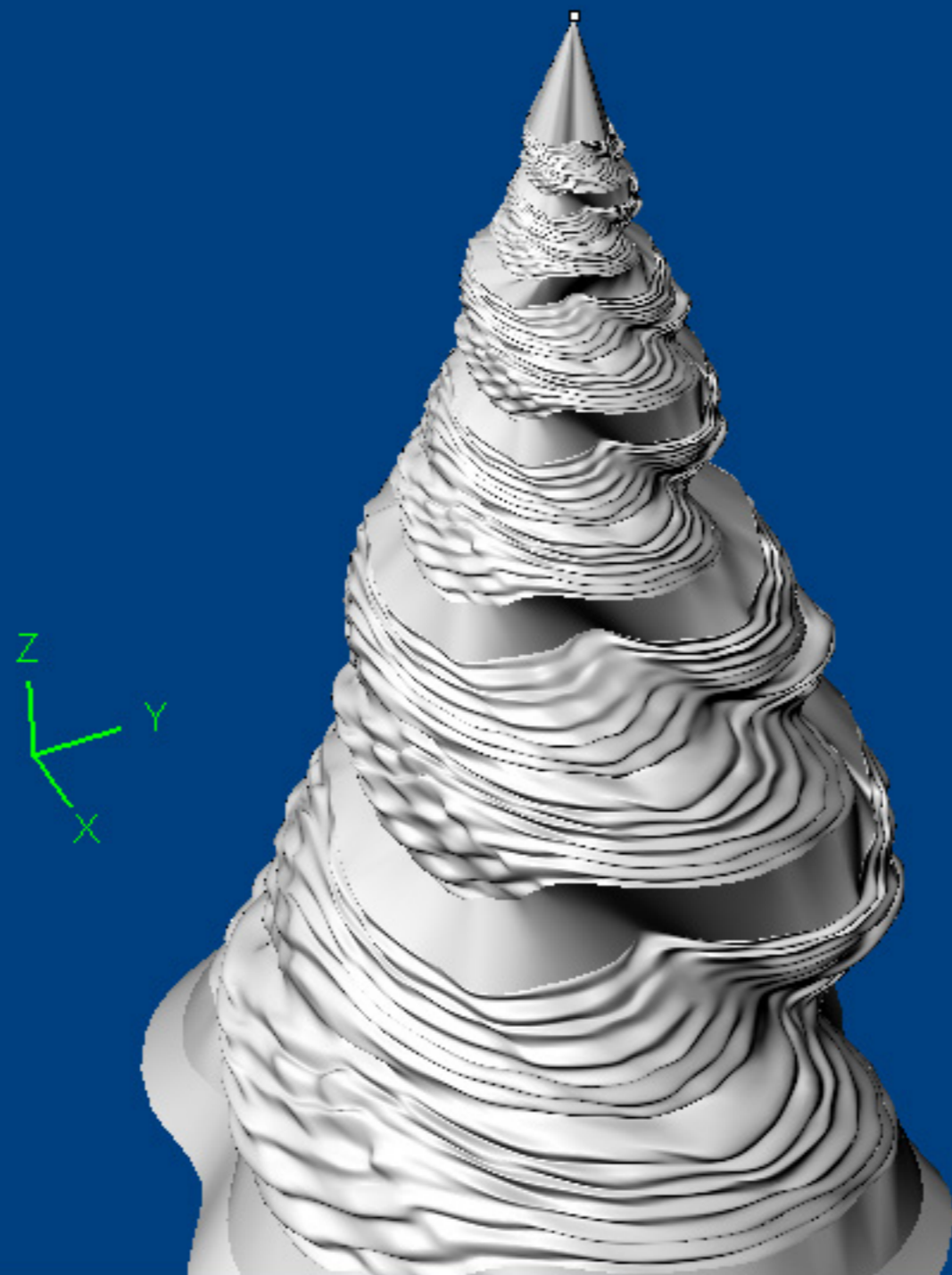
Choose settings (DisplayMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):

Command: _Shade

Choose settings (DisplayMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):



Perspective



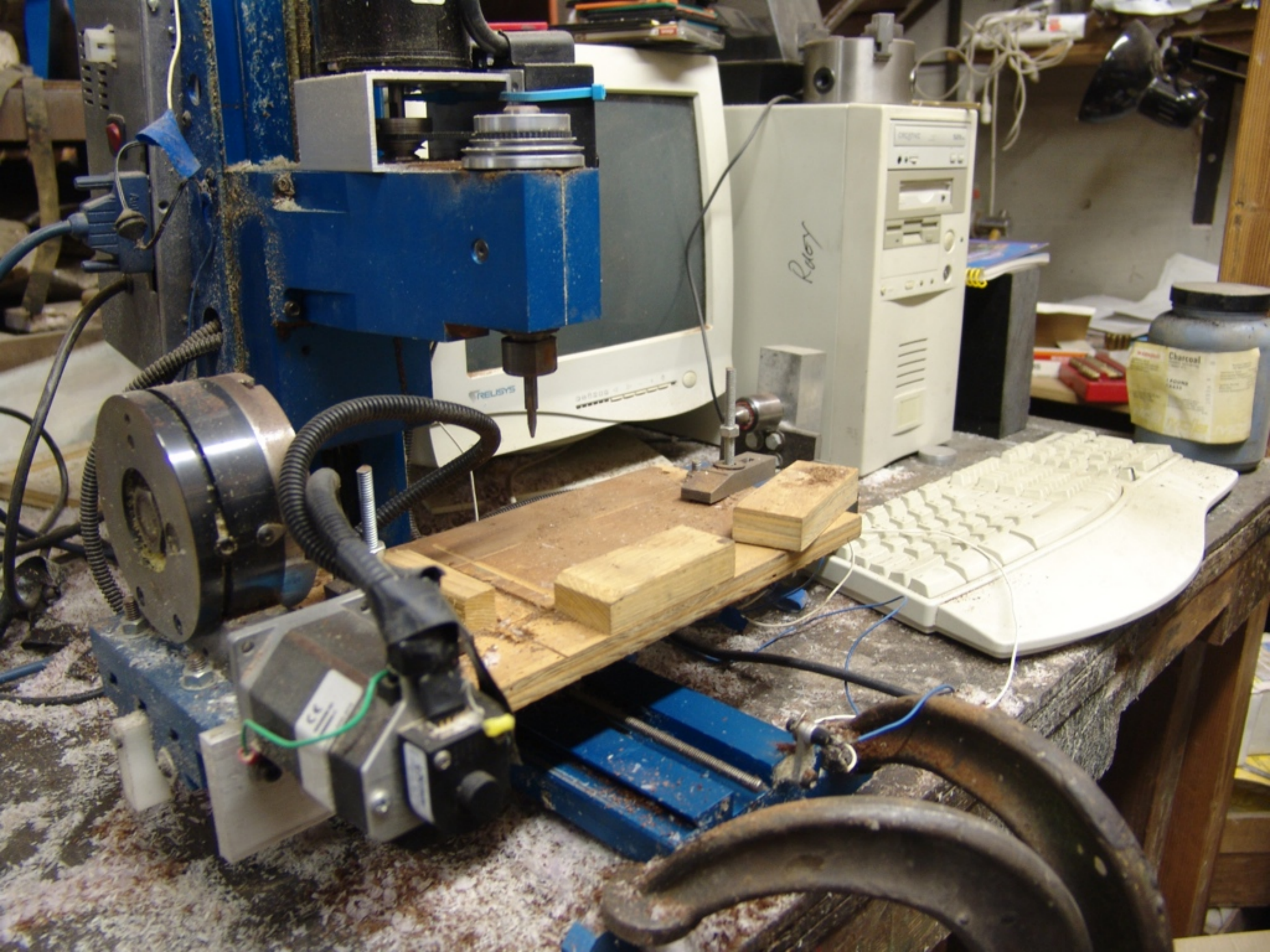
End Near Point Mid Cen Int Perp Tan Quad Knot Project Disable

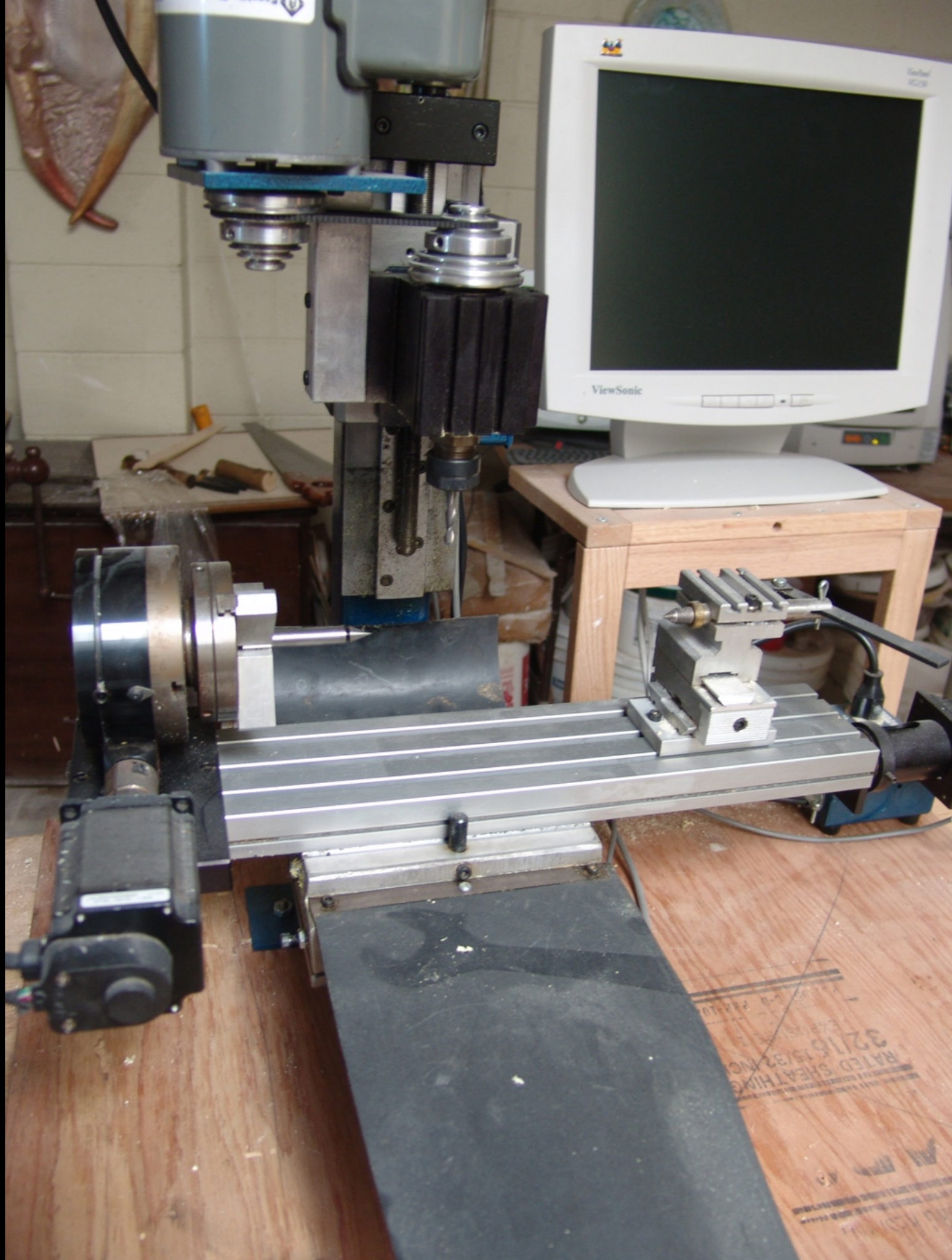
CPlane x -2.946 y 9.262 z 0 Default Snap **Ortho** Planar Osnap

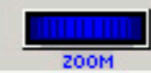
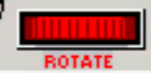
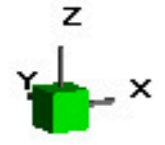
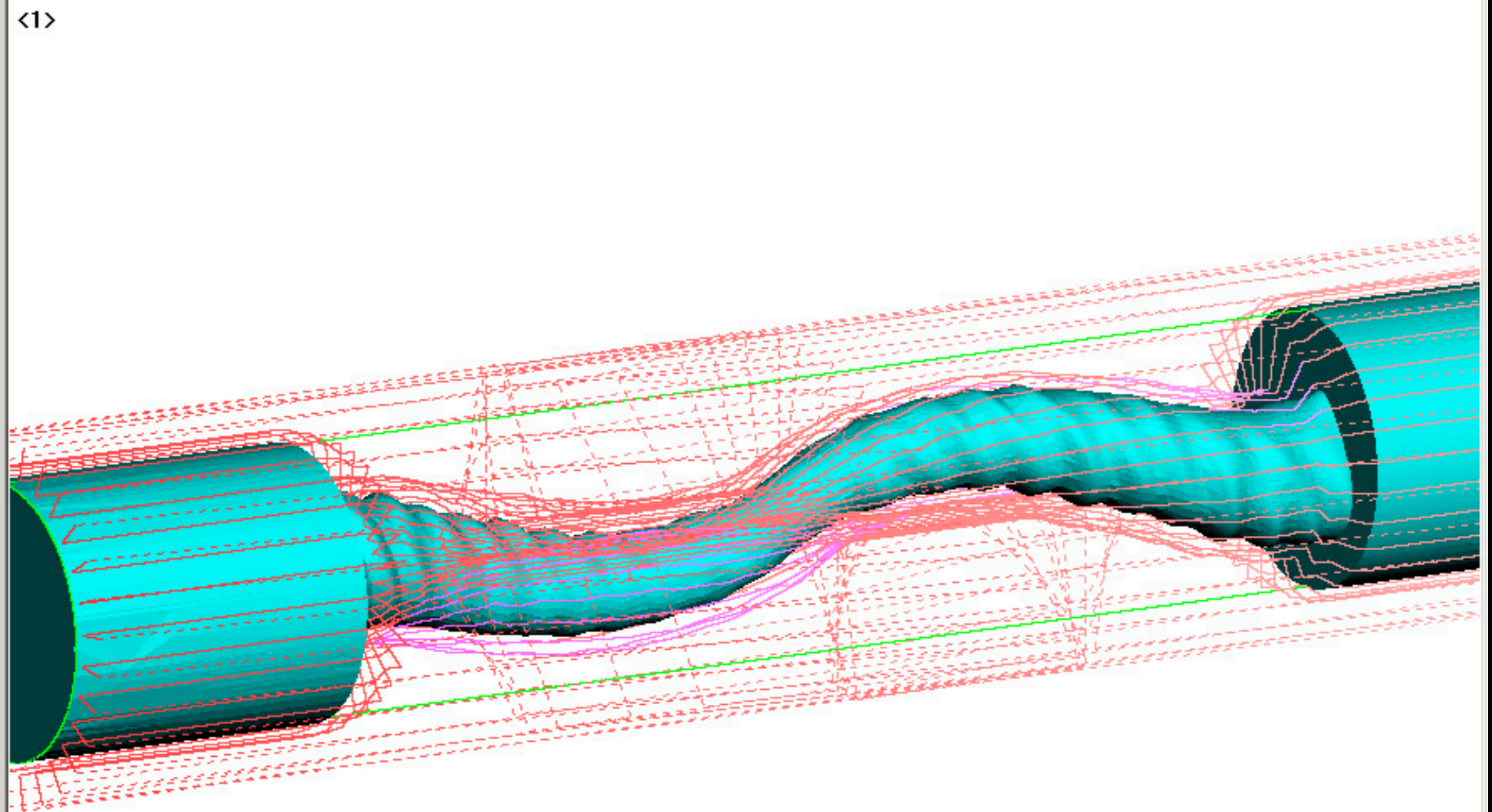
New Inexpensive CNC Tools Hit Market

Output possible in soft materials

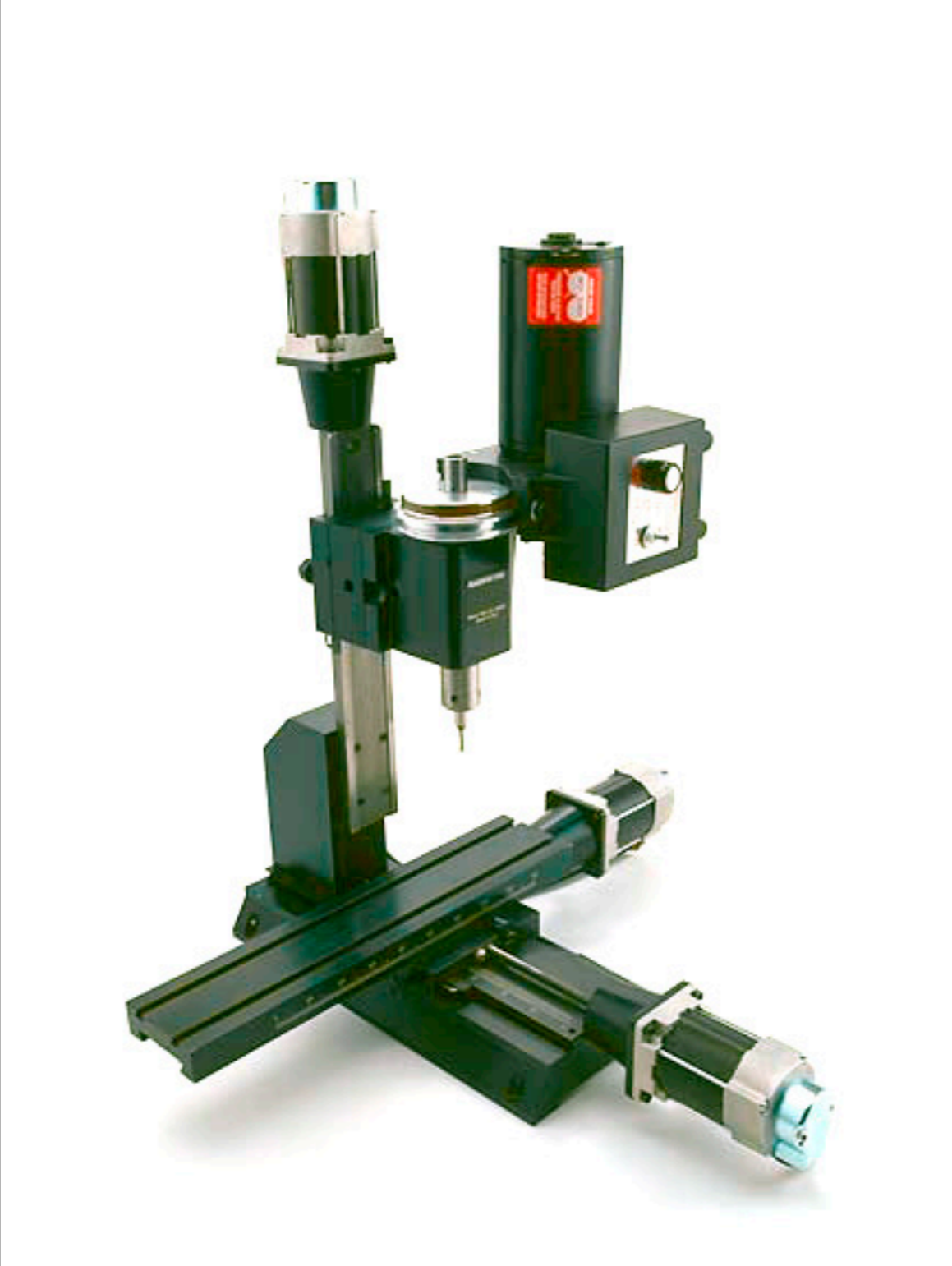
Scale still a limitation



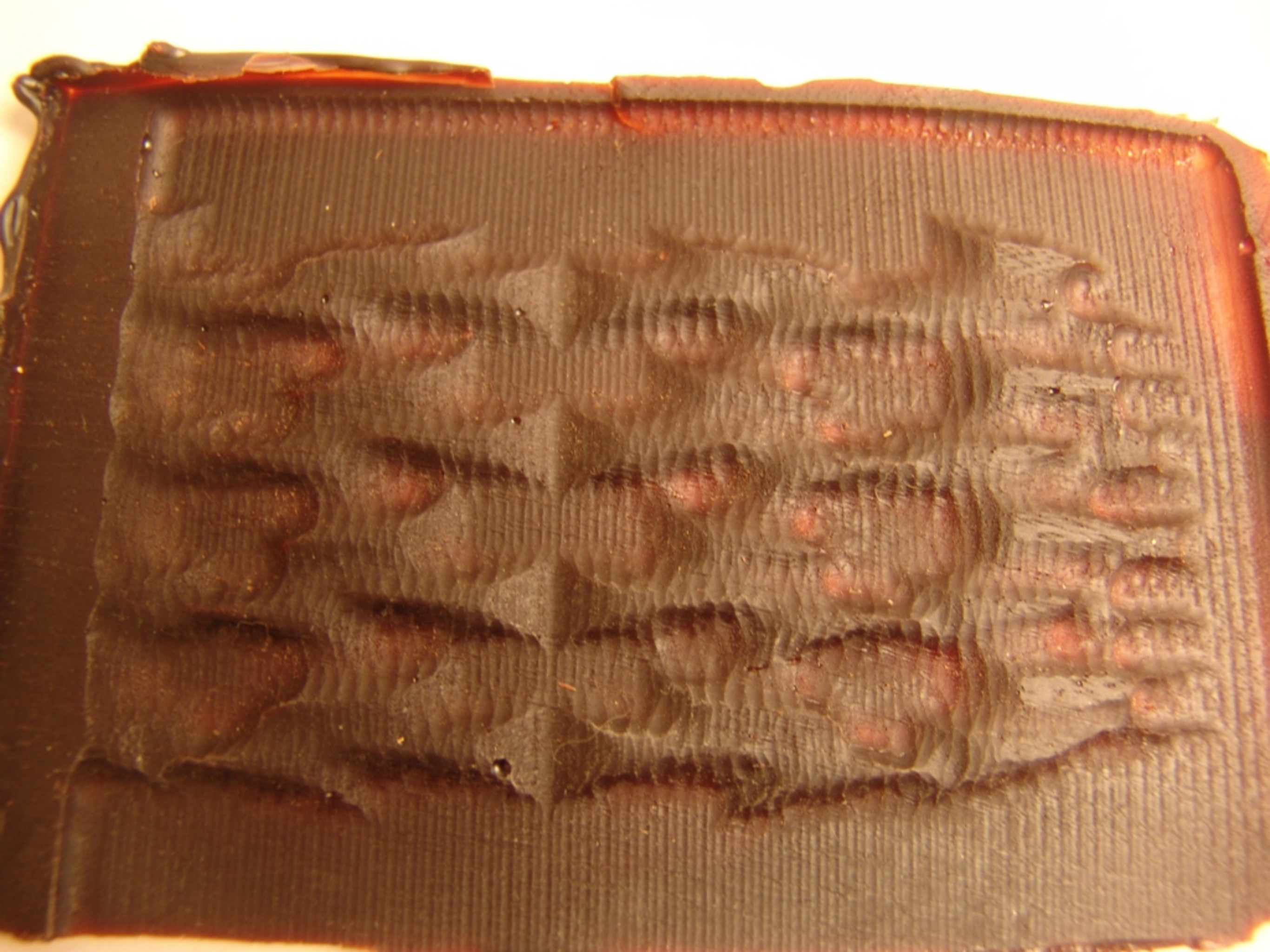














3-D Scanners Improve

Automatic touchprobe scanners

Non-contact rotary laser scanners

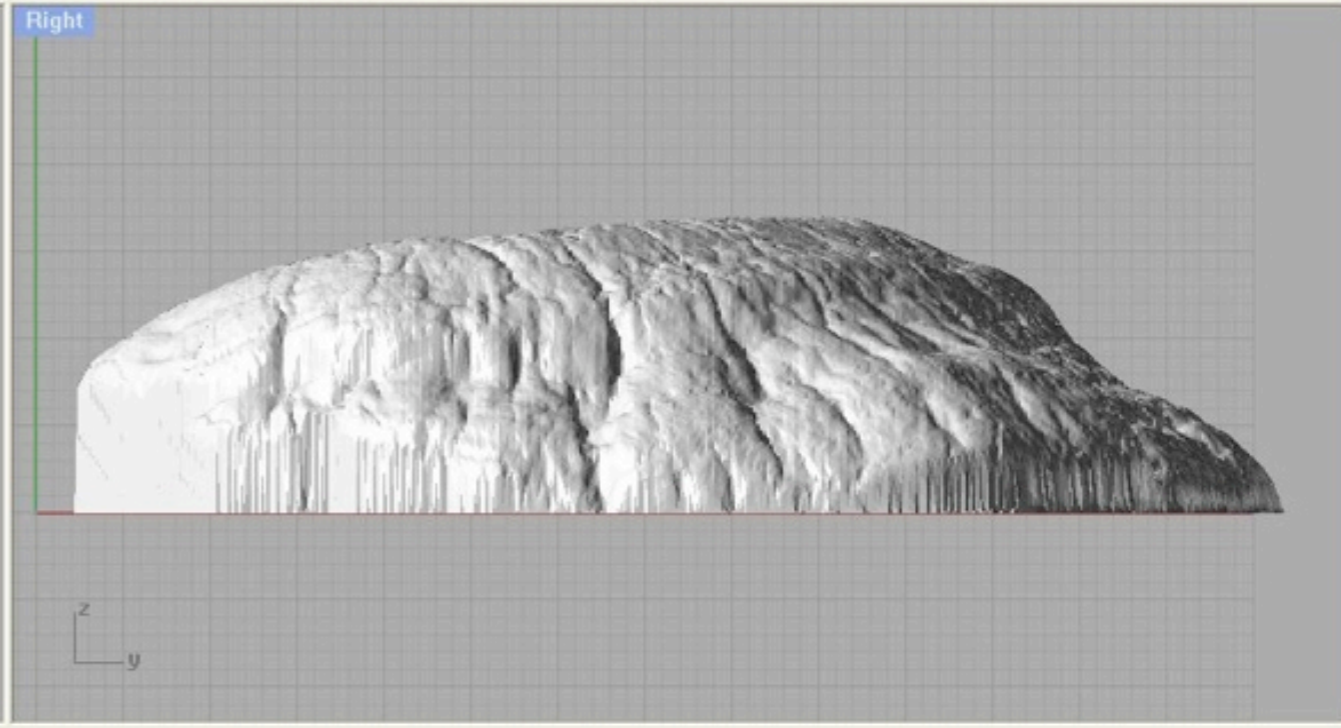
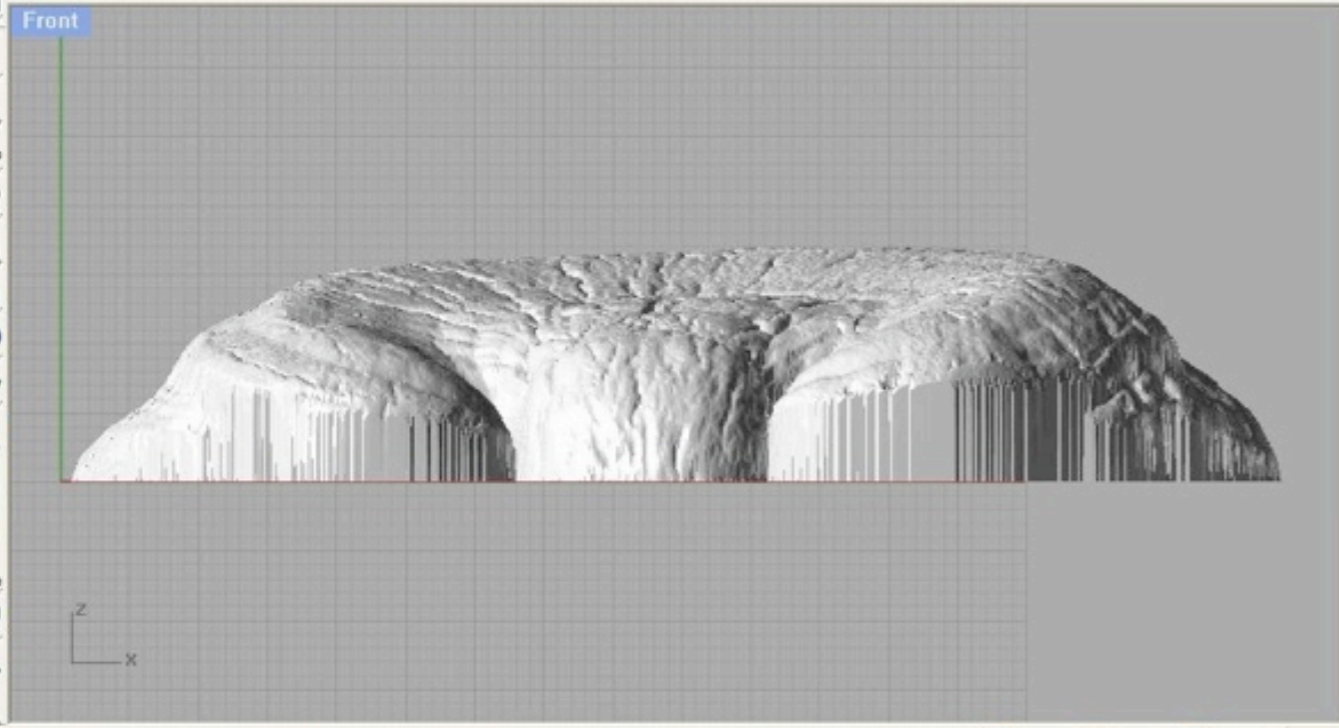
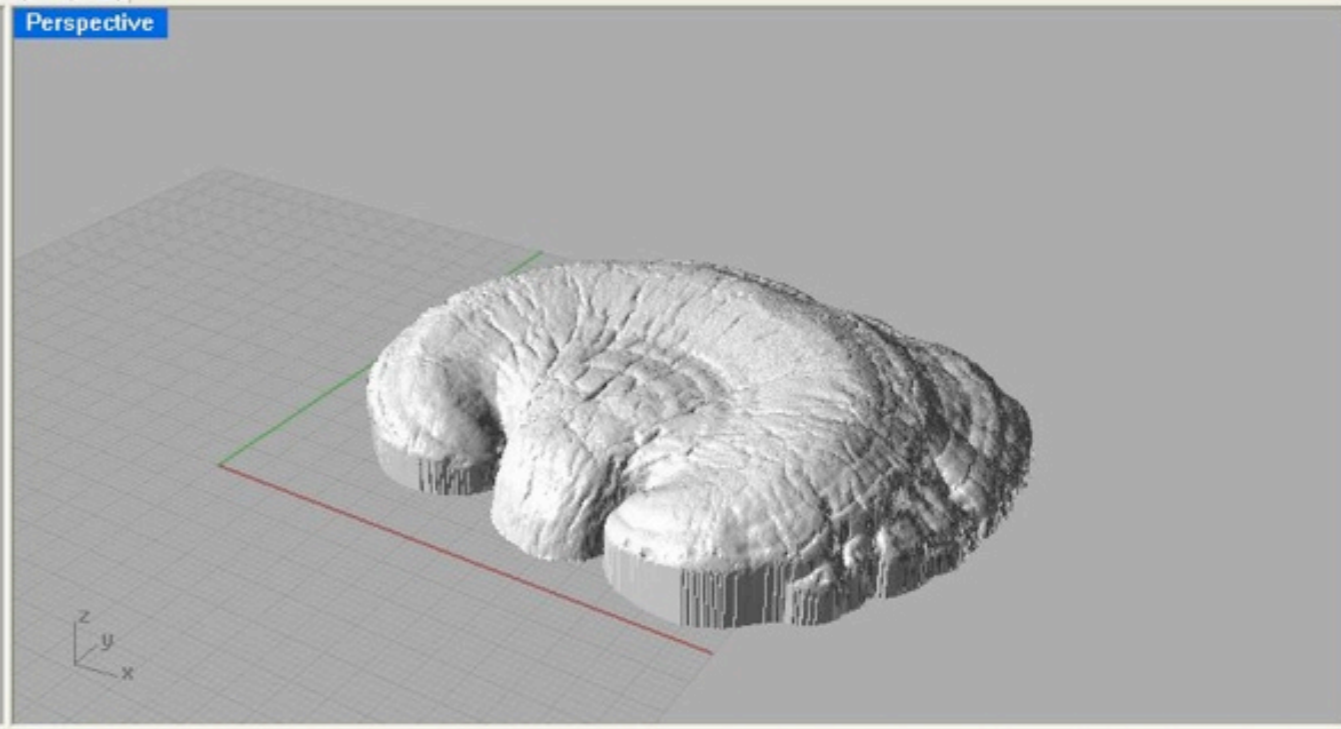
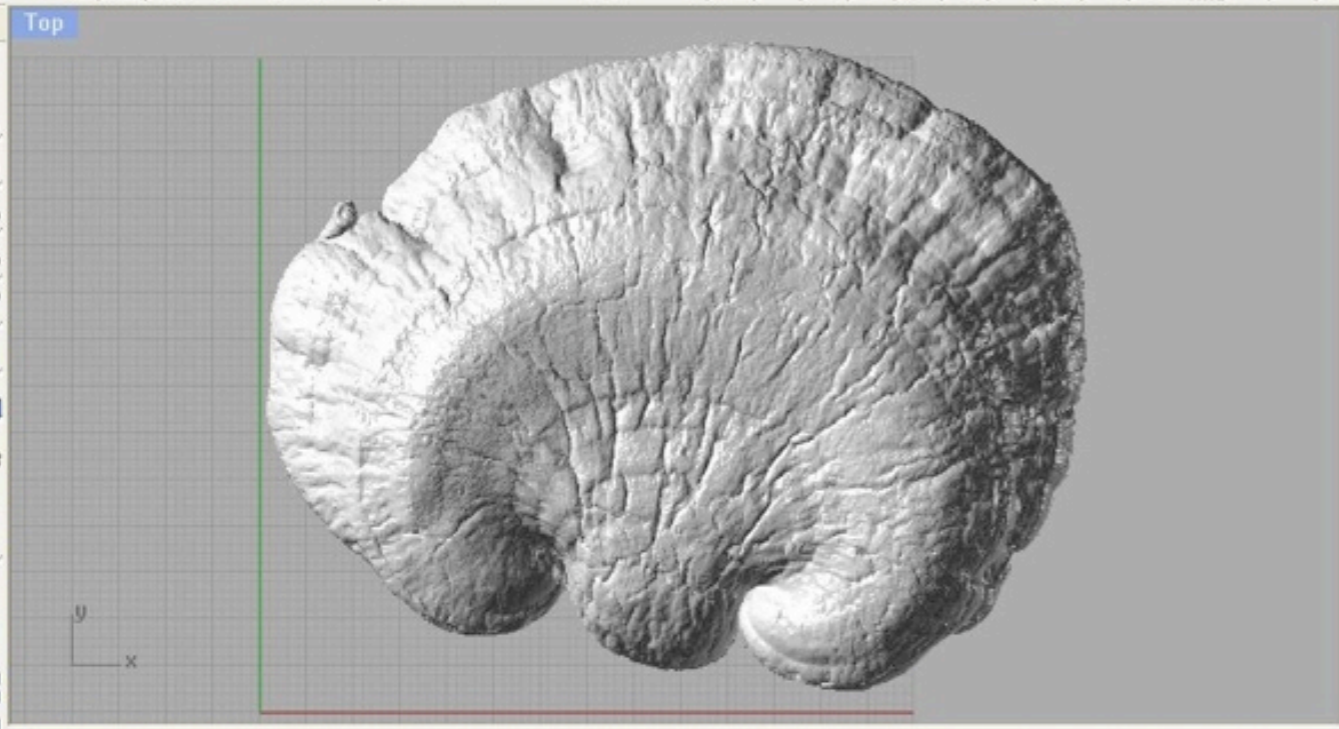
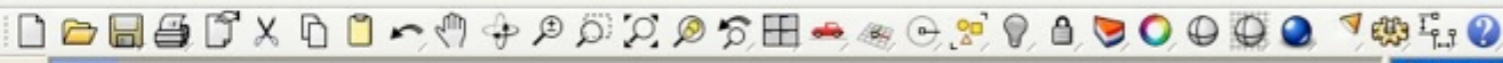


Handwritten text in a gold-colored script on a wooden plaque, likely a religious or historical inscription.

Roland
PIX-30

PICZA
30 SCANNER





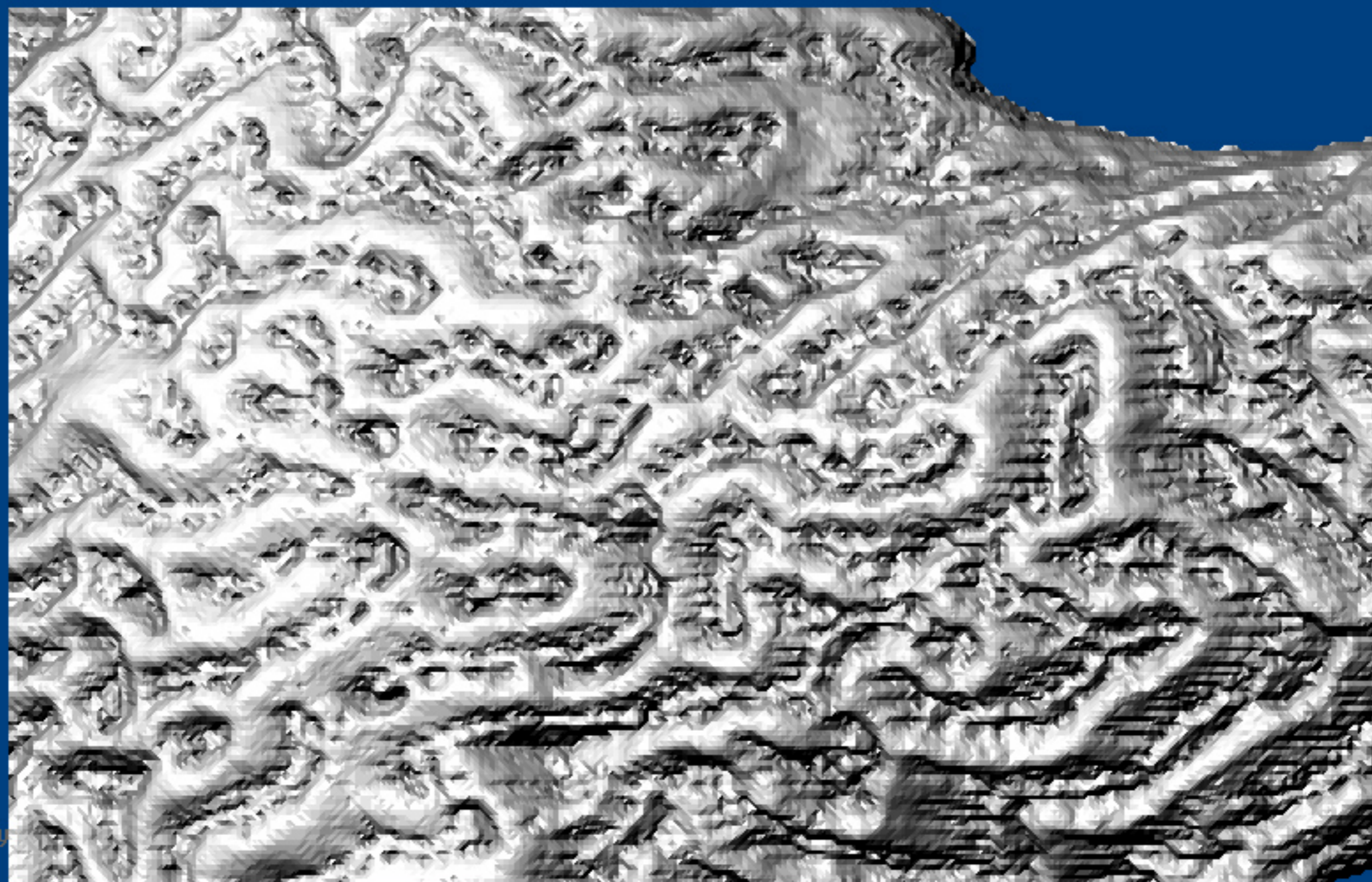
Render completed time: 0:0:9

Command: _Shade

Choose settings (DisplayMode=Shaded DrawCurves=No DrawWires=No DrawGrid=No DrawAxes=No Background=0,63,127):

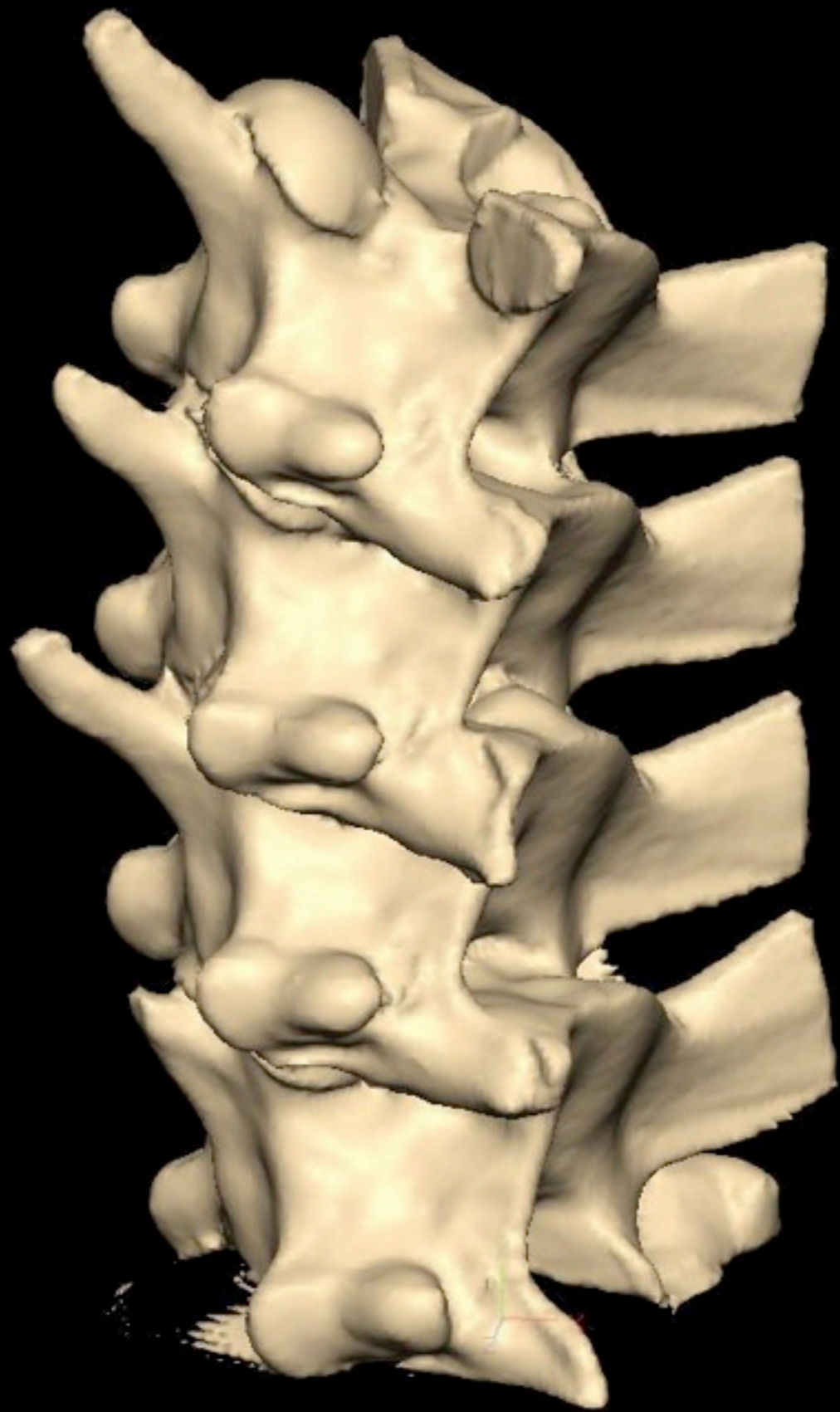


Top



End Near Point Mid Cen Int Perp Tan Quad Knot Project Disable

CPlane x -11.238 y 36.673 z 0 Default Snap Ortho Planar Osnap



Output Equipment Improves

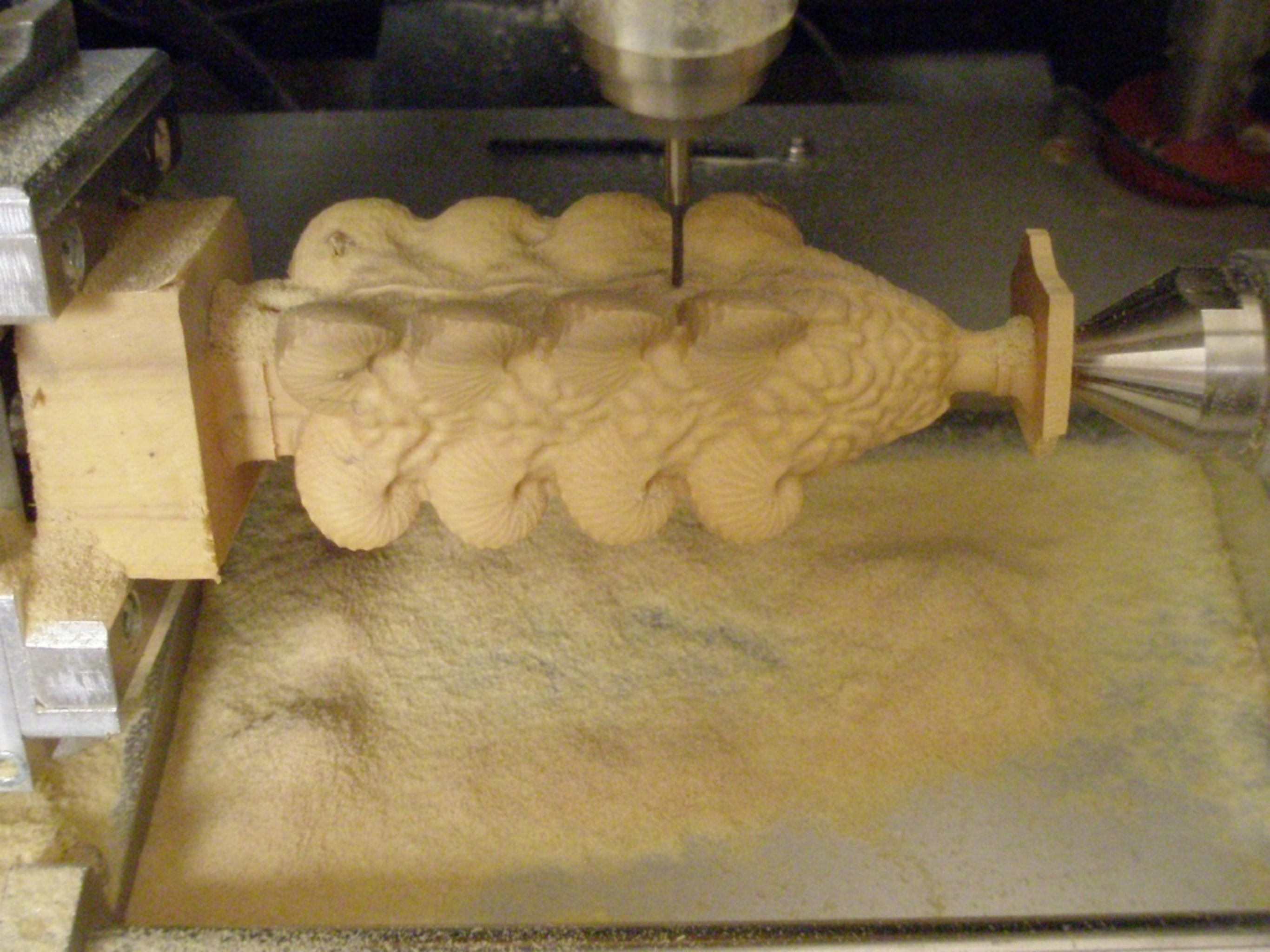
Router for large flat things

Mill for directly cutting metal

4th axis becomes available



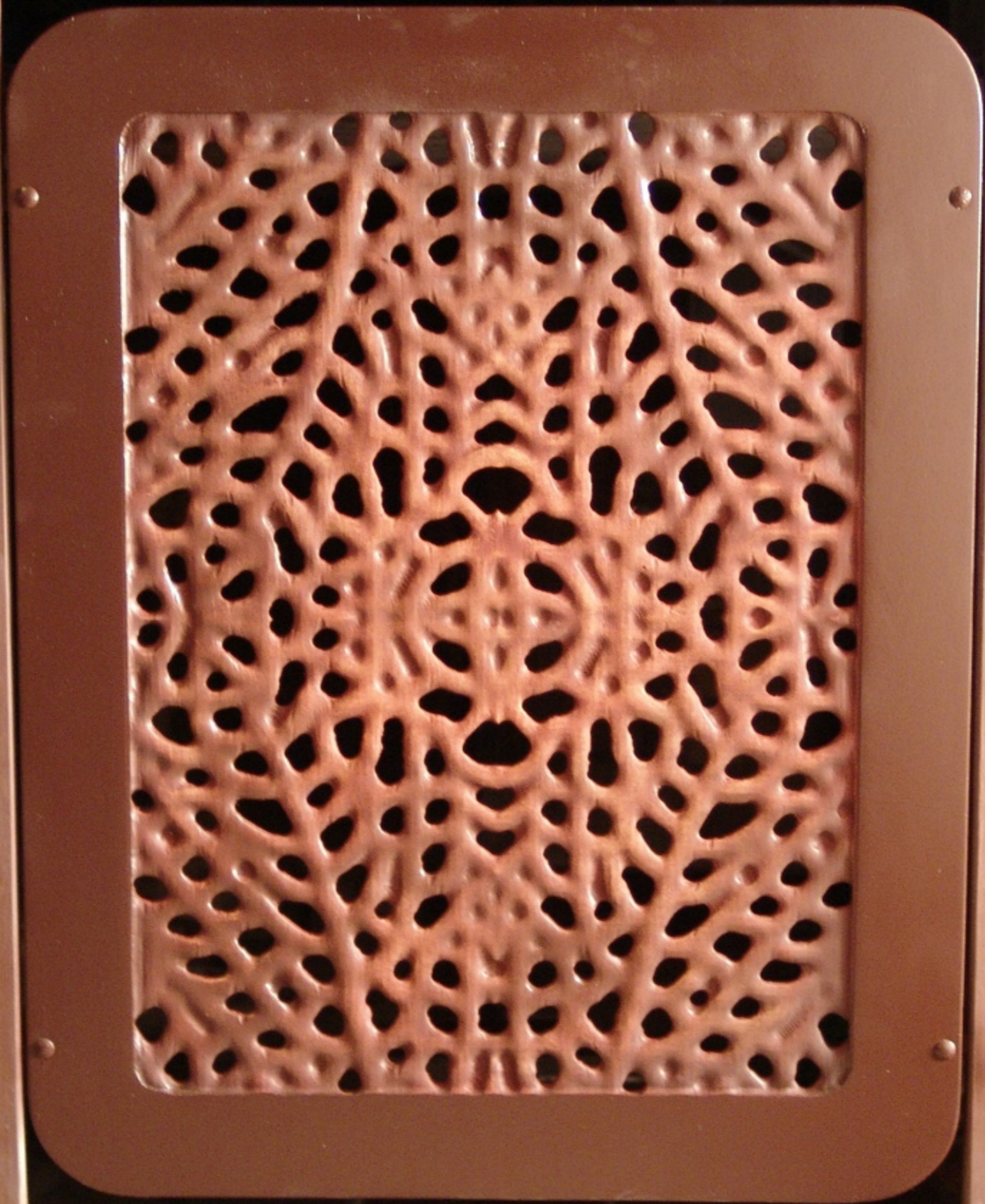




















Ceramics & Jewelry

Rolling stamps make continuous impressions

Wax carvings can be molded for
lost-wax castings





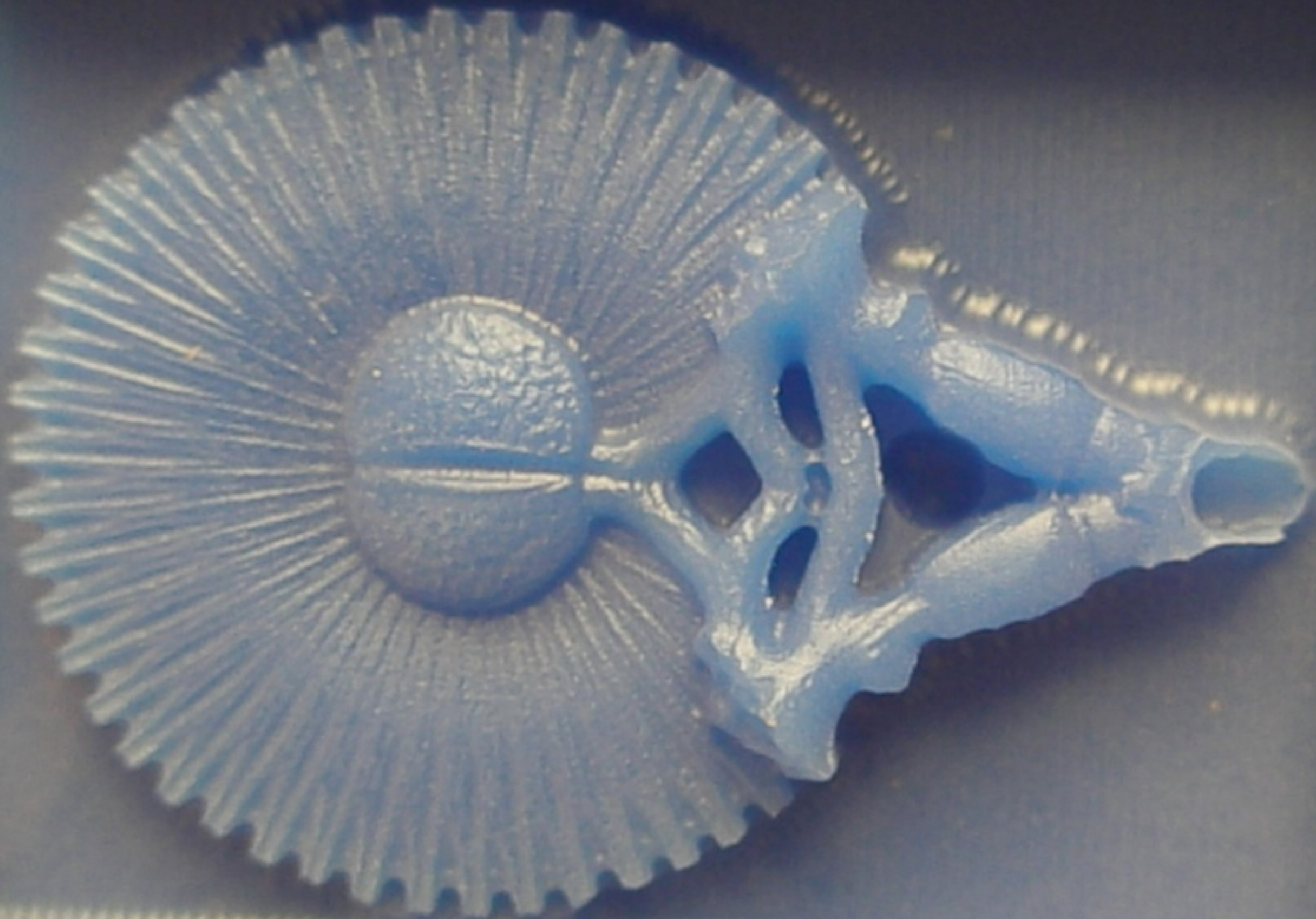














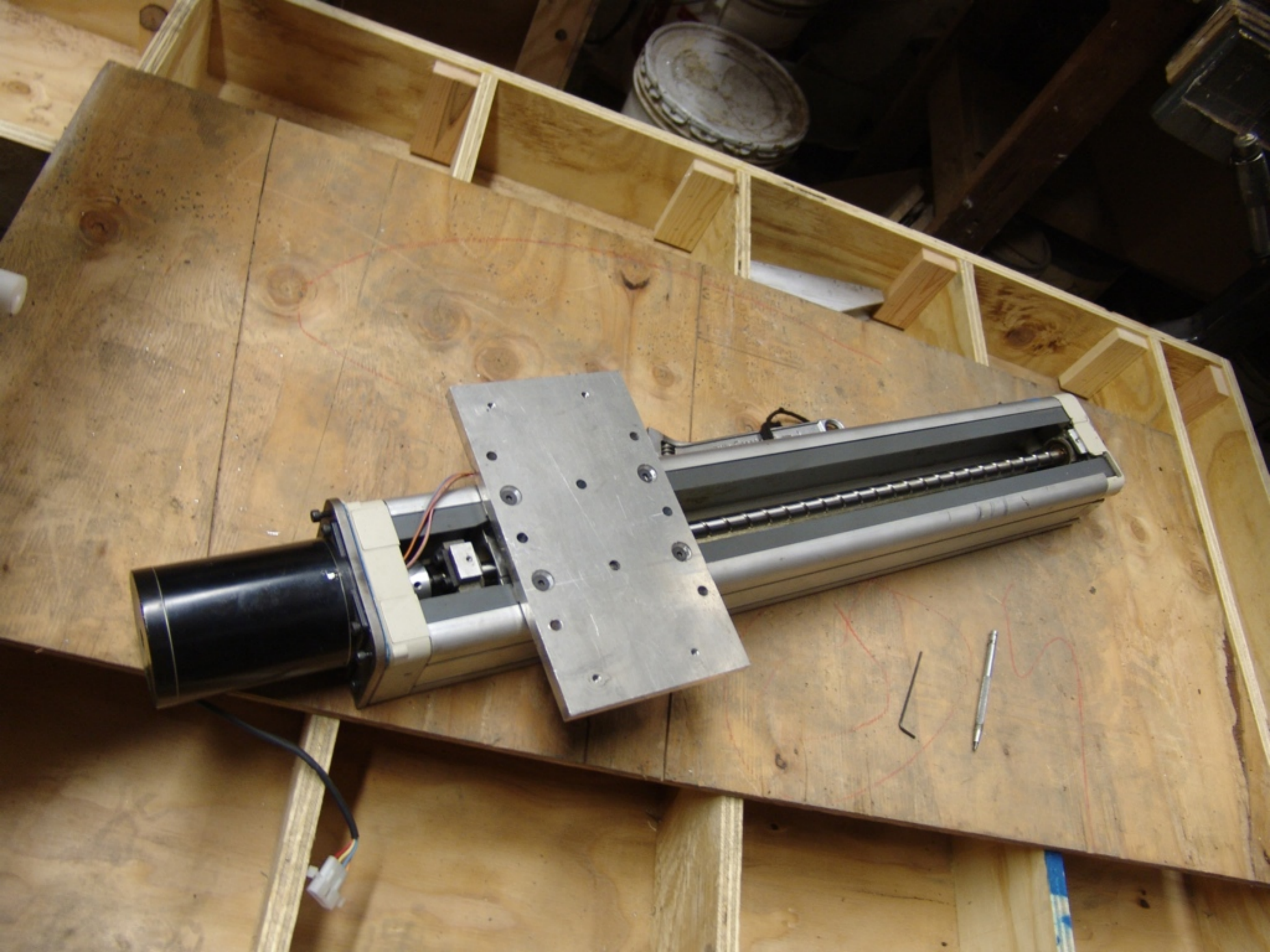




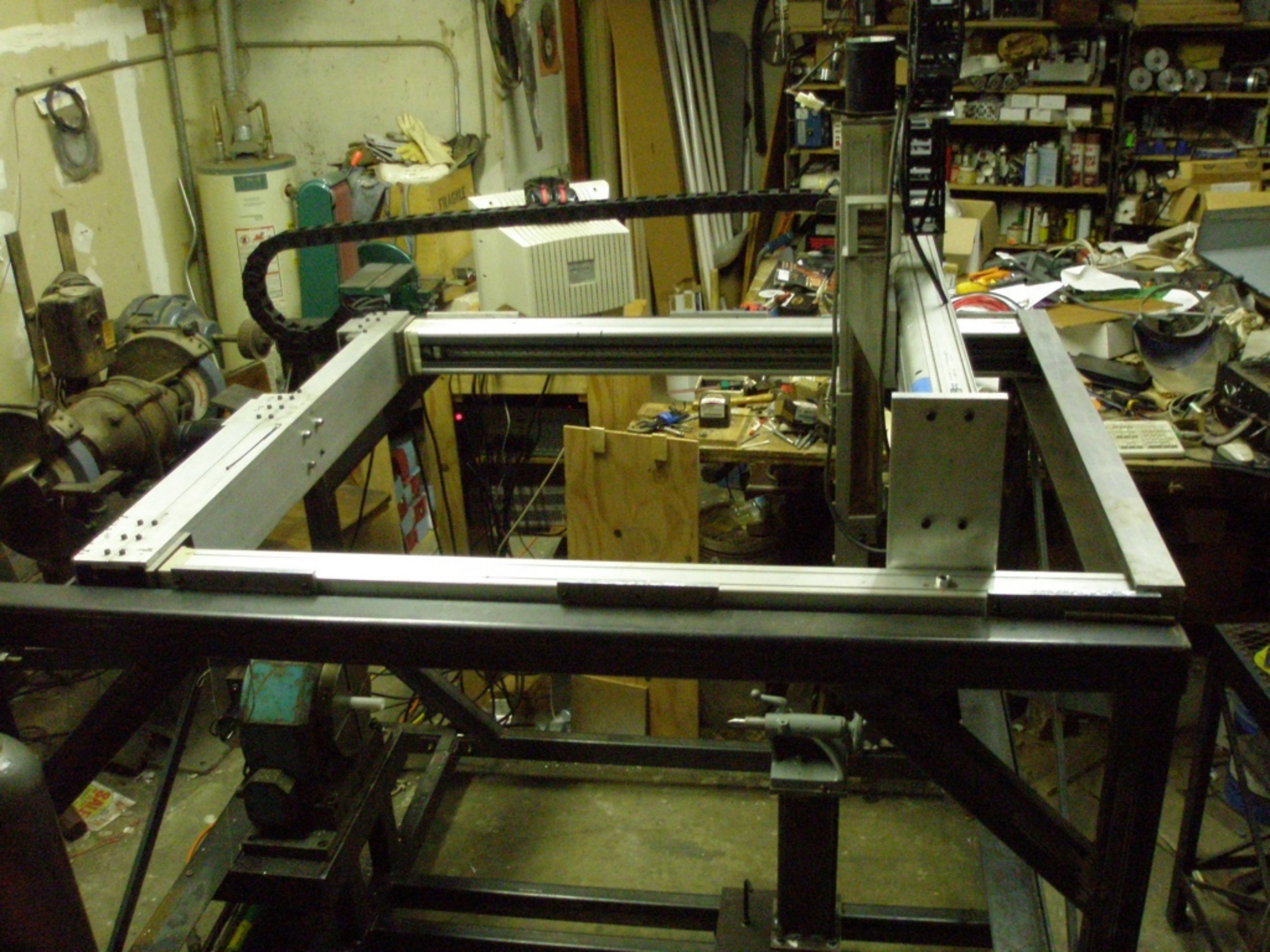
Large Output Still a Problem

My Solution

Large homebuilt machine with 4th axis







CNC Carving Can Use Many Materials

Wood

Plastics

Machinable Wax

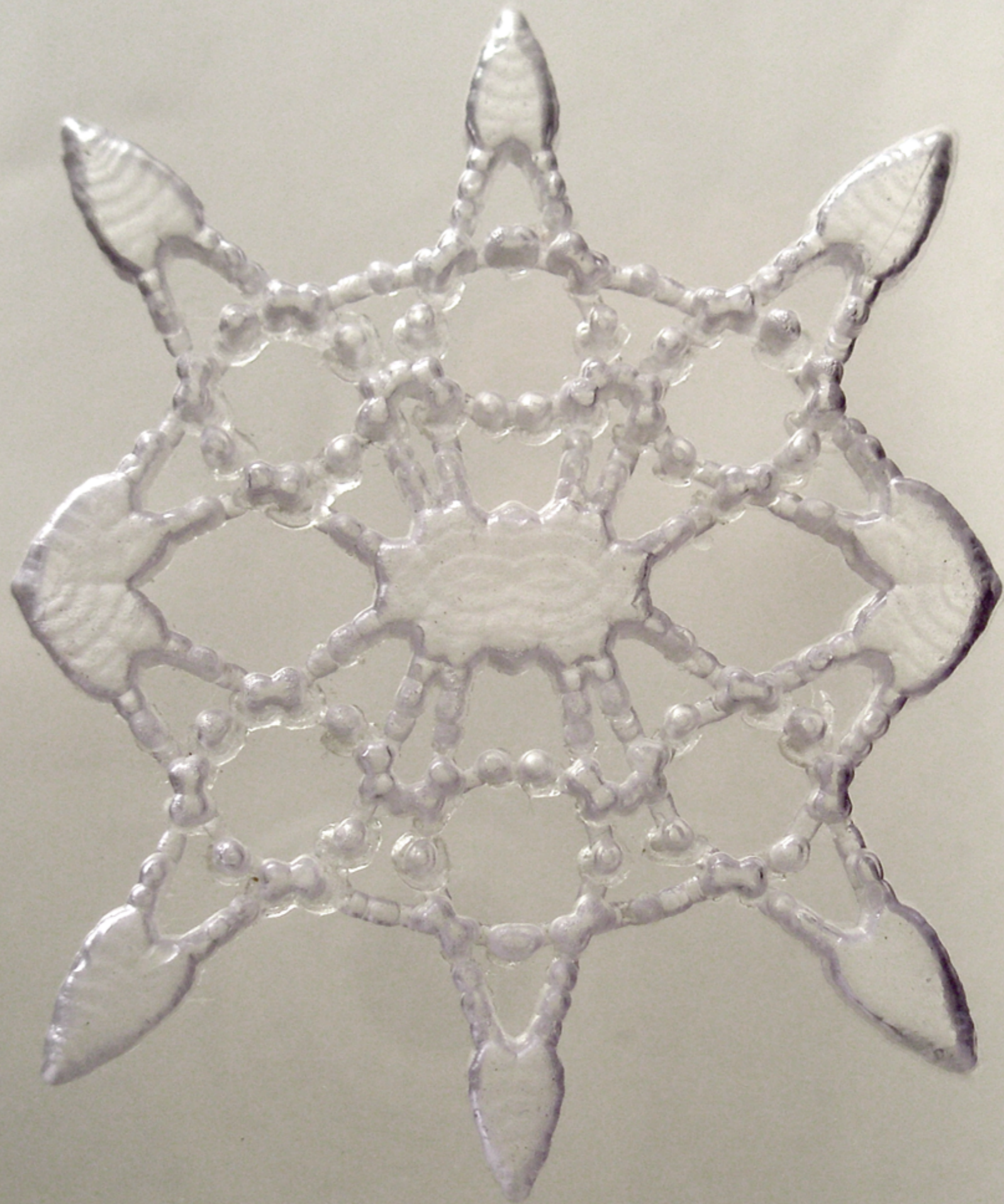
Metals

Ivory nuts























Advantages of Virtual Sculpting

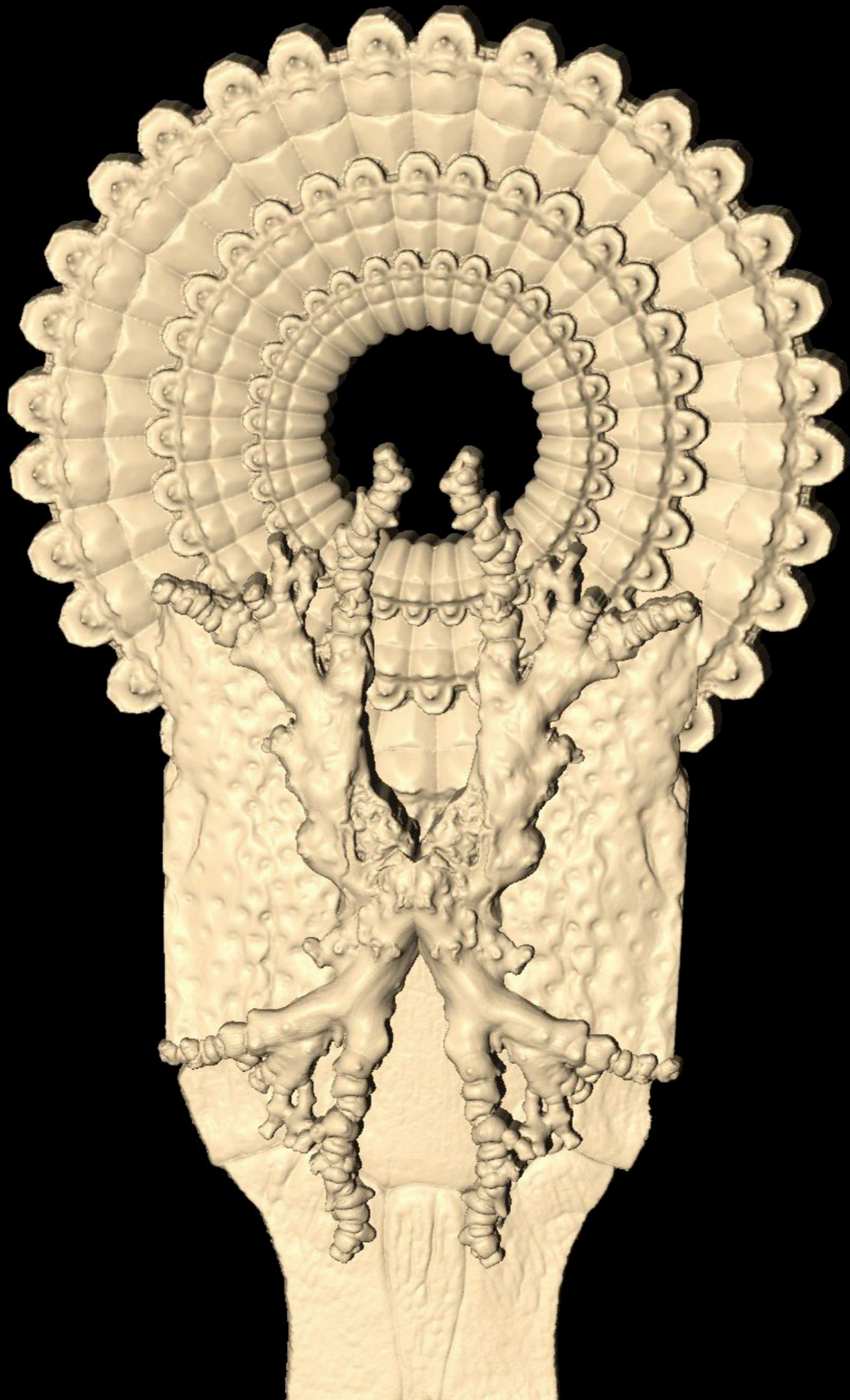
Natural forms as data: scaled and distorted

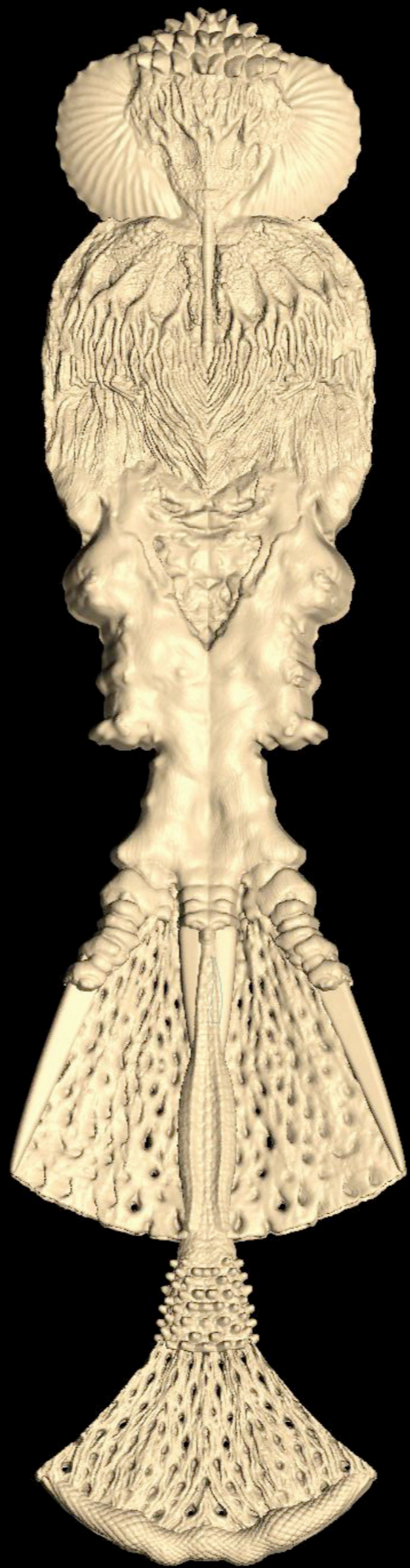
Maquettes are possible

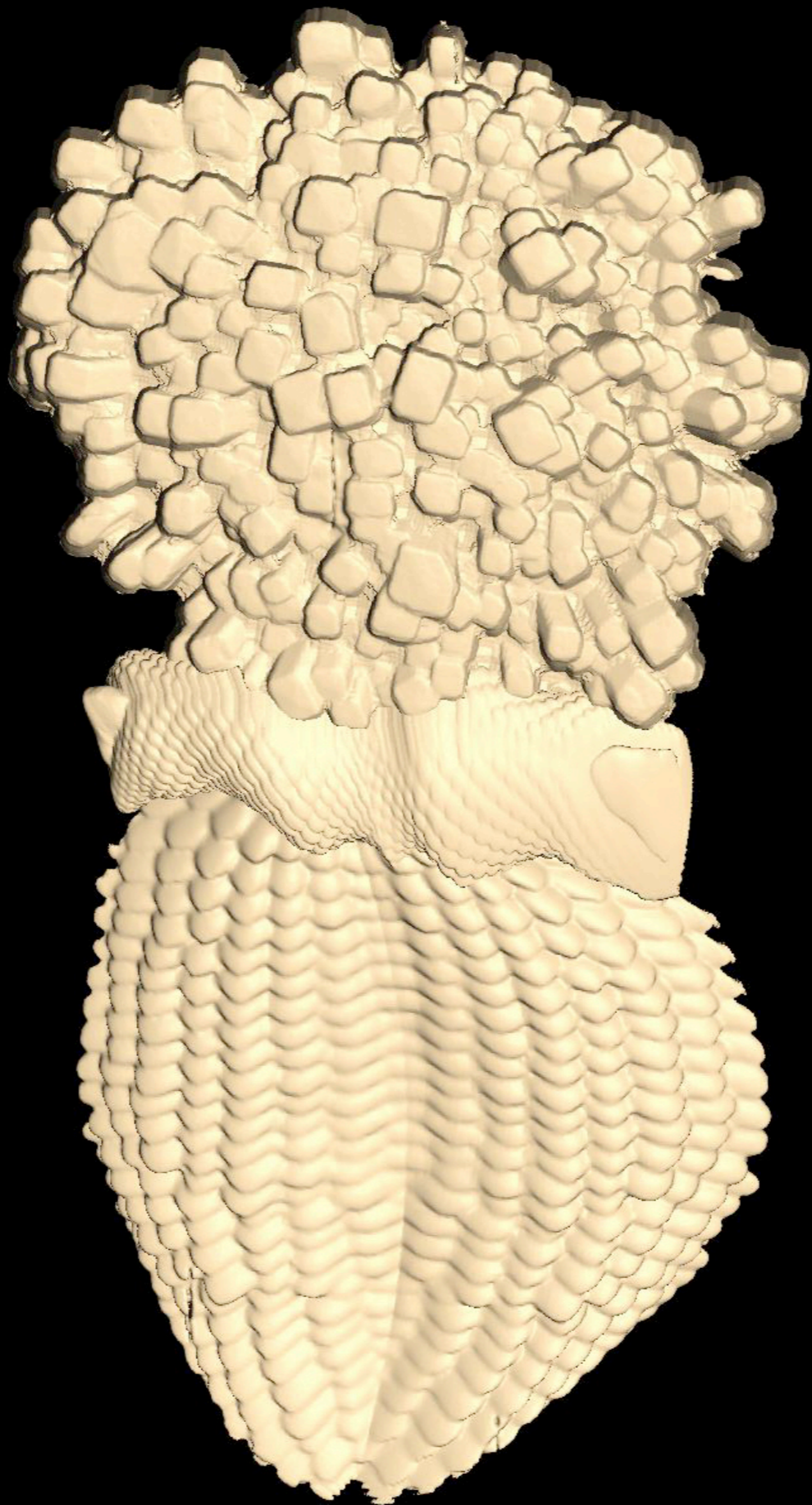
Replication in different materials

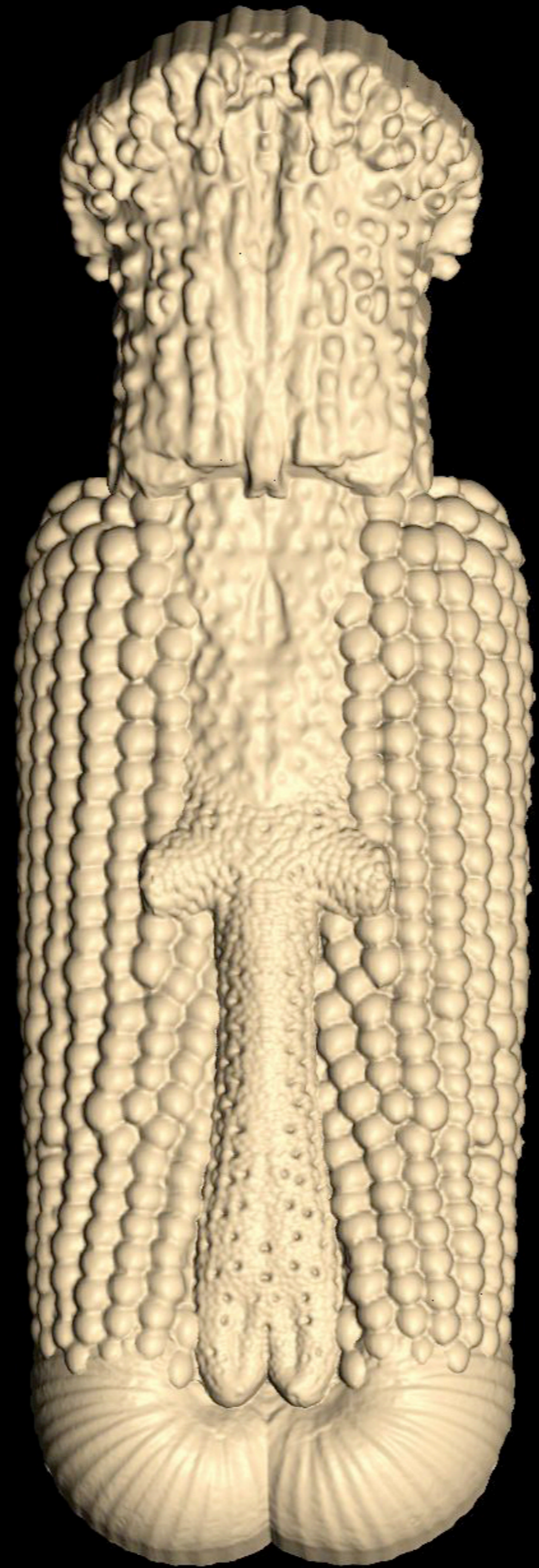
Sculpture over the Internet

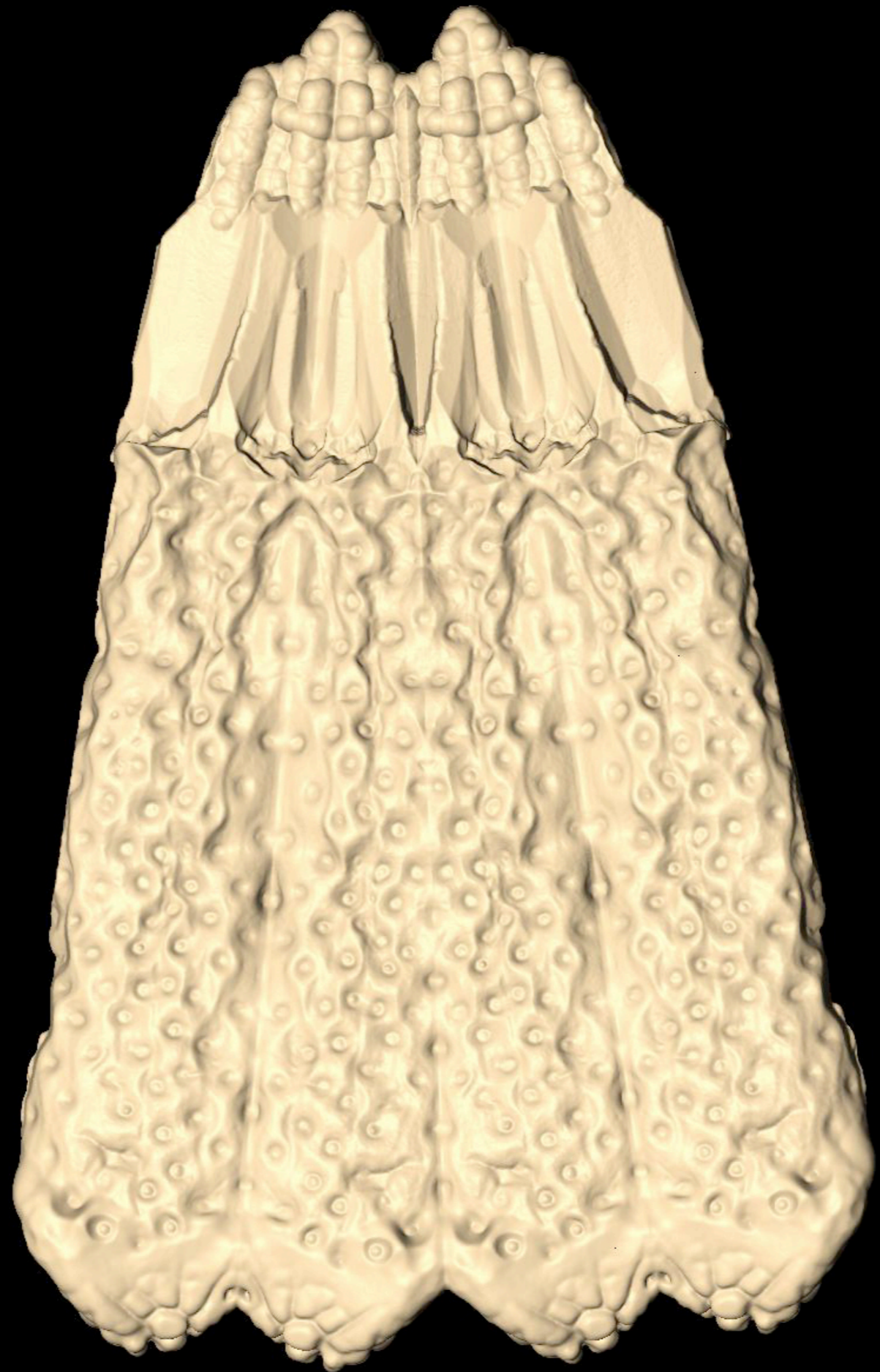


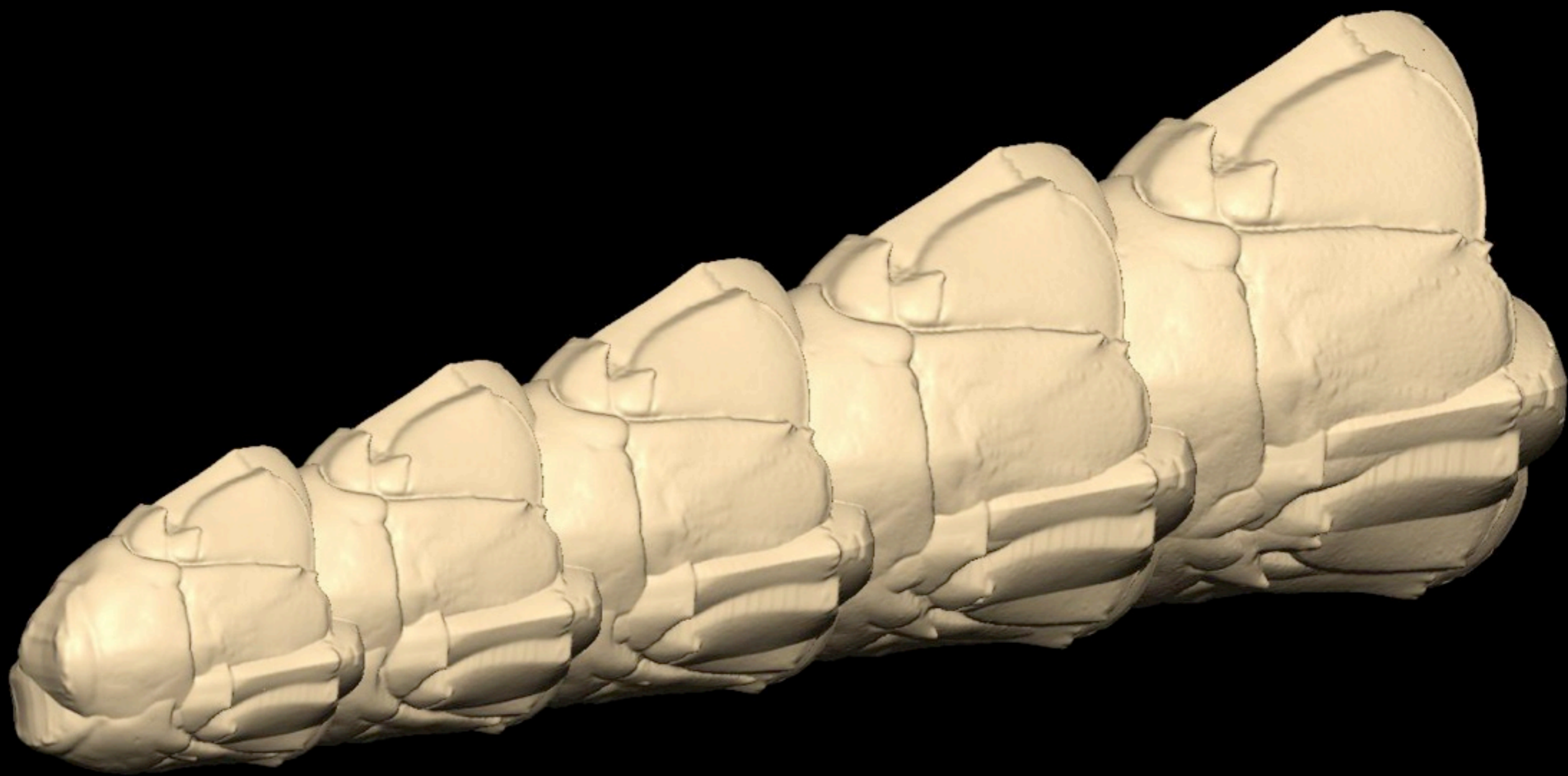


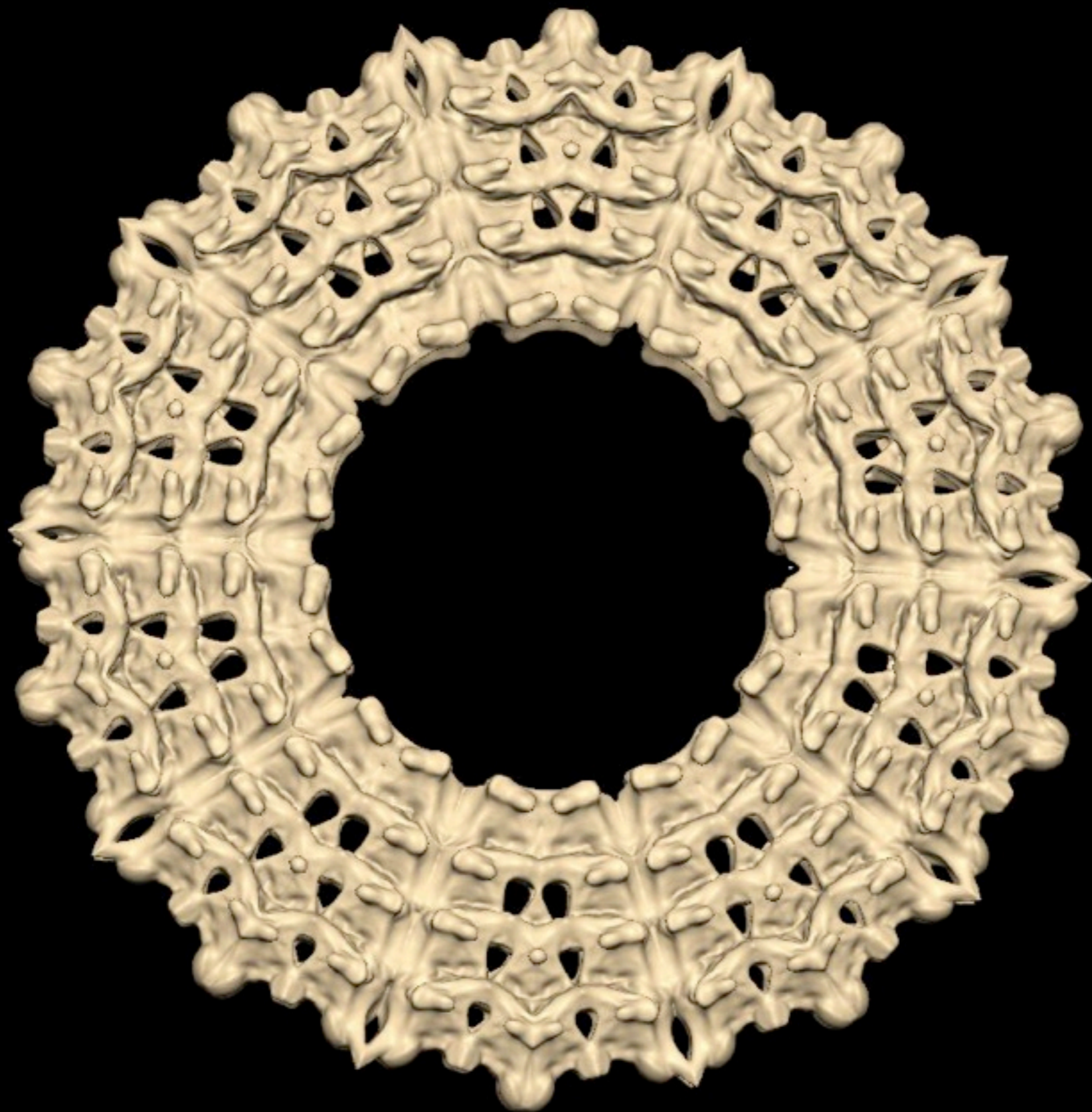


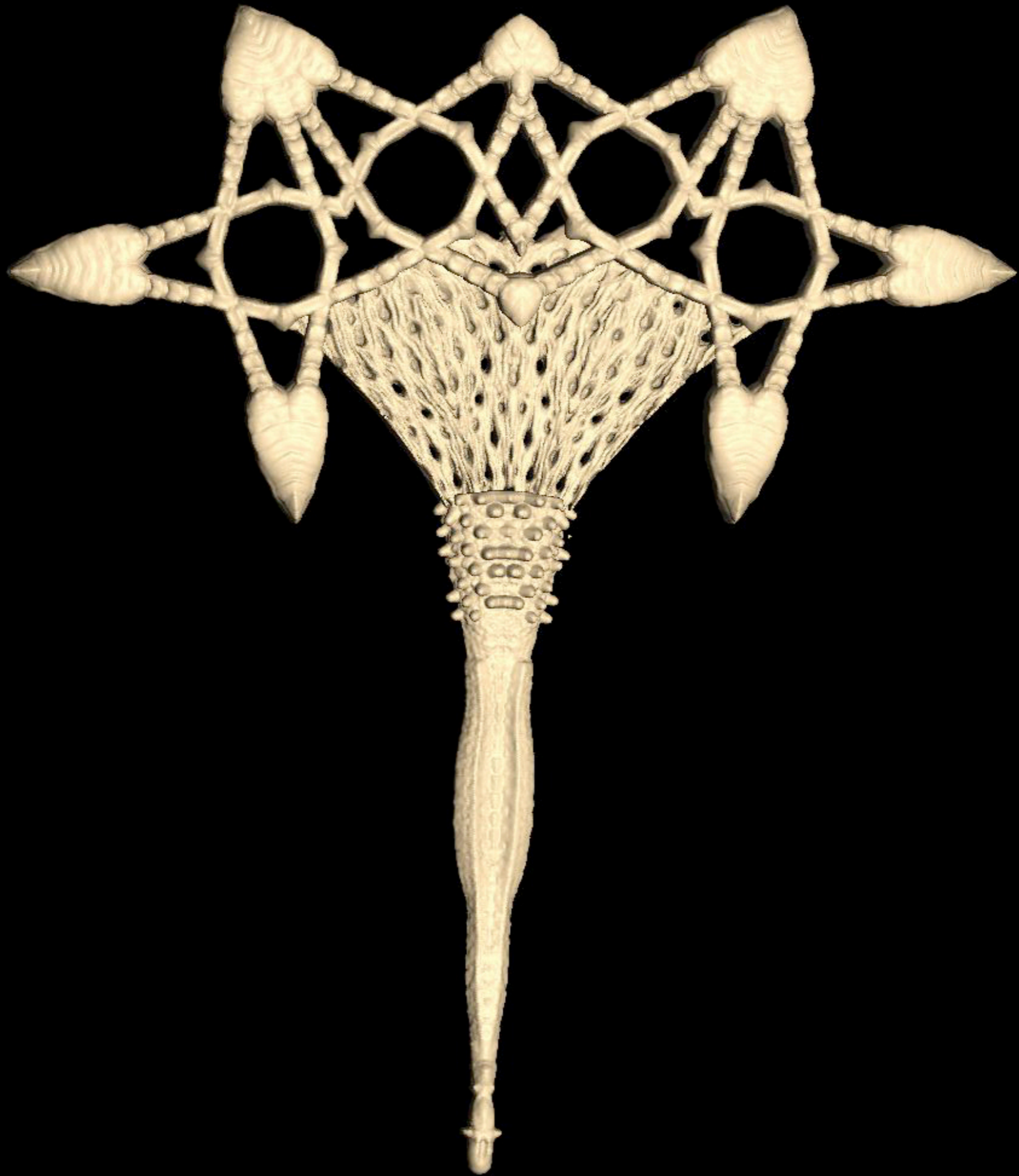




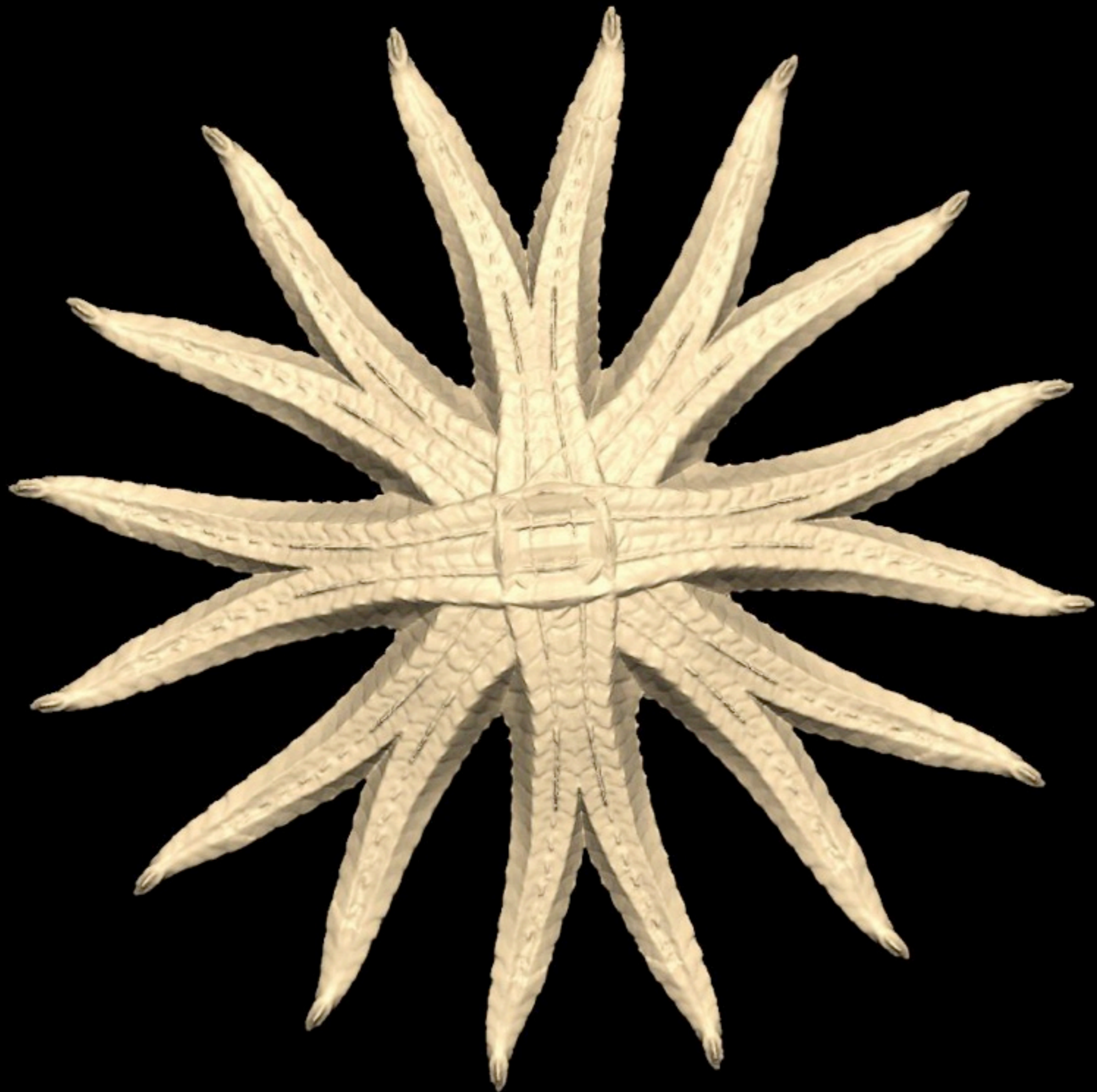


















Questions?

(en anglais s'il vous plait)

Andrew Werby

ComputerSculpture.com

