

millhill

millujeme dizajn

SERVICE

We are an independent design studio. We create, we produce.

Design development
CAD modelling
Engineering
Visualization
Model prototyping
Technical documentation

EXPERTISE

We are passionate about...

Audio devices
Innovative products
Furniture

TECHNOLOGY

Under our roof we offer...

CNC milling
Laser cutting
FDM 3D printing
Vacuum casting

TECHNOLOGY

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PORTFOLIO

AUDIO

01_HUSQVARNA TURNTABLE

02_HUSQVARNA SPEAKERS

03_LOWRYO TURNTABLE

04_LUCIO TURNTABLE

05_ROLLS, DIVERSE, CUTS SPEAKERS SERIE

INNOVATIVE PRODUCTS

06_CLICK LAMP SET

07_ADRIENNE MAKE-UP MIRROR

08_SCEPTRE CEREMONIAL MACE

FURNITURE

09_INA CHAIR

10_KAMMERHOF VARIABLE CABINET

11_MOBILIARI WARDROBE & SHELVES SET



 **Husqvarna**[®]
MOTORCYCLES

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HUSQVARNA
TURNTABLE

HUSQVARNA

TURNTABLE

Author

Millhill design team

Sector

Audio

Design development

Analog and digital sketches

Selection of specific audio components

Definition of turntable architecture

Sketches of three different design proposals

Detailed CAD files with interior and exterior technical features

DESIGN DEVELOPMENT

Sketches show three different designing directions, focusing on creating high-end product corresponding with the new range of Husqvarna e-motorcycles.

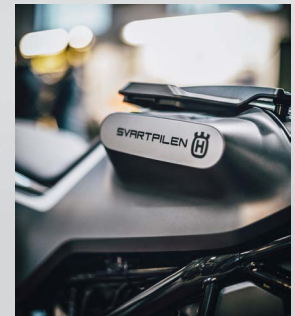
AUDIO





ATTRIBUTES

Visual philosophy of the product is consistent with the company's moto identity and its technical details. It combines smooth surfaces, strong elementary graphics and colors used in Husqvarna e-motorcycles.

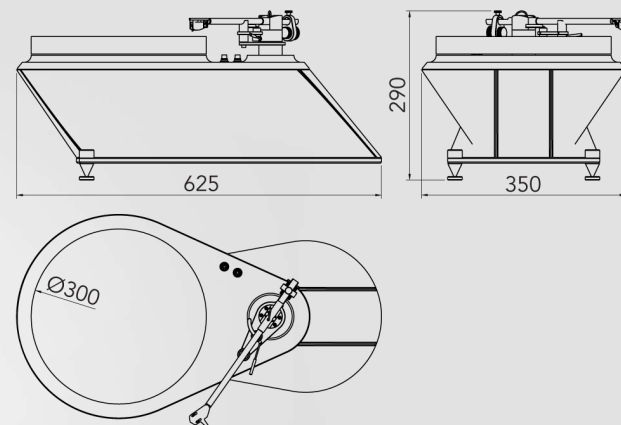
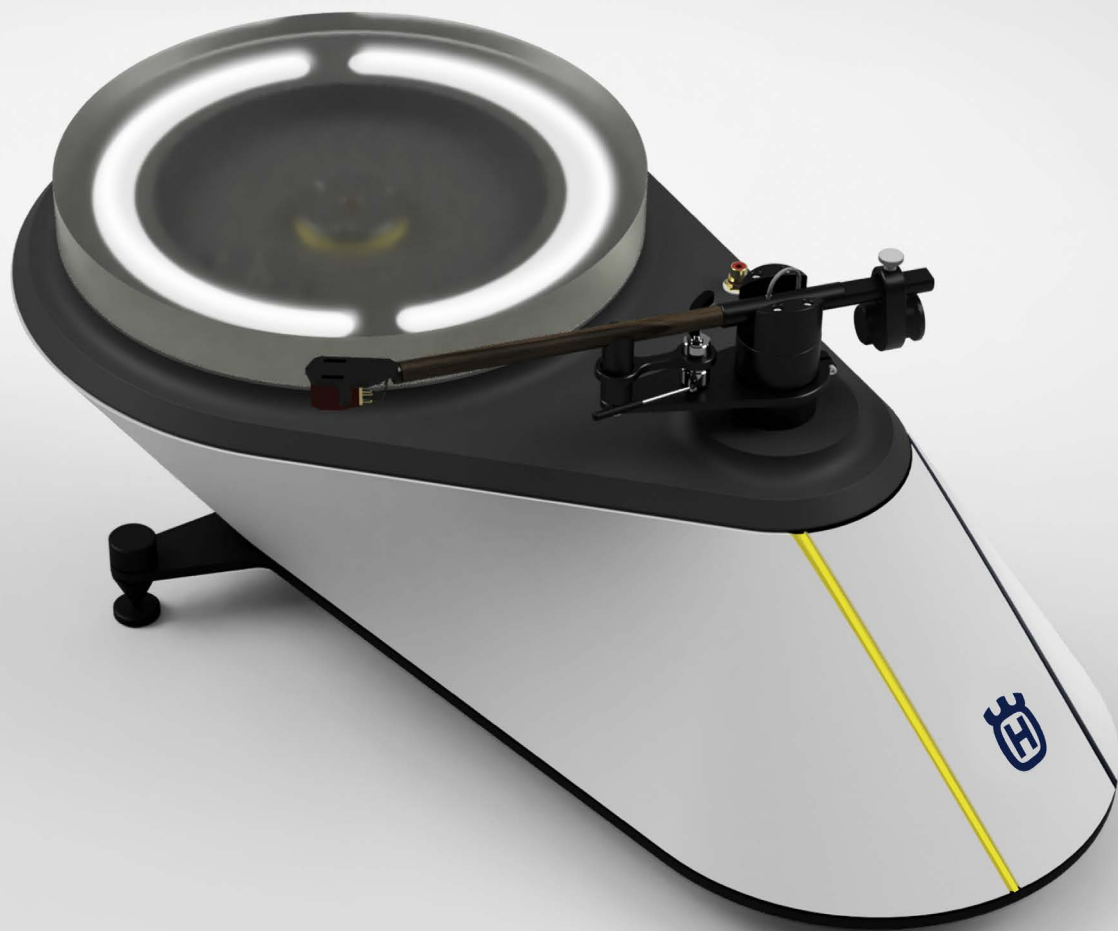




LIT PLATTER

Inspiration for platter design was the front headlight of the Vitpilen motorcycle.







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HUSQVARNA
SPEAKERS

HUSQVARNA

SPEAKERS

Author

Millhill design team

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Definition of speakers architecture

Sketches of three different design proposals

Detailed CAD files with interior and exterior technical features

DESIGN DEVELOPMENT

Design of speakers was proposed in three different styles.

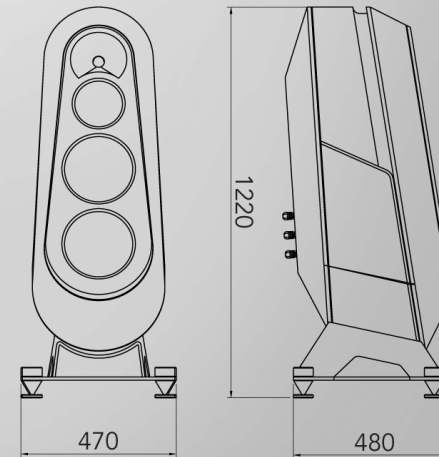






ARCHITECTURE

Speakers consists of four Morel drivers - two bass ones, midbass and tweeter on the top.





MATERIAL

The body is made of HI-MACS, steel base improves stability and provides leveling settings.



AUDIO



AUDIO SET

Project was developed with Husqvarna's input in order to create a complement to brand's identity for promo events, to be displayed next to new generation of Husqvarna e-motorcycles in showrooms.



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18

AUDIO



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LOWRYO
TURNTABLE

LOWRYO

TURNTABLE

Author

Ernest Marko

Sector

Audio

Design development

Analog and digital sketches
Designing audio components
Definition of turntable architecture
Development of software and specific printed circuit
Development of tonearm
CAD data of full turntable body

Rapid prototyping

Creating a prototype
Manufacturing final products



LOWRYO TURNTABLE

Turntable Lowryo is a high-end product built with sense of craftsmanship. It combines wood and metal components with belt-driven mechanism. Three spike feet with slip & vibration protection ensure the turntable's stability while also being adjustable.



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AUDIO



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LUCIO
TURNTABLE

LUCIO

TURNTABLE

Author

Ernest Marko

Sector

Audio

Design development

Analog and digital sketches
Designing audio components
Definition of turntable architecture
Development of software and specific printed circuit
Development of tonearm
CAD data of full turntable body

Rapid prototyping

Creating a prototype
Creating final product

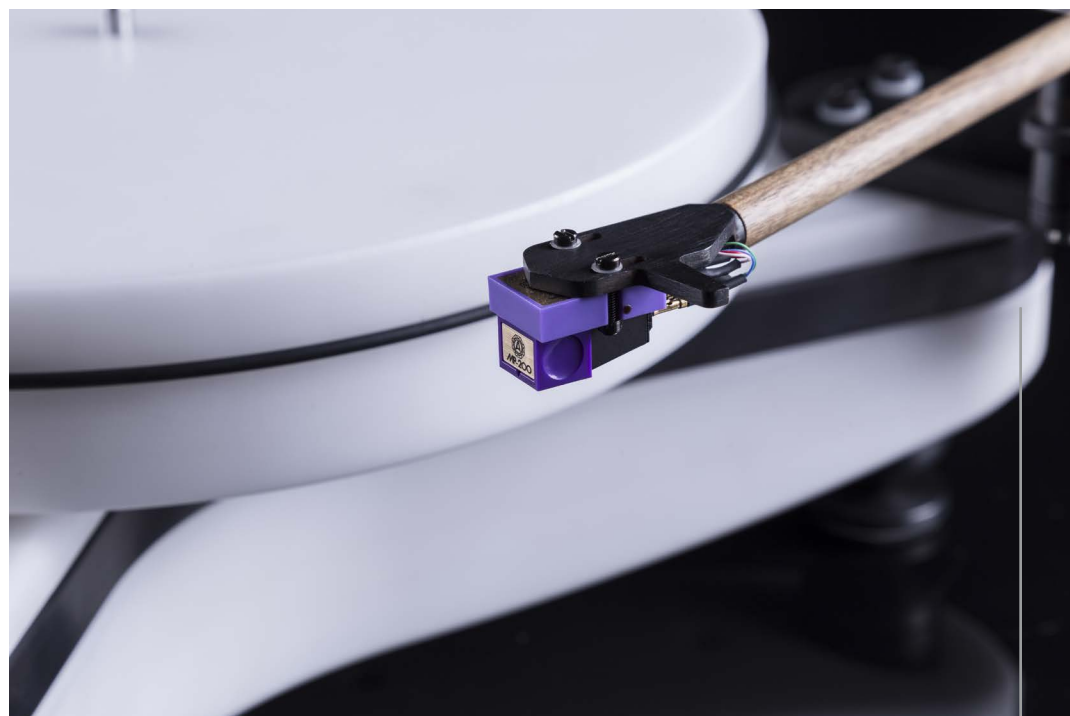


LUCIO TURNTABLE

Translucent HI-MACS is dominant in this model. It's combined with belt driven mechanism, metal segments, custom-made tonearm and three spike feet with anti-vibration and anti-slip pads to ensure horizontal stability and adjustment.



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AUDIO



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ROLLS, DIVERSE, CUTS
SPEAKERS SERIE

ROLLS, DIVERSE, CUTS

SPEAKERS SERIE

Author

Ernest Marko

Sector

Audio

Design development

Analog and digital sketches
Designing audio components
Definition of speakers architecture
CAD data of full speakers body

Rapid prototyping

Creating functional prototype
Creating final product

ARCHITECTURE

Speakers Rolls, Diverse and Cuts use the same architecture as various material and construction solutions. Functional and aesthetic meets focused on different features in each model.



ROLLS

Design combines ground aluminium with cherry wood, cylindrical loudspeaker enclosure, two-way bass reflex and converters attached to the inner wall for quality long-term listening with soft rendition.



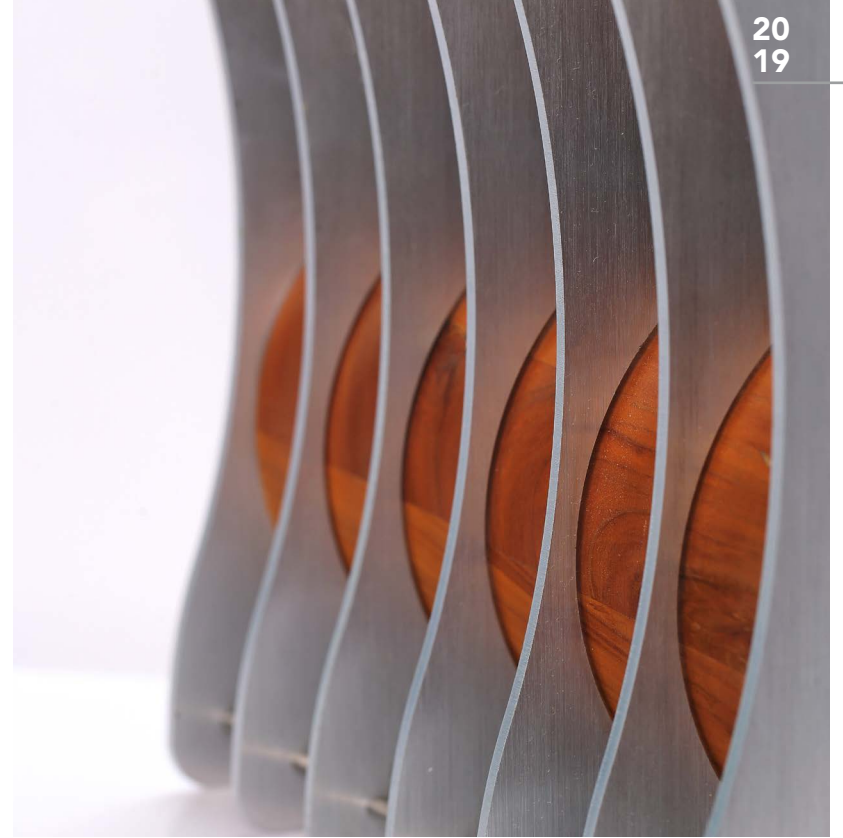
DIVERSE

Combination of carbon and HI-MACS focuses on high strength, achieved by thin carbon segments and construction made of MDF and American walnut wood. It provides broader, compact inner space, enabling deeper tones to be spread.



CUTS

A robust shape with an emphasis on wooden part made of American walnut and oak veneer creates sonically accurate speaker with premium spatial effects, sound location & musicality with soft rendition



SOUND

Each design has its own distinct sonic profile, generally characterizable as being non-aggressive, with accurate sound layout.





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CLICK
LAMP SET

CLICK

LAMP SET

Author

Ernest Marko

Sector

Product

Design development

Analog and digital sketches
Definition of lamp architecture
CAD data of the whole lamp set

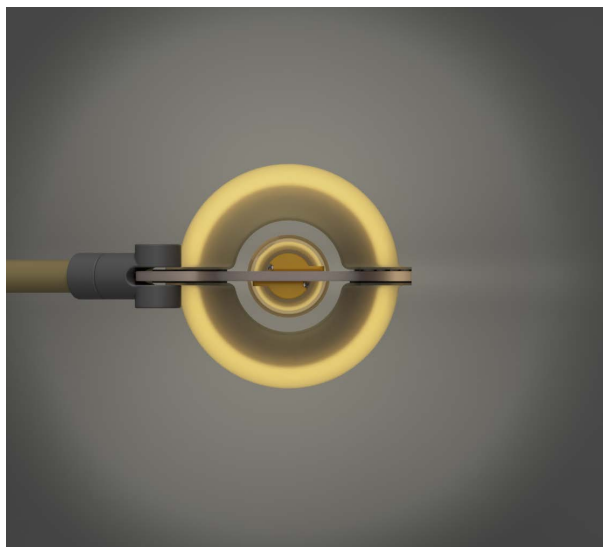
Rapid prototyping

Creating functional prototype
Creating final product

MAGNETIC SYSTEM

Custom principle of embedded magnets in light shields enable intuitive manipulation and easy exchange.

PRODUCT





LIGHT SHIELD

Various patterns of light shield segments are compatible with all lamp set models.





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ADRIENNE
MAKE-UP MIRROR

ADRIENNE

MAKE-UP MIRROR

Author

Millhill design team

Sector

Product

Design development

Analog and digital sketches
Definition of mirror architecture
CAD modeling

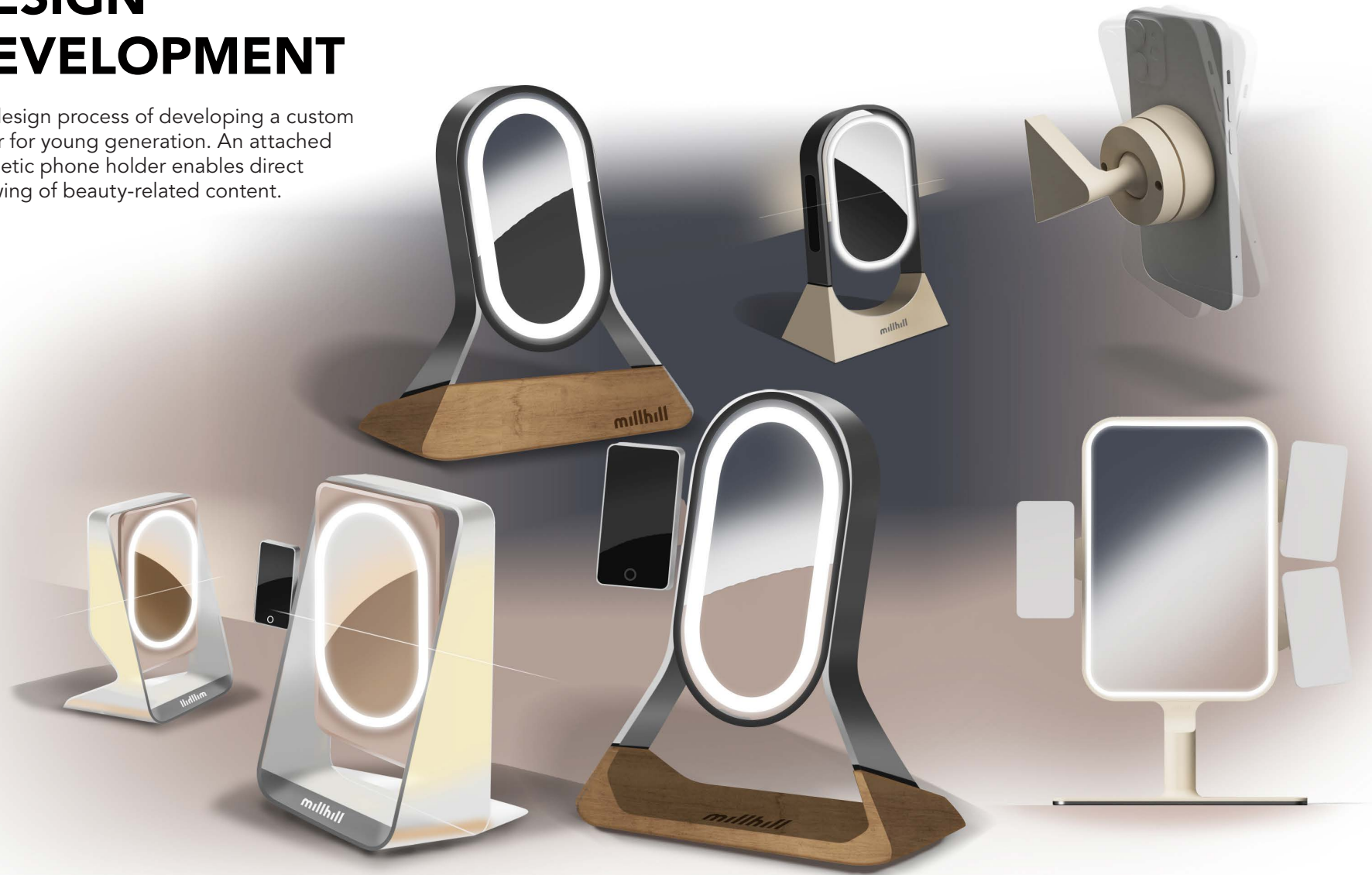
Rapid prototyping

3D Printing - Z-ULTRAT
Creating functional prototype

DESIGN DEVELOPMENT

The design process of developing a custom mirror for young generation. An attached magnetic phone holder enables direct following of beauty-related content.

PRODUCT





PROTOTYPE

Mirror has an embedded LED light. The whole aluminium section creates a touch switch, movable magnetic holder joint allows easy adjustment of phone position.



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SCEPTRE
CEREMONIAL MACE

SCEPTRE

CEREMONIAL MACE

Author

Arpád Pál, Ernest Marko, Daniel Krištof

Sector

Product / Art

Design development

Analog and digital sketches
Definition of mace architecture
CAD modeling

Rapid prototyping

3D Printing - Z-ULTRAT
Data for CNC milling



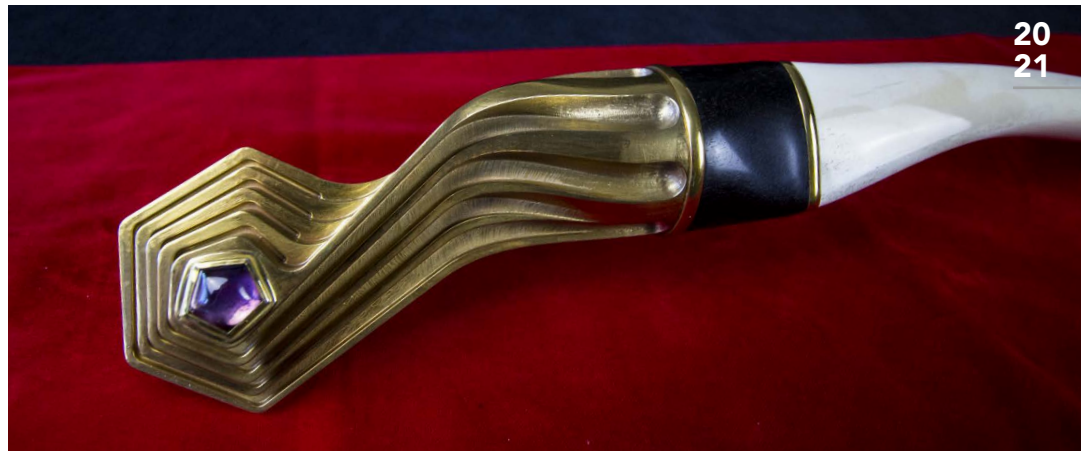
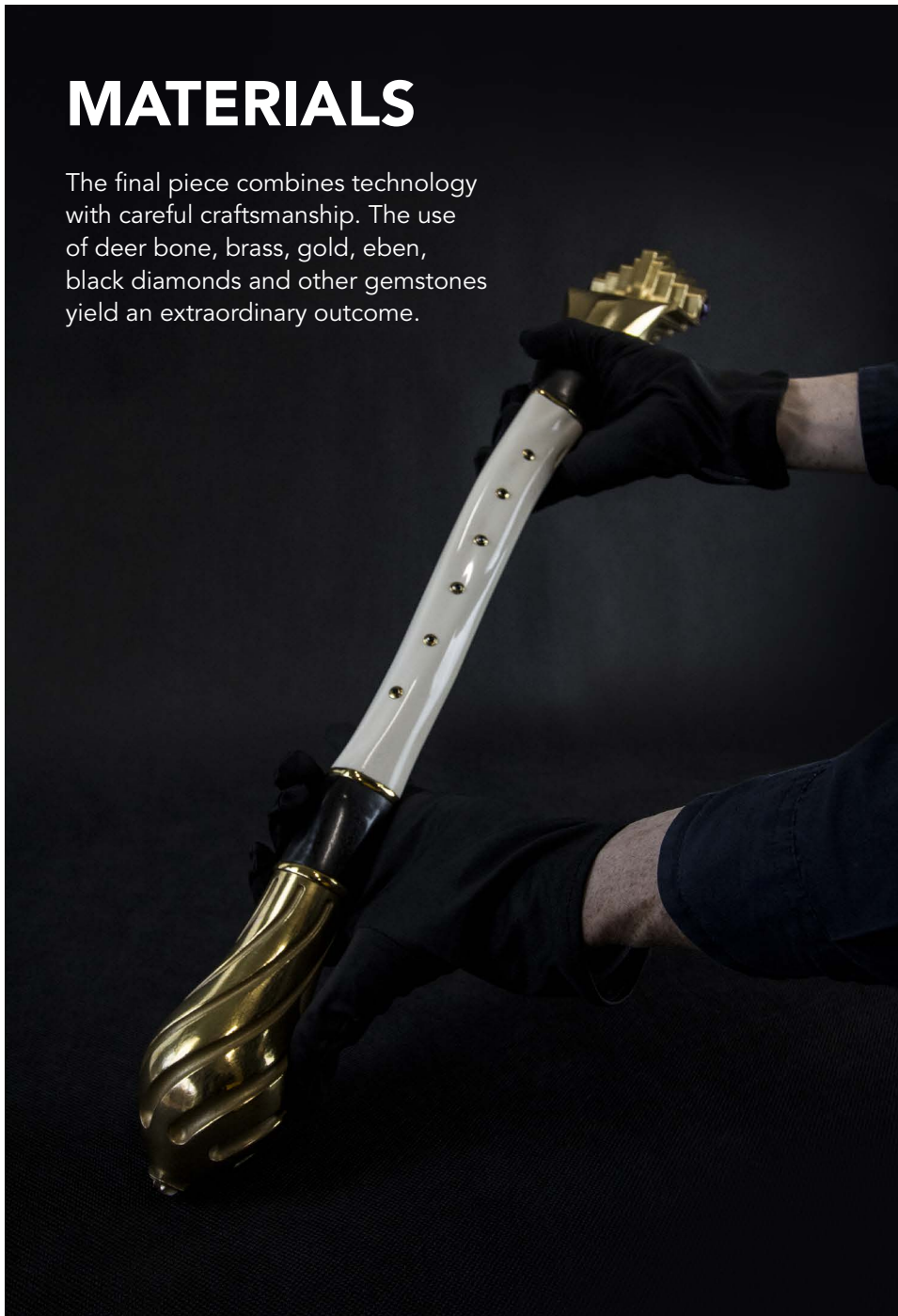
SCEPTRE

The ceremonial mace was designed for Ján Albrecht Music and Art Academy Banská Štiavnica. Before final product was crafted, 1:1 prototype was 3D printed.



MATERIALS

The final piece combines technology with careful craftsmanship. The use of deer bone, brass, gold, eben, black diamonds and other gemstones yield an extraordinary outcome.



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FURNITURE



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INA
CHAIR

INA

CHAIR

Author

Miroslav Truben

Sector

Furniture

Design development

Analog sketches

CAD prototyping

Strength tests

Creating physical prototypes

INA CHAIR

INA is a minimalistic furniture solitaire. Design's emphasis on lightness is well illustrated in the physical form. Two intersecting wood pieces form this chair's sitting spot.







Kammerhof photos by
Lubomír Lužina

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KAMMERHOF

VARIABLE CABINET

Author

Marcel Mészáros, Ernest Marko

Sector

Furniture

Design development

CAD modeling

Details solving

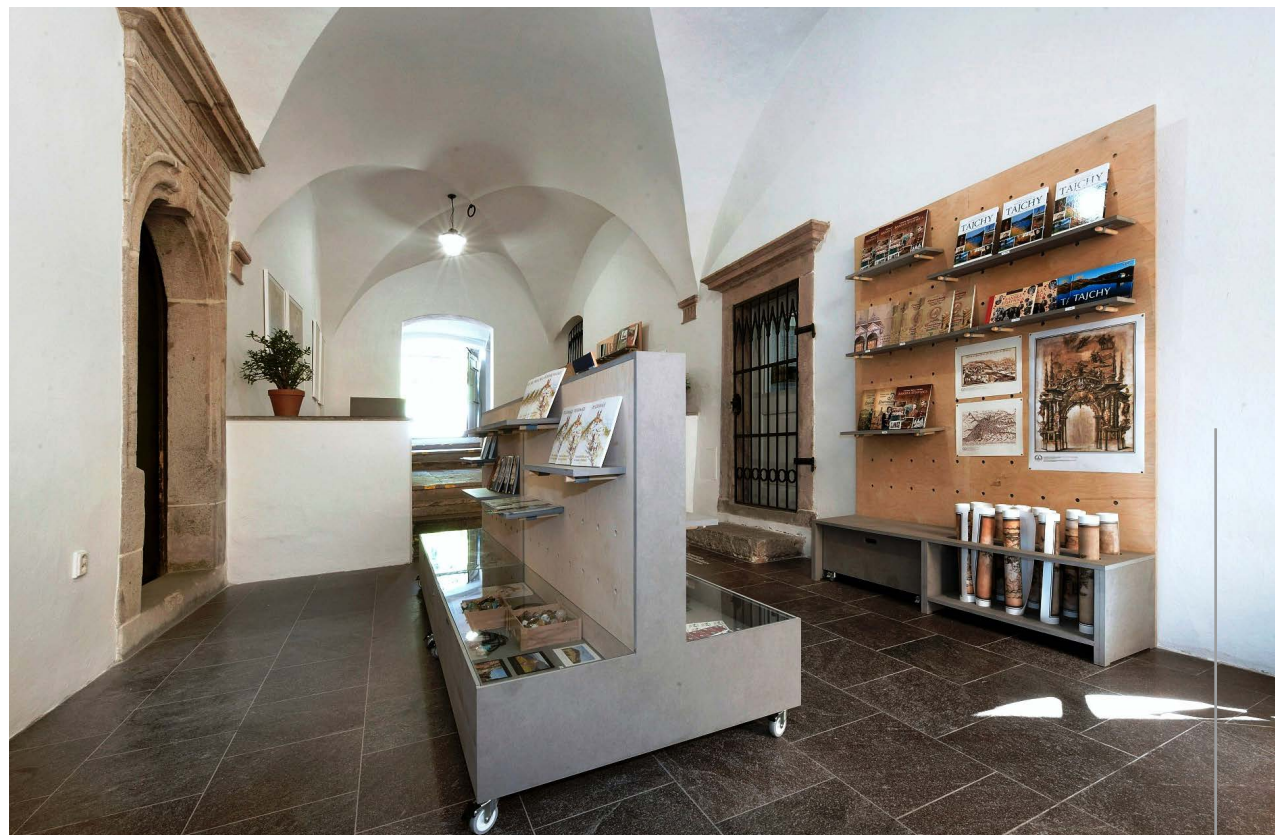
Rapid prototyping

CNC milling

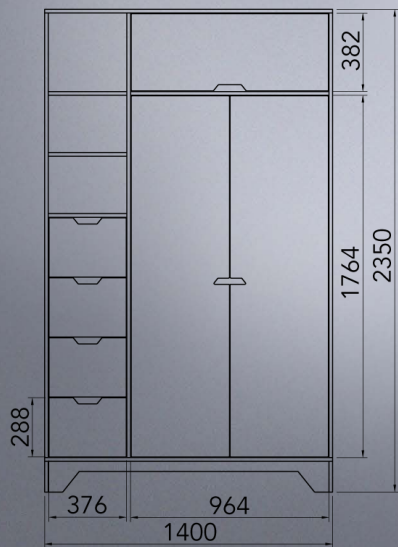
Assembling



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FURNITURE



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MOBILIARI

WARDROBE & SHELVES SET

Author

Ernest Marko

Sector

Furniture

Design development

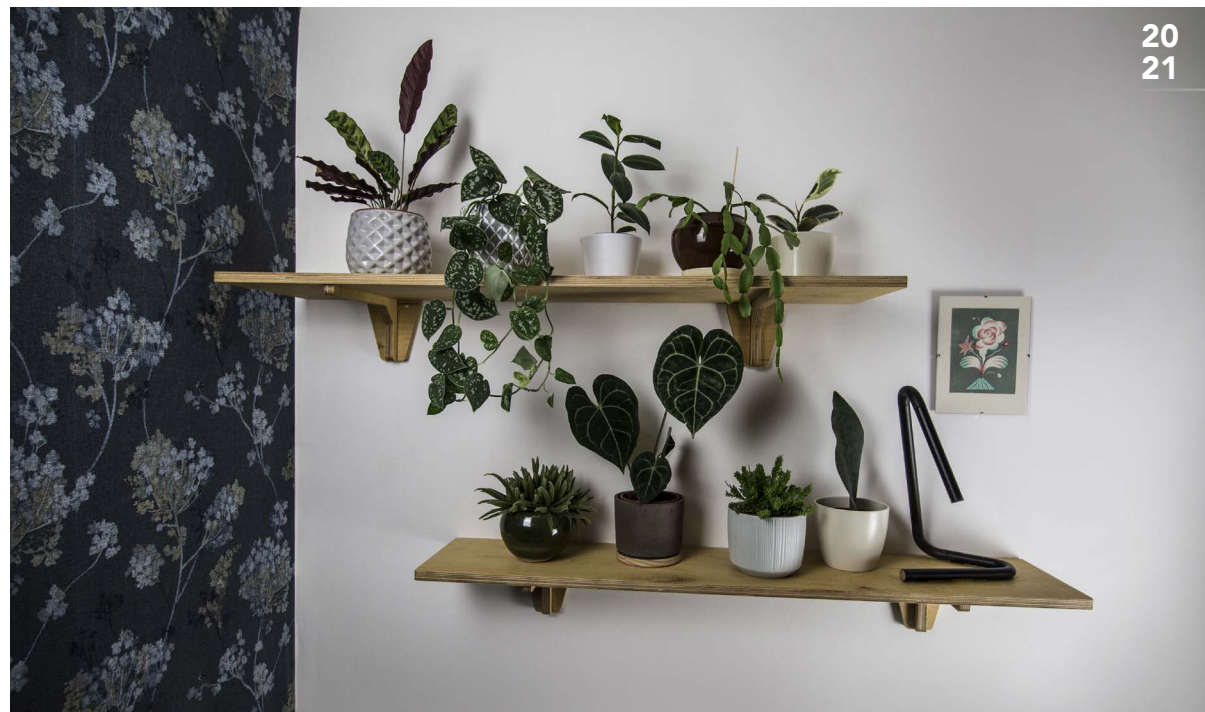
Analog and digital sketches

Definition of architecture

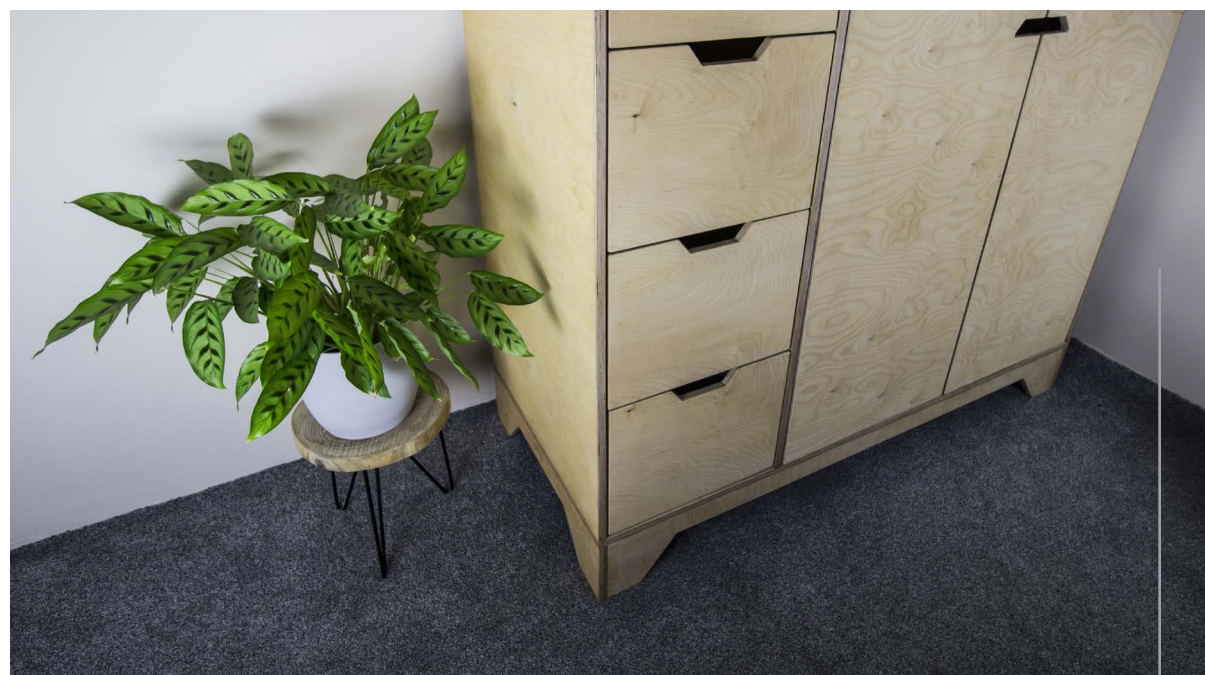
CAD modeling

Rapid prototyping

CNC milling & assembling



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RAPID PROTOTYPING

TECHNOLOGIES

01_CNC MILL

02_LASER CUT

03_3D PRINT

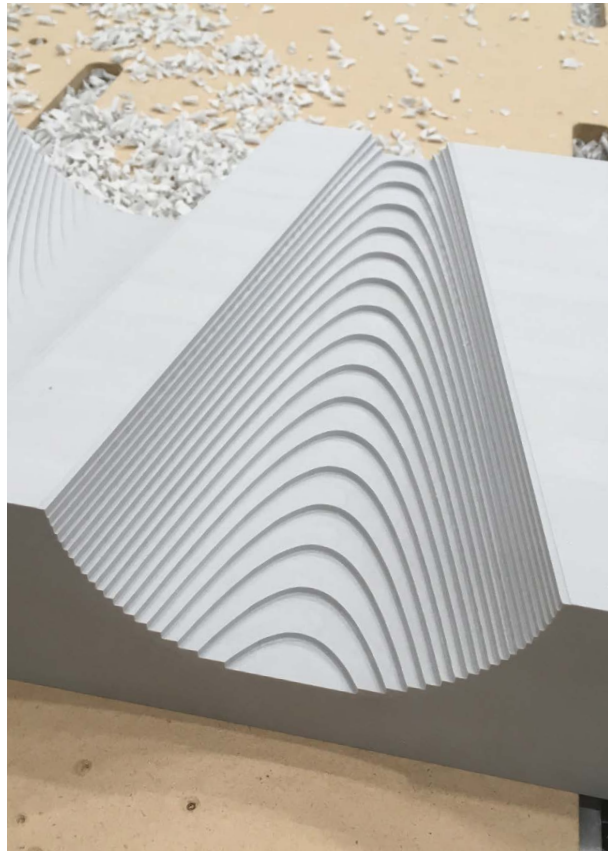




RAPID PROTOTYPING

CNC MILL

millini



REALIZATIONS

Specification

3-axis CNC technology with dimensions 3000 x 1500 x 400 mm (with 4th rotary axis)

Materials

Wood, plywood, MDF, tooling board etc.

Plastic, synthetic stone, other non-metallic substances etc.

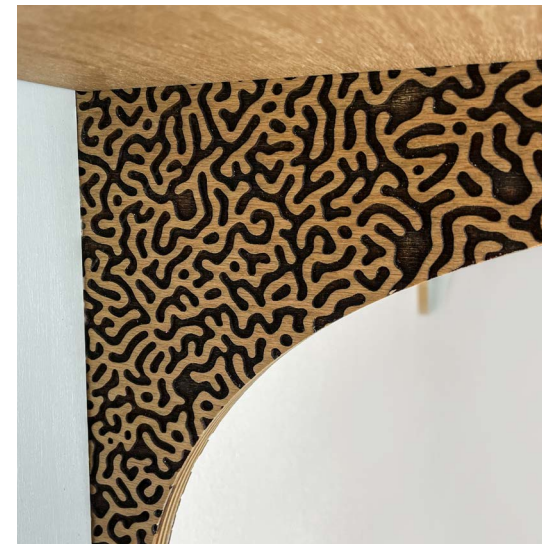
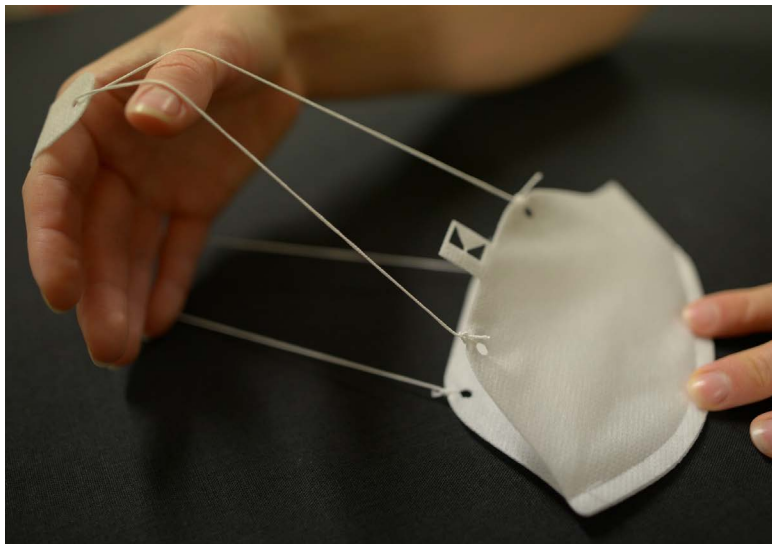
Composite materials as laminate, carbon, kevlar etc.

RAPID PROTOTYPING

LASER CUT

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REALIZATIONS

Specification

150W CO2 laser with dimensions 1300 x 900 x 250 mm
and additional rotary axis

Materials

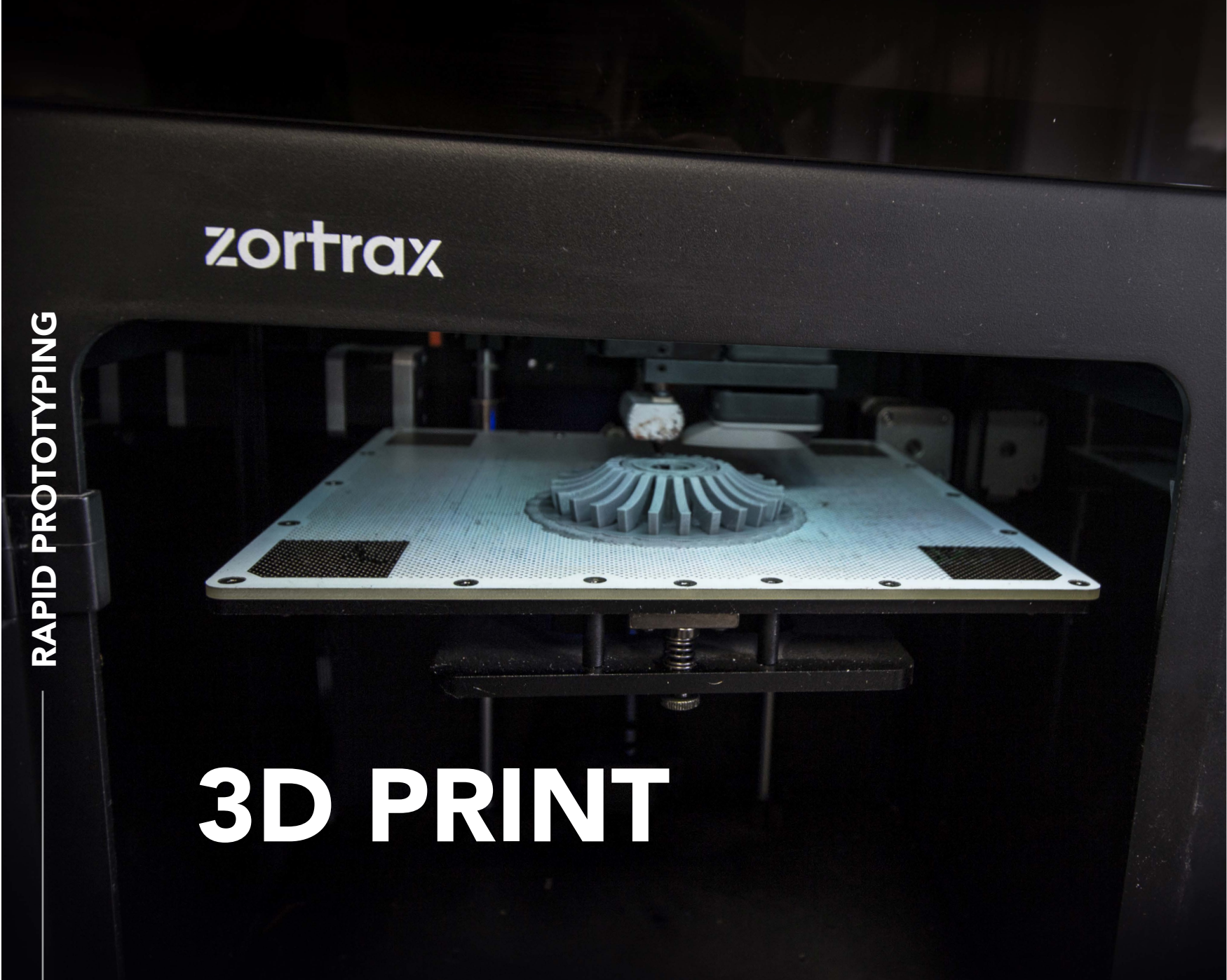
Wood, metal, glass, textile, stone, plastic, rubber,
leather, foam, cardboard etc.

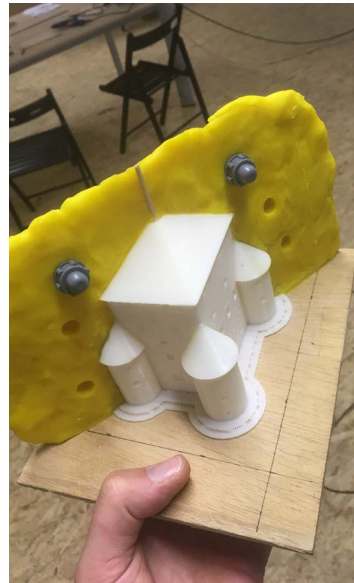
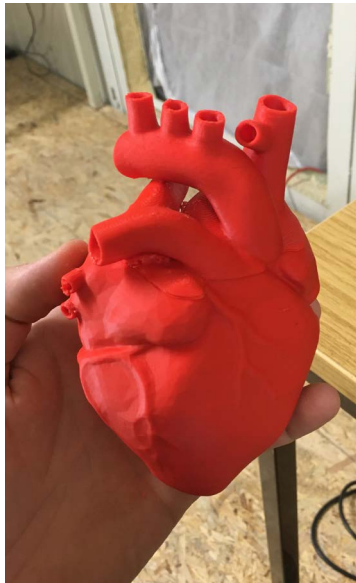
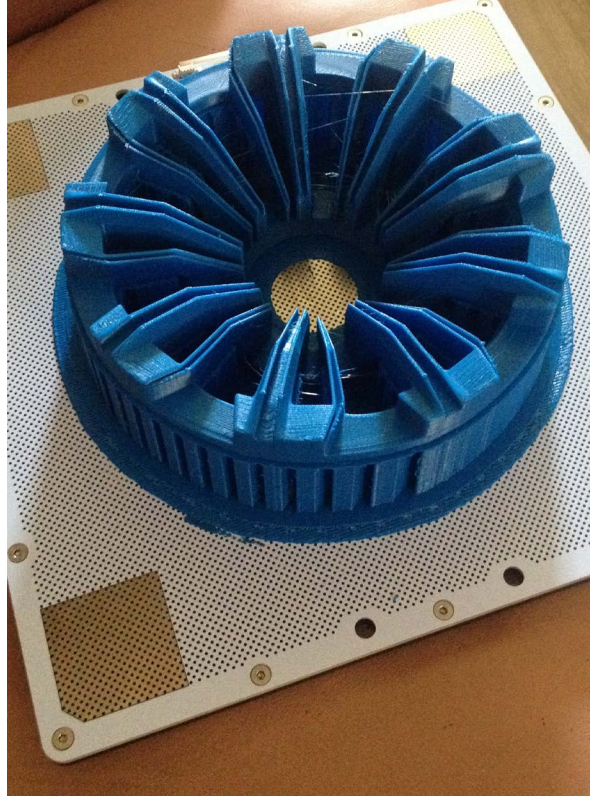
RAPID PROTOTYPING

zortrax

3D PRINT

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REALIZATIONS

Specification

FDM Printer Zortrax M200 210 x 210 x 180 mm

Materials

Authorized materials from Zortrax (Z-ULTRAT, Z-HIPS, Z-PCABS, Z-ABS, Z-PETG etc.)

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CONTACT

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