Professional 3D Printing

NELMOVI • 27/02/2021

FOUNDER

Master in Manufacturing Processes
(Fev 2014 - July 2016)

Undergrad Aeronautical Mechanical Engineering
(Jan 2009 - Dec 2013)

Exchange UndergradStudent
(Jan - May 2012)

1st Place Lunabotics Contest
(June 2012)

Exchange UndergradStudent
(June 2012 - July 2013)

Daniel Lopes

Executive Director
(July 2014 - Present)

3DLOPES

3DLOPES TEAM

Eng. Daniel Lopes

EXECUTIVE DIRECTOR

Eng. Eduardo Paoliello

INVESTOR

Eng. Ricardo Zimmer

INVESTOR

Gabrielle Vieira

MANAGER ADM FINANCE

Eng. Pedro Fagundes

MANAGER PRODUCTION

Eng. Cristiano de Paula

MANAGER PROJECT

Eng. André Macedo

MANAGER MARKETING

Warley Gonçalves

COMMERCIAL ANALIST

Edevaldo Barbosa

COMMERCIAL ASSISTENT

Raboni Rocha

3D PRINTING EXPERT

Matheus Freitas

3D PRINTING EXPERT

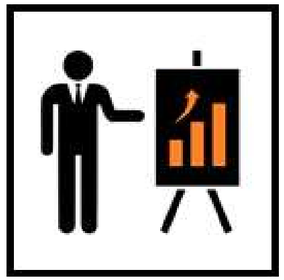
Eng. Alexandre Luz

PROJECT (MEC) ANALIST

Eng. Dener Sampaio

PROJECT (ELE/PROG) ANALIST

BUSINESS

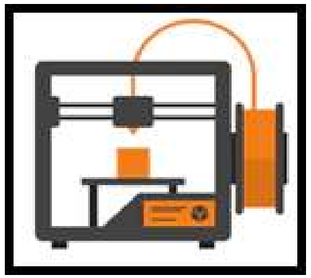


CONSULTING

Identification of opportunities for application of 3D printing technology in industries

3D MODELING

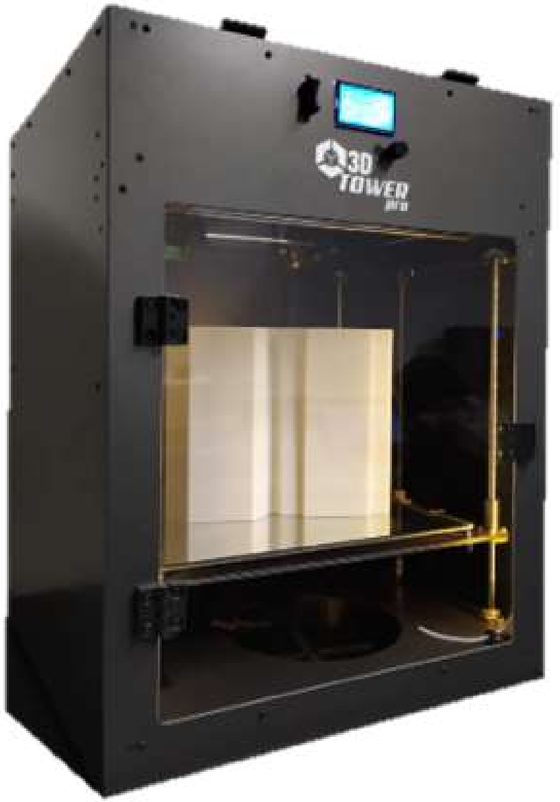
Qualified and experienced team in developing projects for 3D printing



3D PRINTED PARTS

Manufacturing of parts using different 3D printing technologies (Polymers, Resins, and Metals)

3D PRINTERS – POLYMERS



TOWER PRO 400

MODEL: FDM CORE XY (DIRECT DRIVE)
STRUCTURE: STAINLESS STELL AND ACM
3D PRINTING VOLUME: 400X400X400mm
3D PRINTING SPEED: 150mm/s
EXTRUSION TEMPERATURE: 300°C
HEATED BED TEMPERATURE: 150°C
LAYER HEIGHT: 0.05mm – 0.4mm
FILAMENT DIAMETER: 1.75mm
COMMUNICATION: USB OR SD CARD
SOFTWARES: REPETIER, SIMPLIFY, CURA
VOLTAGE: 127 V and 220 V
WEIGHT: 43 Kg

3D printed gear with Nylon 645

TOWER PRO 200

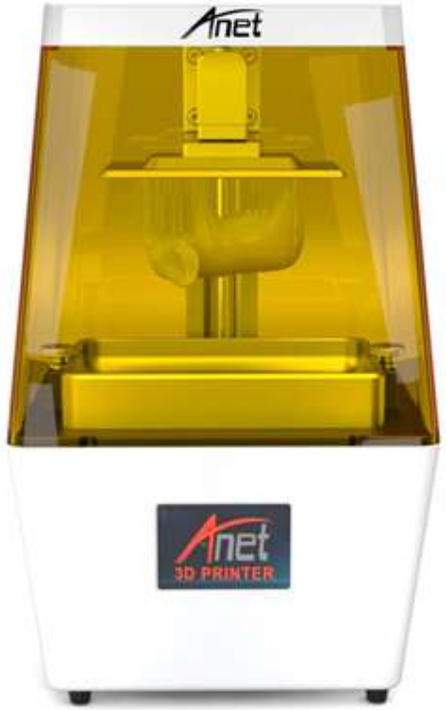
MODEL: FDM CORE XY (DIRECT DRIVE)
STRUCTURE: STAINLESS STELL AND ACM
3D PRINTING VOLUME: 200X200X200mm
3D PRINTING SPEED: 150mm/s
EXTRUSION TEMPERATURE: 300°C
HEATED BED TEMPERATURE: 150°C
LAYER HEIGHT: 0.05mm – 0.4mm
FILAMENT DIAMETER: 1.75mm
COMMUNICATION: USB OR SD CARD
SOFTWARES: REPETIER, SIMPLIFY, CURA
VOLTAGE: 127 V and 220 V
WEIGHT: 18 Kg

Filaments: PLA; ABS; ASA; PETG; TRITAN; NYLON 230; NYLON 645; NYLON BRIDGE; PCTPE; PE; PP; TPU; FRP 193 Flame Resistant; HIPS; AND OTHERS.

3D PRINTERS – RESINS

ANYCUBIC (SLA)

MODEL: SLA (Stereolithography)
3D PRINTING VOLUME: 192 X 120 X 240 mm
INNER TEMPERATURE: 50°C
LAYER HEIGHT: 25 – 100 microns
MATERIALS: Photopolimerized resin
SOFTWARES: Chitubox
VOLTAGE: 110V
WEIGHT: 10.8 kg
EXTERNAL SIZE: 270X290X475mm



ANET N4 (DLP)

MODEL: DLP (Digital Light Processing)
3D PRINTING VOLUME: 120 X 65 X 138 mm
PRINTING PRECISION: 47 microns
LAYER HEIGHT: 40 – 100 microns
MATERIALS: Photopolimerized resin
SOFTWARES: Chitubox
VOLTAGE: 110V
WEIGHT: 6.5 kg
EXTERNAL SIZE: 230X235X380mm

RESINS: PHOTOPOLIMERIZED RESINS

3D printed detailed structures with photopolimerized resin

3D PRINTER – METALS

OMNISINT-160 (SLM):

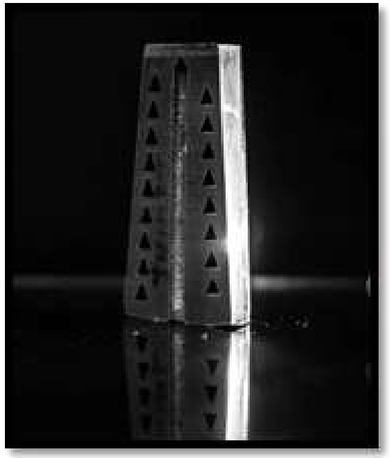
Model: SLM
Compressed Air: 4-6 Bar. 0,5L/min ARGONIUM / NITROGEN
3D Printing Volume: 154 x 154 x 224 mm
Scan Speed: 15000 mm/s
Inner Temperature: up to 250 ºC
Layer Height 0,02mm - 0,09mm
Softws 8.1, Omnimark100, STL SVoltage: 220V
Weight: 760 kg
External Size: 2000 x 1500 x 2000 mm
Laser: Ytterbium Fiber Laser WaveLenght 1090 nm

METALS:

Stainless Steel 316L; Inconel 718; Maraging Steel M300; Titanium; Cobalt; Chrome; Bronze, and others.

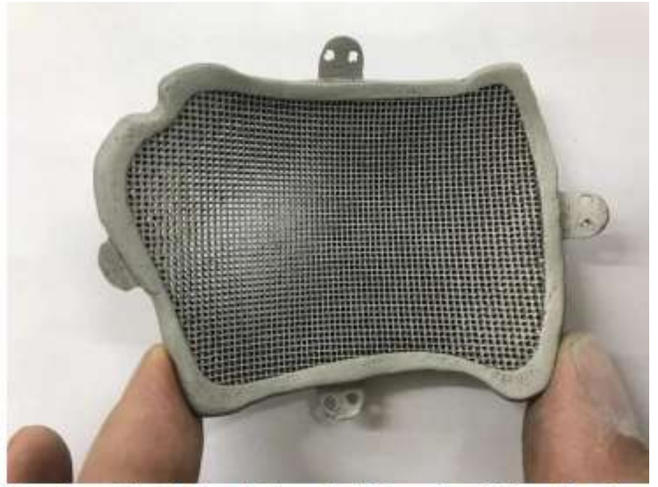
GRANULOMETRY:

15 a 45 µm

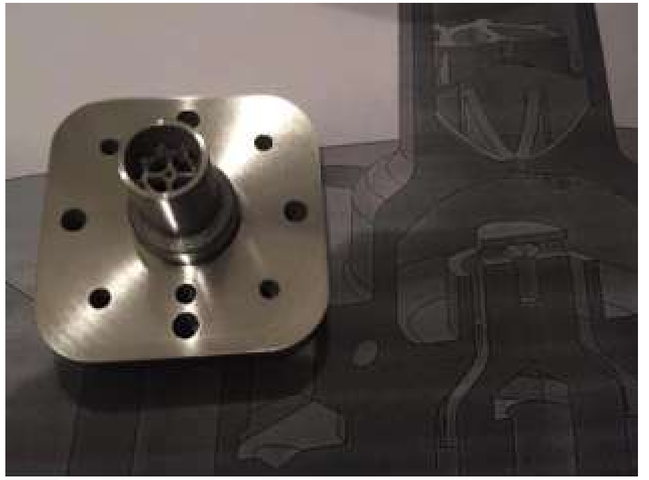


3D printed Injection Mold with Inconel 718

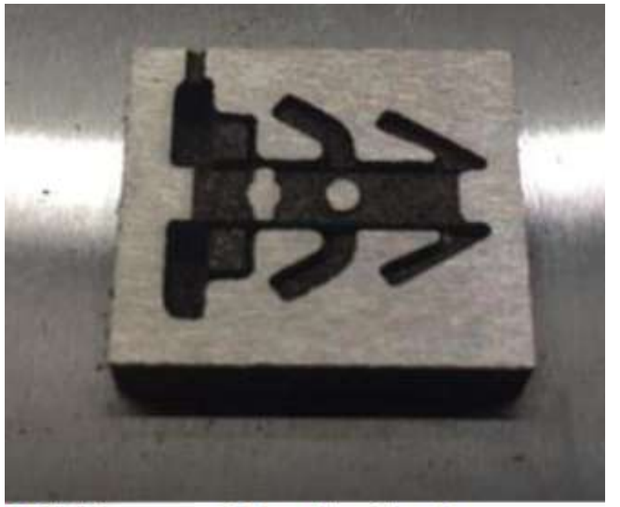
PRODUTOS - METAIS



Trabecular Metal Cranial Repair (Titanium)



Combustor for SpaceX– Inconel 718



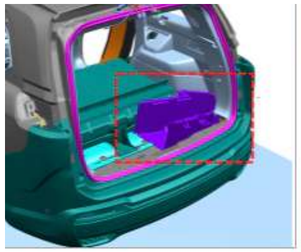
Mold Inserts – Maraging Steel

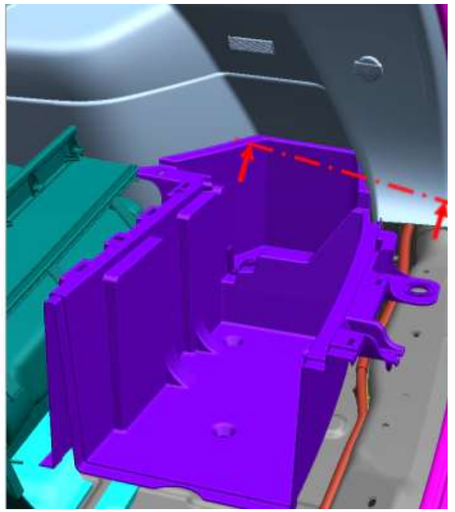
Mechanical Parts – Stainless Steel

Mold Inserts – Maraging Steel

Cup Mold with Conformal Cooling Channels

CLIENTS – AUTOMOTIVE INDUSTRY





STELLANTIS

Prototyping for validation of the assembly process and supply of spare parts for the automotive sector.

MOPAR

3D printing of spare parts for vehicles that left the production line less than 10 years ago.

STRATI (2014)

The world's first 3D printed eletric car.
44 hours

https://www.youtube.com/watch?v=daioWlkH7ZI

LSEV (2018)

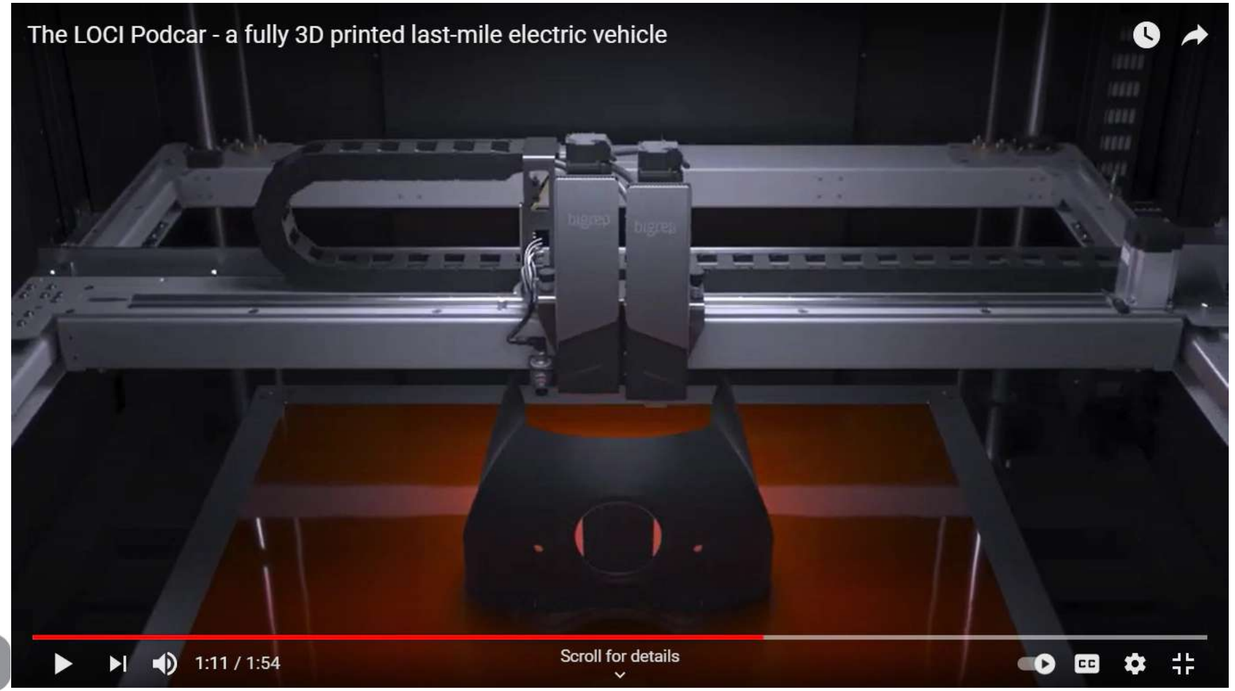
The first 100% eletric 3D printed car

7,000 orders have already been placed in Europe

https://www.youtube.com/watch?v=llqAvDLjVCw&

BigRep (2019)

BigRep rolls out 3D printed autonomous electric LOCI Podcar



https://www.youtube.com/watch?v=DV8ki7nUhi8

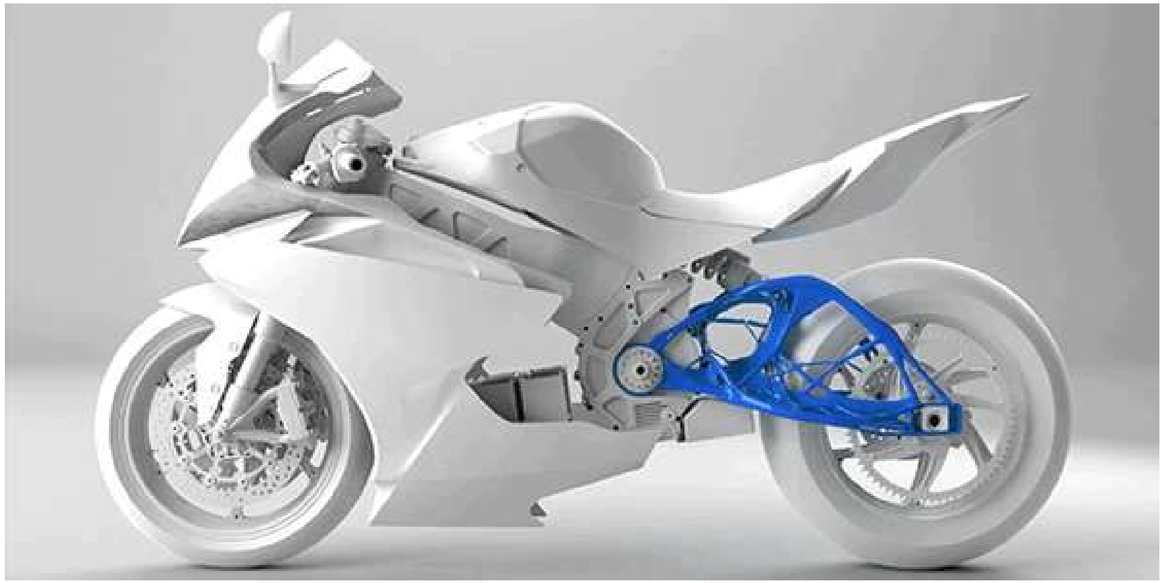
GENERATIVE DESING

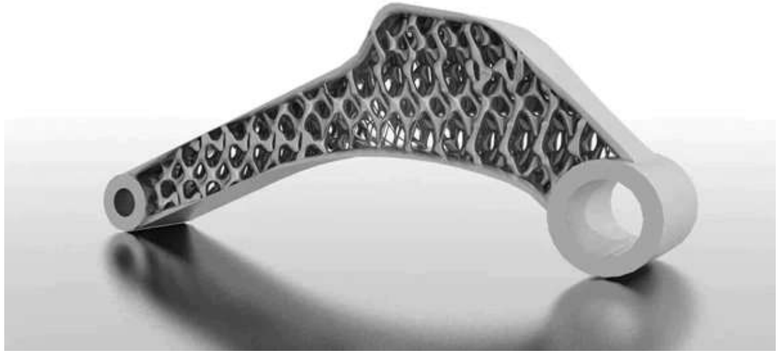
AUTODESK

Reduce components quantity

Reduce weight

Increase strenght





Thanks

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