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manufacturing & engineering

Parts manufacturing for industry
in metal casting & 3d print

Grafcocad is a manufacturing and engineering services company for the manufacture of parts and components for industry.
Since 1996 he has been collaborating with companies in mechanical, energy, aerospace, electronic and medical sectors.

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Manufacturing tecnologies

- Metal casting
- Metal 3D print SLS
- Metal 3D print BJ
- Mechanical machining N.C.
- 3D print polymers

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Metal casting

SS 303-304-310-316-17.4PH   Aluminium (other AOR)

From the C.A.D. the prototype is carried out for functional and aesthetic tests and casting with lost wax or sand technology in the metal and in the required quantity.

Metal 3d print SLS

SS 316L   Titanium   Aluminium   Inconel

From the C.A.D. the prototype is carried out for functional and aesthetic tests and 3d printing with Selective Laser Sintering technology in the metal and required quantity.

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Metal 3d print BJ

SS 420/BR   SS 316L   316LHD

From the C.A.D. the prototype is carried out for functional and aesthetic tests and 3D printing with Binder Jetting technology in the metal, finish and quantity required.

Mechanical machining

drillings threads leveling slotting wire EDM

Precision mechanical machining on parts produced, by C.N.

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3d print polymers

PA11 PA12 PA 12 GB TPU   ULTEM PEEK

From the C.A.D. the prototype is carried out for functional and aesthetic tests and 3d printing with Selective Laser Sintering or Multi Jet Fusion technology in the material, finish and quantity required.

Engineering services

- C.A.D. 3D modelling

- Topology optimization

- 3D Scan - *Reverse engineering*

- Medical imaging

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C.A.D. modeling

3D model from 2D draw

From 2D drawings the C.A.D. 3D of the part for later use.

Topology optimization

lightweight and cost reduction

From the C.A.D. 3D and indications provided, the optimization of the shape is performed for the lightening, the reduction of the manufacturing material and the cost of the part.

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scan 3d - reverse engineering

from real object to 3d model

From existing parts through 3D scanning and reverse engineering for the realization of the C.A.D. 3D for subsequent uses (eg the production of replicas).

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medical imaging

solid model and graphic elaborations from MR/CT

The C.A.D. model is obtained from CT or MRI. 3D of the part or graphic elaborations, for subsequent uses (documentation, study, creation of prototypes and prostheses).
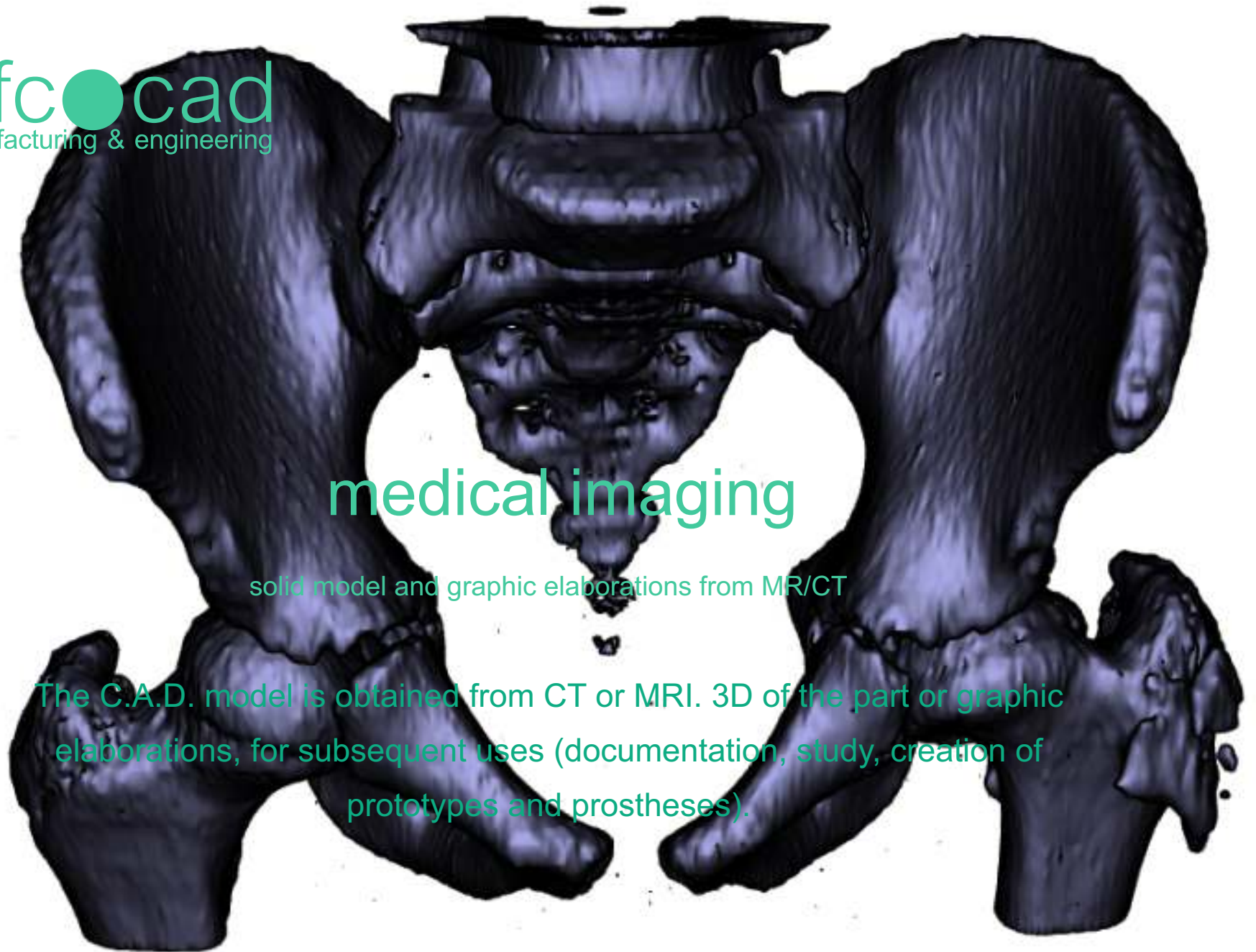
manufactured parts examples

- Turbine impeller SS 420/br

- Exhaust manifold aluminium

- Power control lever SS 316L

- Heat exchanger SS 420/br

- Heat exchanger Inconel 625

- Lightened component SS 420/br

- Electronic case polymer

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ENERGY turbine impeller

3d printed in stainless steel 420/BR

Spare part of a turbine impeller for the production of electricity.

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INDUSTRIAL engine component

Aluminium cast

Marine engine replacement component (exhaust manifold).

INDUSTRIAL custom component

Cast stainless steel 316L (burnished)

Electronic power delivery control component customized in size and shape.

ENERGY heat exchanger

3d printed in stainless steel 420/BR

Stirling engine component (heat exchanger) for electricity generation.

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ENERGY heat exchanger

3d printed in inconel 625

Stirling engine component (heat exchanger) for electricity generation.

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INDUSTRIAL assembly machine component

3d printed in stainless steel 420/BR (burnished)

Part of automatic machine for the distribution of assembly components
lightened for cost containment.

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ELECTRONICS custom case

3d printed in polymer (ABS)

Functional case of electronic components of the apparatus for detecting the parameters of aircraft engines.

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