



GF Machining Solutions:

Il laser texturing per la finitura di superfici: l'esperienza di ML Engraving

Testimonial: ML Engraving



Claudio Rossi

Product specialist Advanced manufacturing GF



Sales support laser technologies GF Machining Solutions

Italy - Brasil – Turkey

Mobile: +393450833616 Email: claudio.rossi@georgfischer.com



Laser TSE



Texturing
Structuring
Engraving



Microlution



Laser Micro Cutting
Laser Micro Drilling
Laser Micro Turning



Additive
Manufacturing



DMLS Powder bed
For Mold & Die

The three divisions of GF

Key figures 2021

GF Corporation	137 companies	14'000 employees	CHF 3'722 million sales
-----------------------	---------------	------------------	-------------------------



GF Piping Systems

CHF 1'971 million sales



GF Casting Solutions

CHF 880 million sales



GF Machining Solutions

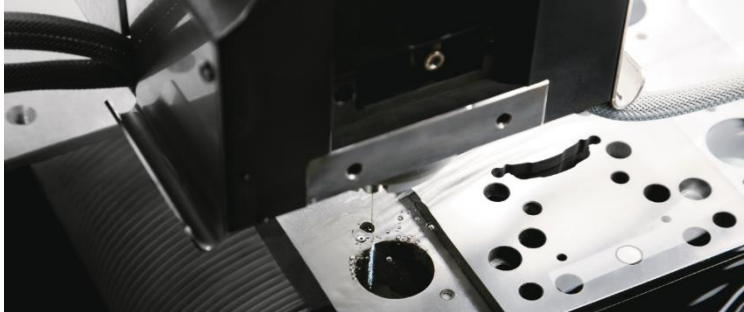
CHF 873 million sales

GF Machining Solutions



GF Machining Solutions:

Our technology brands



AgieCharmilles

Wire-cutting, die-sinking and hole-drilling EDM solutions and Laser texturing



Mikron Mill

High-speed, high-performance and high-efficiency Milling technologies



Microlution

Specialized in femtosecond Laser for hole-drilling and micro-cutting in a wide range of industries



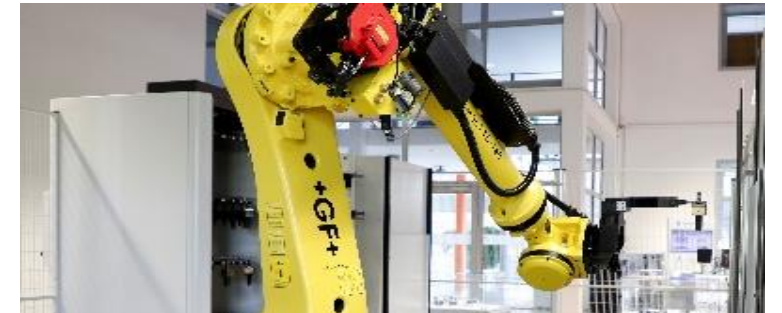
Liechti

Leader in five-axis airfoil machining solutions for the turbine industry



Step-Tec

High-end motor Spindles and subassemblies



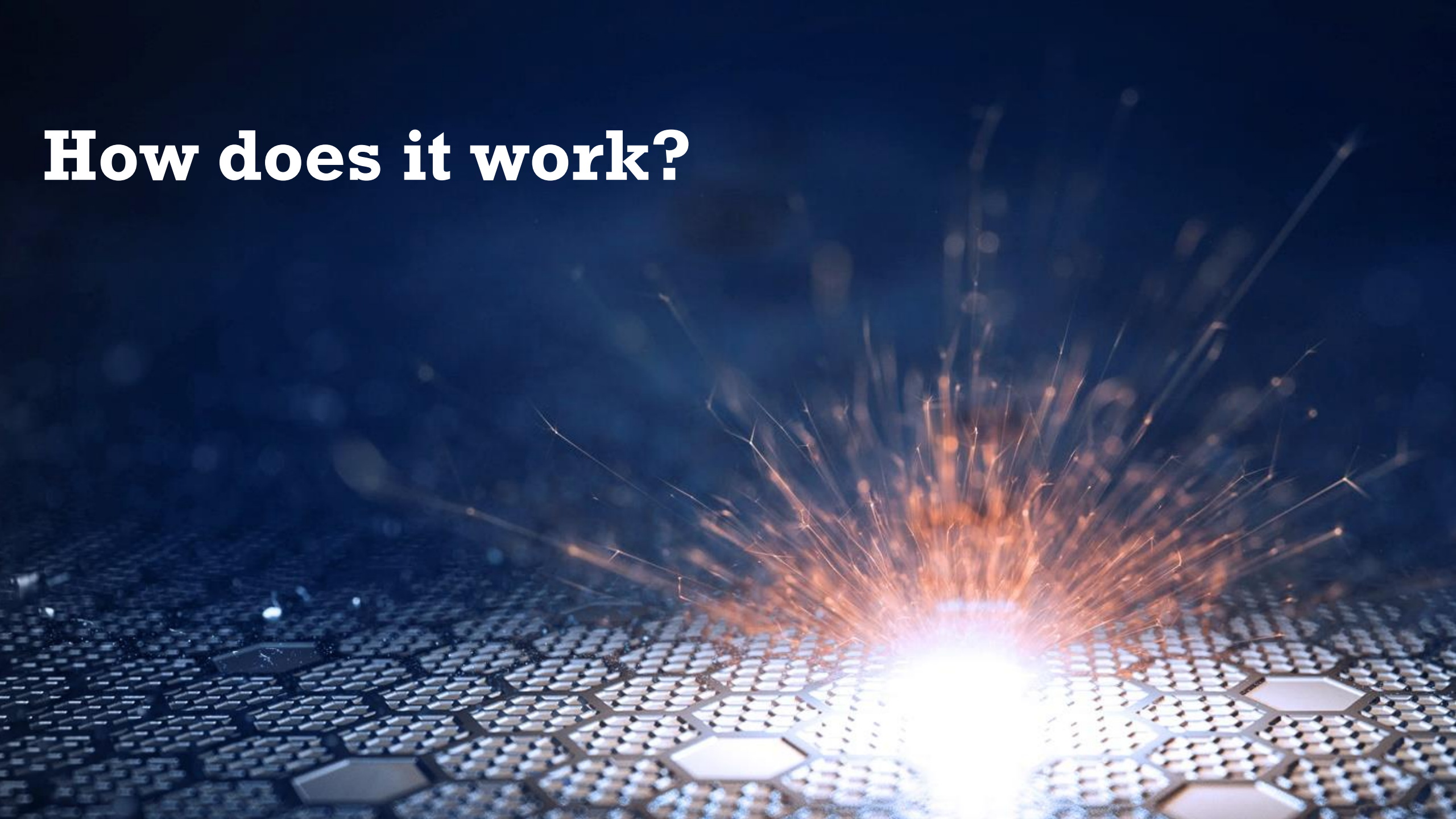
System 3R

Productivity-boosting Automation, Tooling and Software systems

Laser Texturing



How does it work?



Machine portfolio



LASER S 1000 U



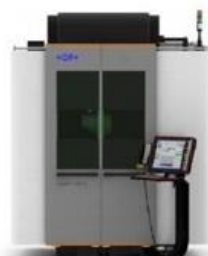
LASER S 1200 U



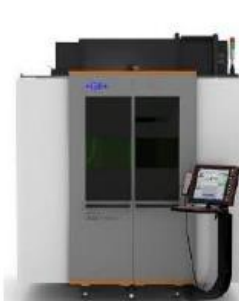
LASER S 2500 U



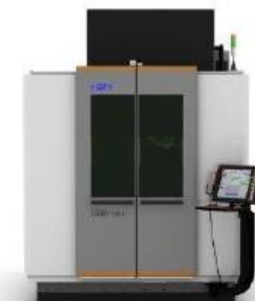
LASER P 400 (U)



LASER P 600 U



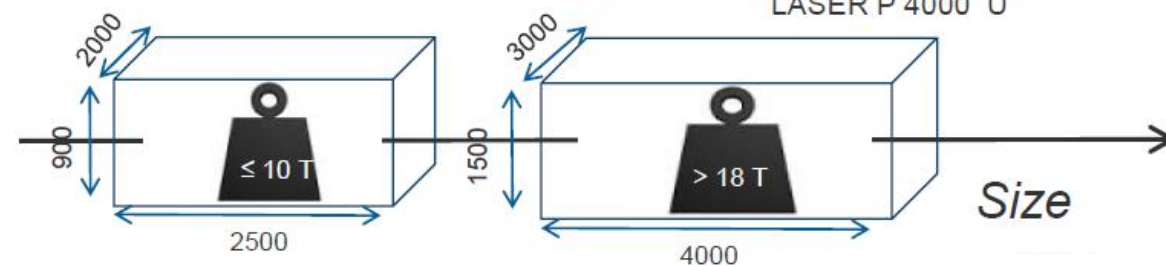
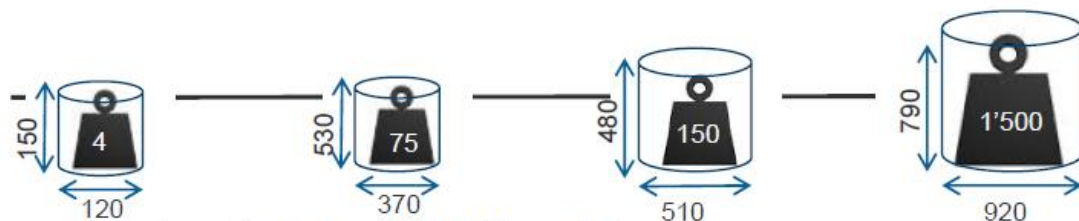
LASER P 1000 U



LASER P 1200 U



LASER P 4000 U





ML ENGRAVING

Adding value to surfaces

Since **1999**

Team of 75 professionals

9 laser machines out of 15 are GF Machining
Solutions

8,3 € Mln income in 2022

Headquarters in Onore (BG) 2.500 sm

3 patents for texturing protocols

7 projects granted by European Commission

1 Logistics dept. for shipments all over Europe

Members of the **GLG Global Laser Group**



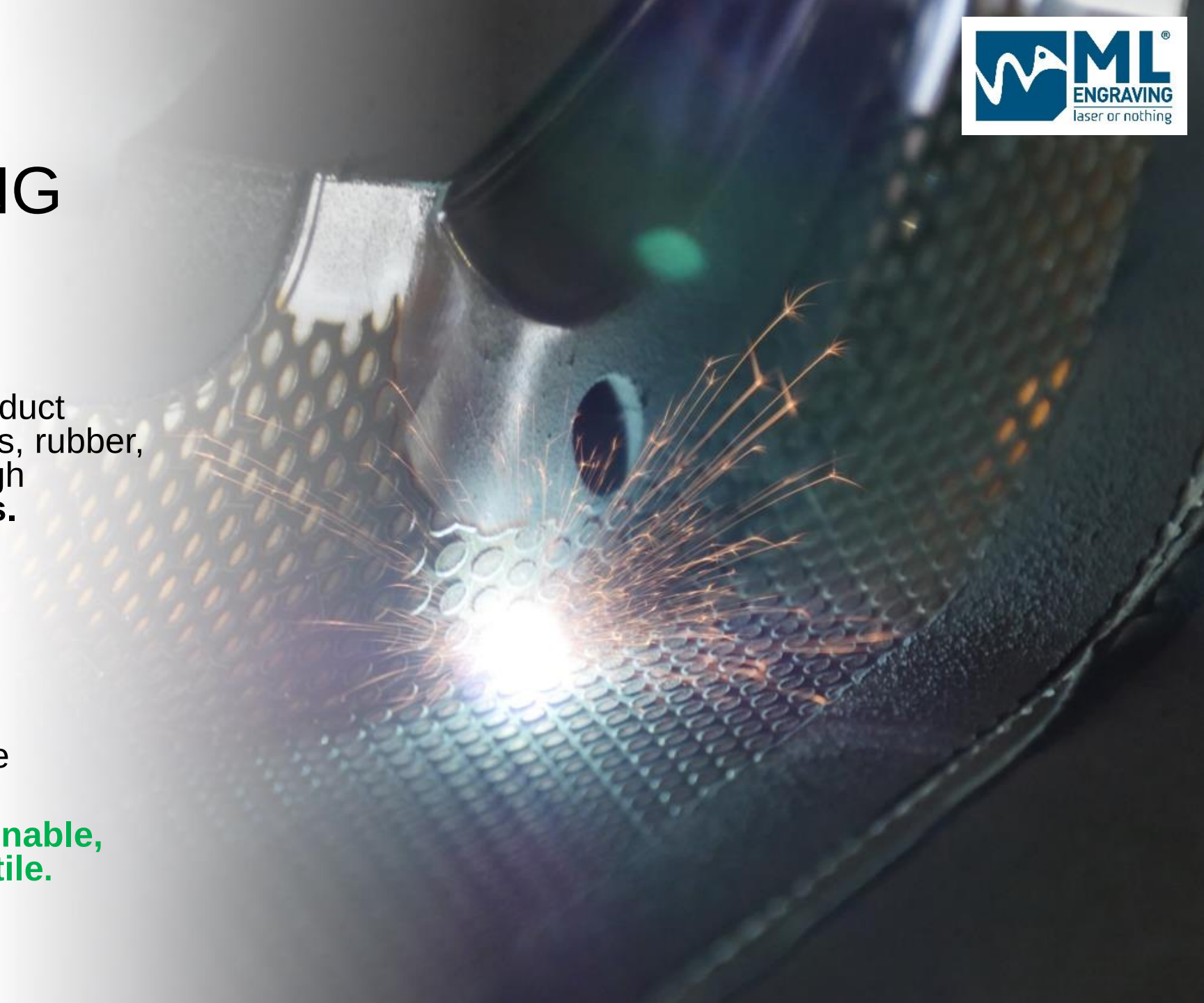
ML ENGRAVING

ML Engraving enhances product surfaces made out of plastics, rubber, silicone or even glass through **laser engraving on moulds.**

Strengths:

- laser technology
- digital processes
- know-how and experience

Laser technology is sustainable, energy efficient and versatile.

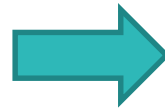


Adding value to surfaces for aesthetics or performance improvement



DRE[®] : the brand new era of co-design

Be sure of the final result with DRE[®]



DRE[®] provides a **completely digitalized management** of your project:
from the digital preview to the engraving.

Rever case study



REVER

A project for



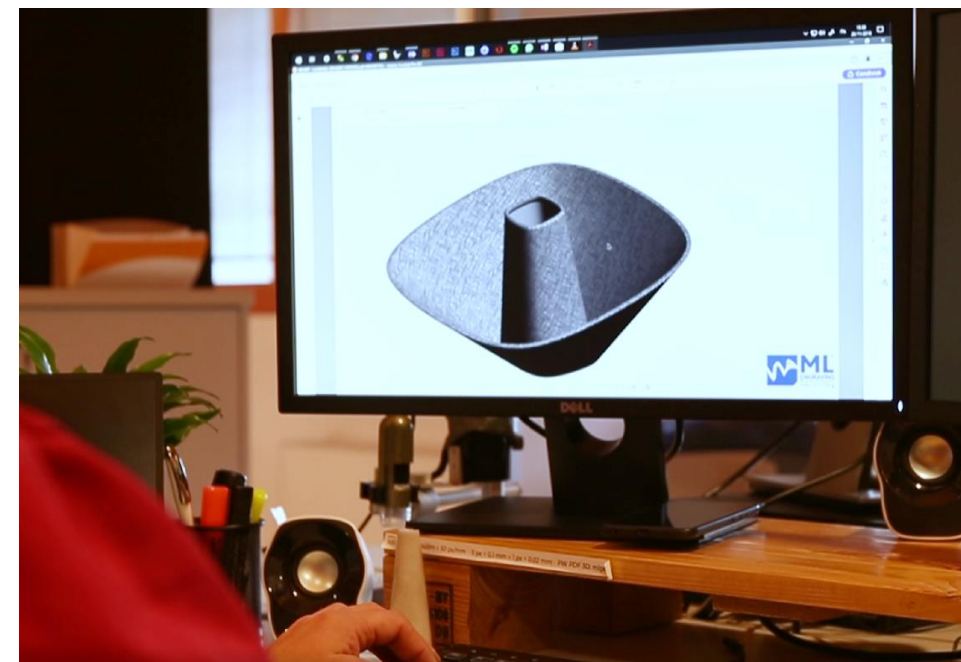
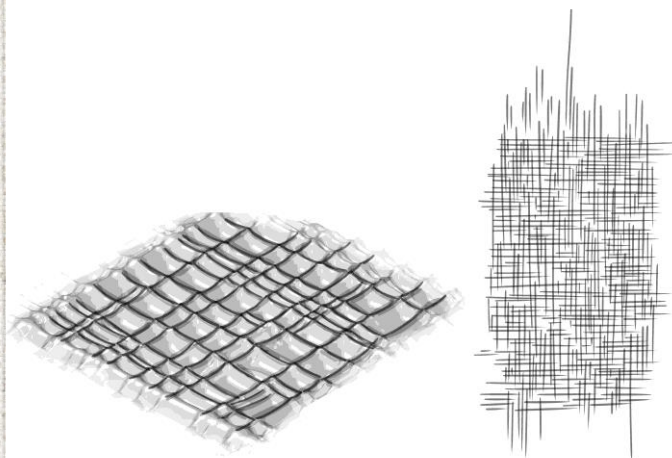
WEVER & DUCRÉ

LIGHTING

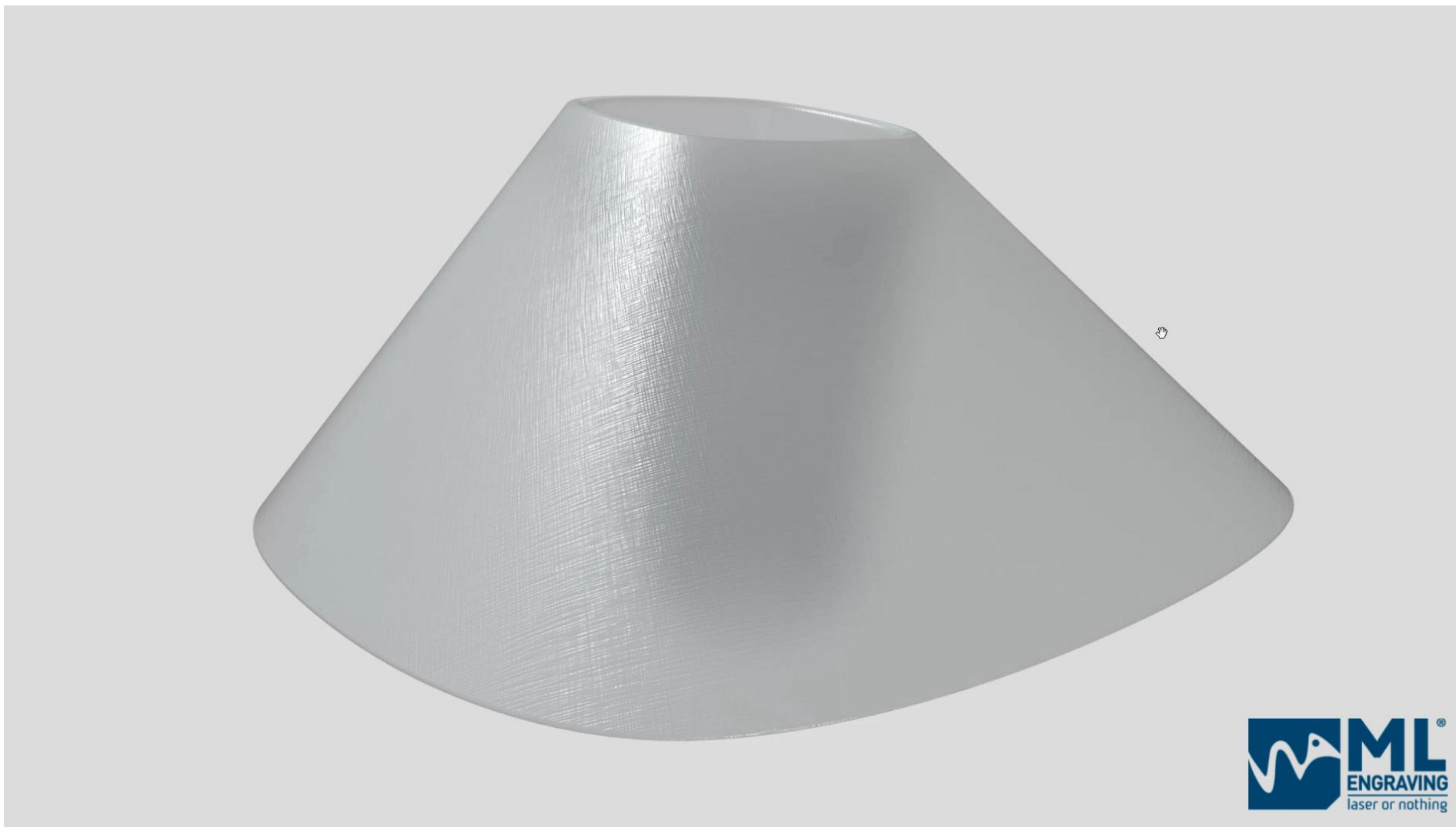
From sample to 3D model

Customer's request

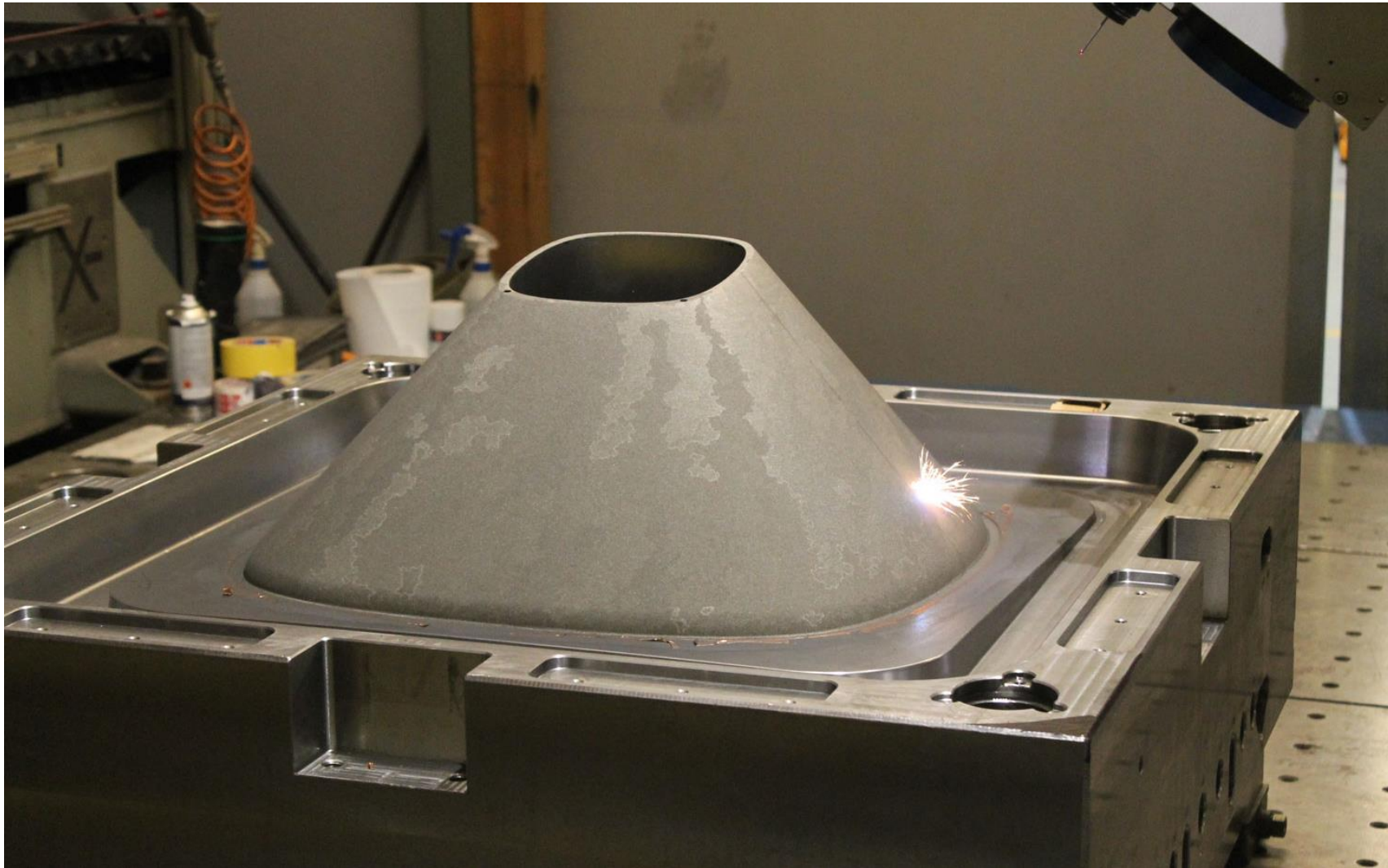
«Texture inspired by delicate linens for the outer panels and an opaque, satin finish for all the inner surfaces»



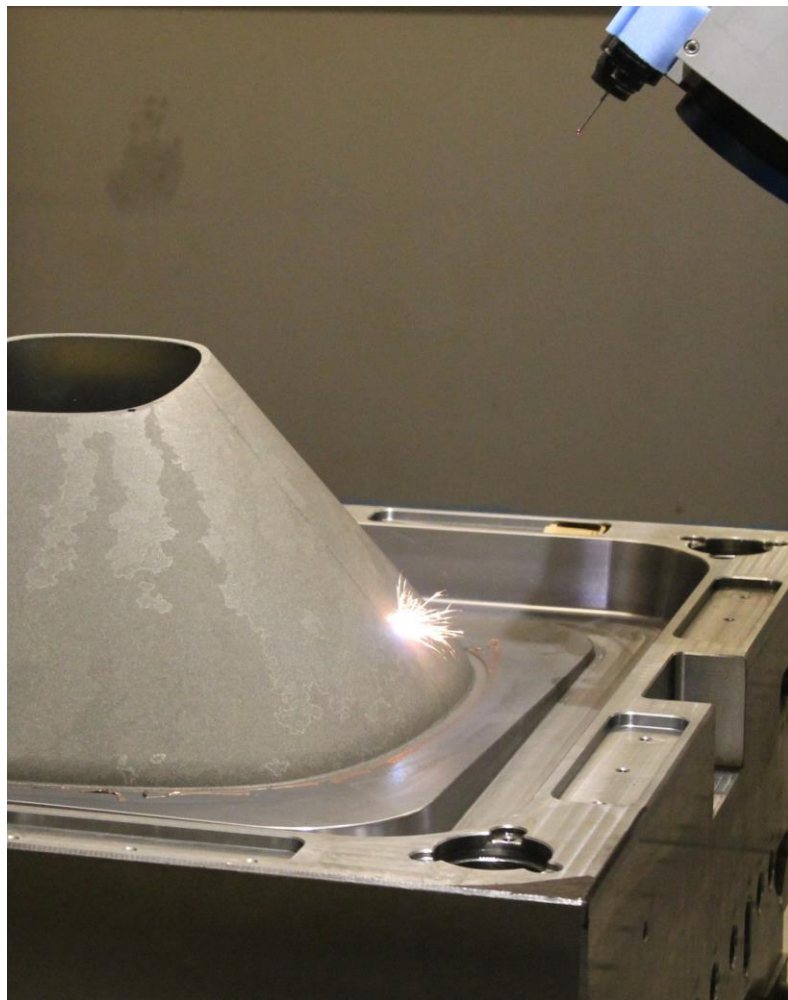
From digital co-design DRE[®]



To laser engraving on the mould



From mould to product



Thank you!