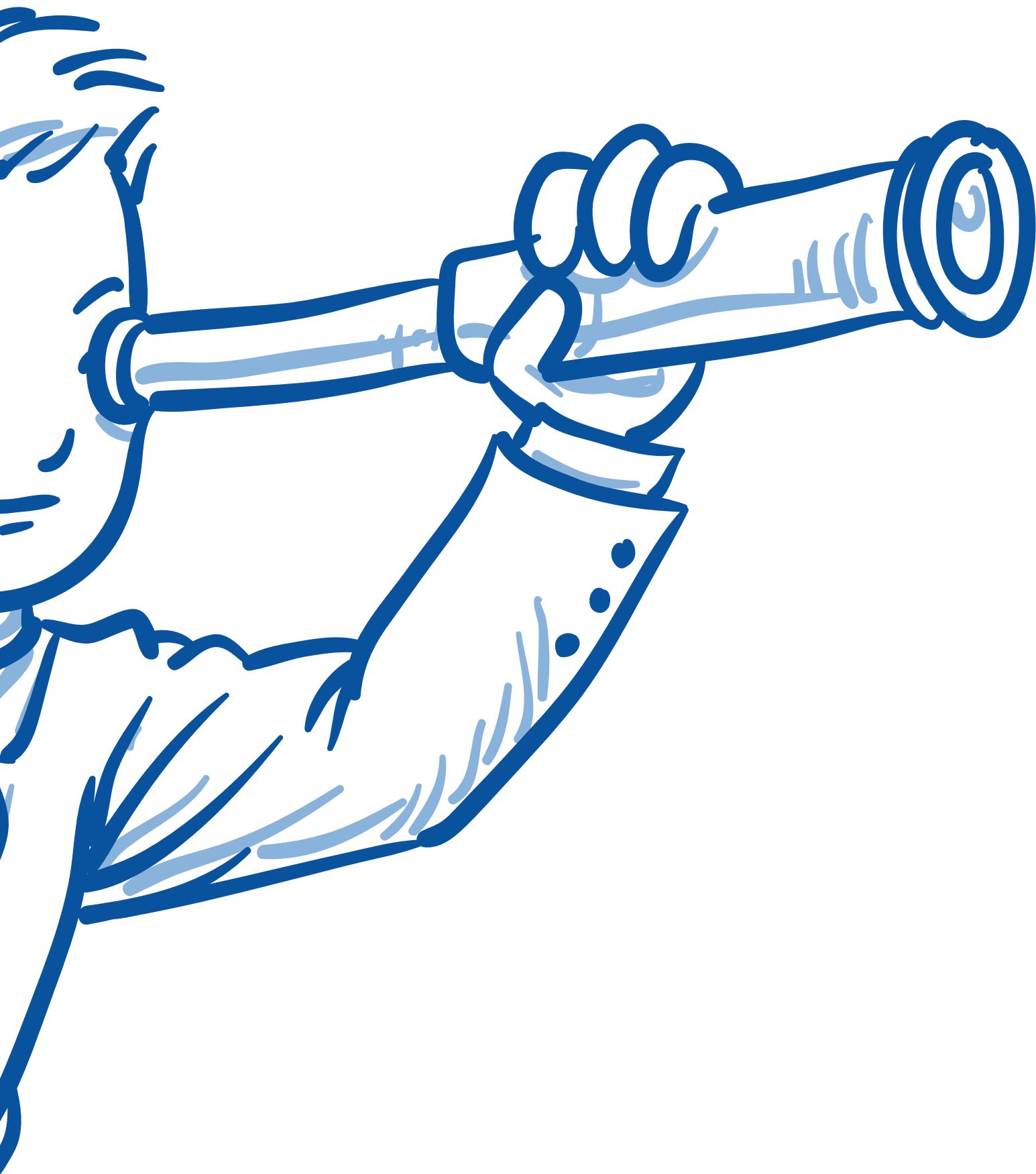


LEGHE LEGGERE LAVORATE



Your Contract Manufacturer



LegheLeggereLavorate
our history began in
1951, but the time has
not yet come to put an
end to over sixty year
of passion.
We are a company,

originally dedicated
parts, that decided
to jump into the
evolutionary perspecti-
ve of precision
mechanics, specializing
in the production of

turned parts of special
technology.
We thus identified our
aim for the future
which we hope it will ac-
company us in a journey
towards the technologi-
cal advances.



Know-How Leghe Leggere Lavorate was born in 1951 thanks to the experience of fans of fine mechanics who decided to build a company on a human scale, with an agile and dynamic structure. These are characteristics that make the difference in the production of turned products with high technological standards.

Creativity Leghe Leggere Lavorate has an innovative spirit and a specific curiosity that lead to a continuous research of solutions and products to satisfy the Client.

Quality Leghe Leggere Lavorate put particularly attention to the quality of its products for a totally Client satisfaction.



LEGHE LEGGERE LAVORATE





Discover our full-service capabilities

Leghe Leggere Lavorate, is an industry leading Contract Manufacturer that offers fully integrated medical device manufacturing capabilities. From design and development, through the validation and production process, up to packaging and logistics.

4 The most important services we can offer

- 1 R & D
- 2 Manufacturing
- 3 Finishing
- 4 Packaging

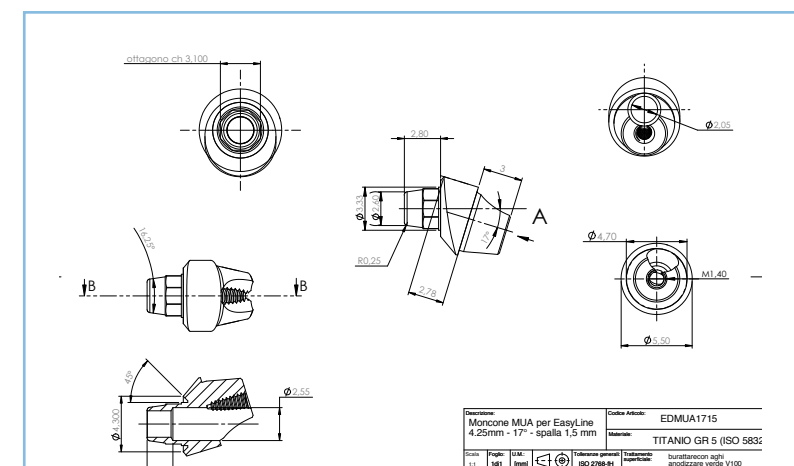
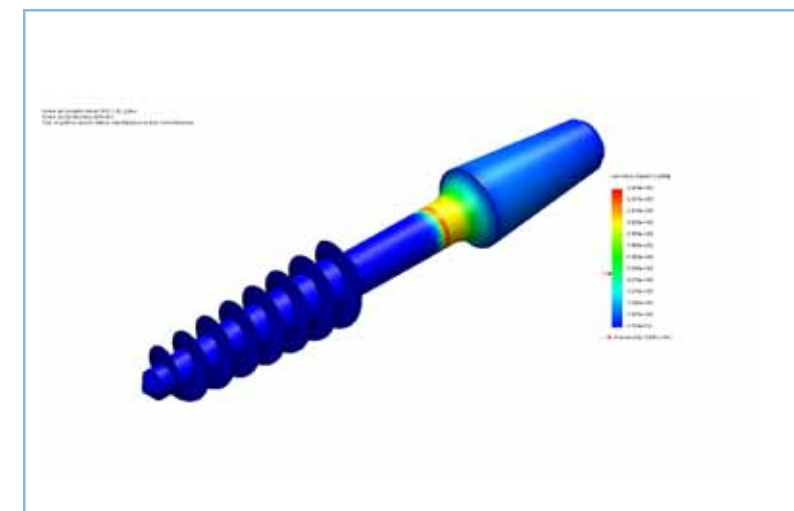
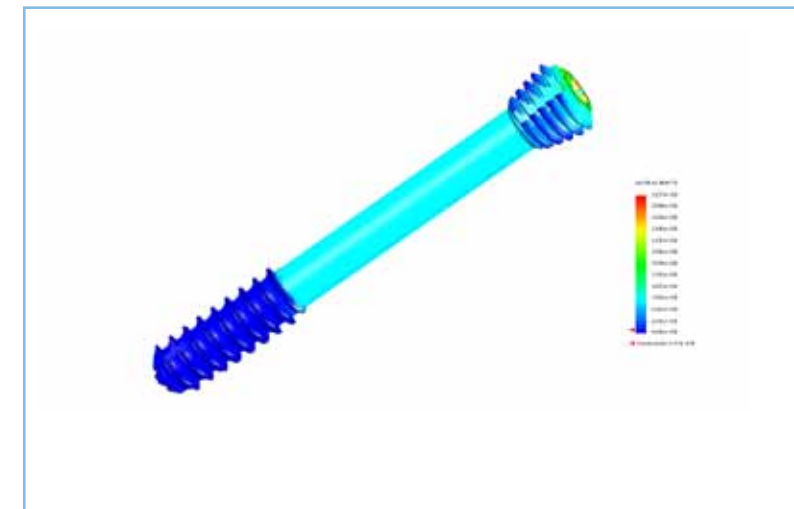
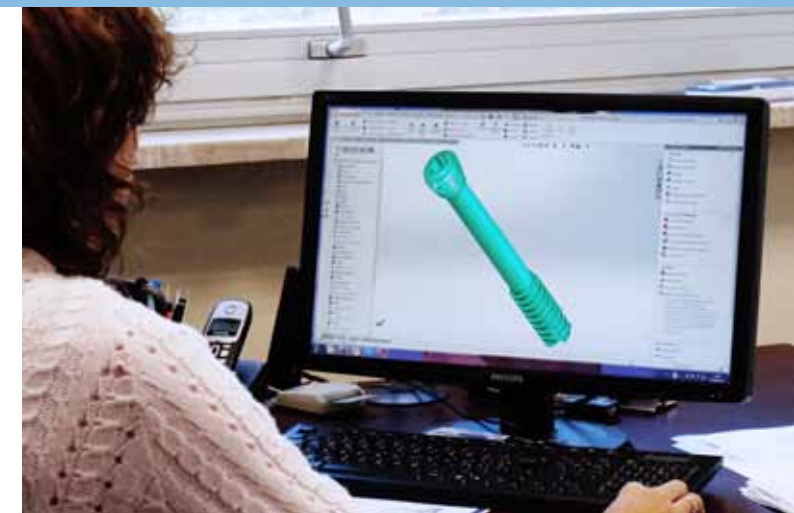


R & D

Leghe Leggere Lavorate technical department is able to study and realize any kind of piece or mechanical handling suggesting possible technical solution that, without alter the design, could reduce product costs.

- In detail:
- Mechanical design
 - FEM/FEA analysis
 - Technical Manual
 - Technical data and list of components management
 - Technical 2D and 3D drawings
 - Trasparency of data with a dedicated internet portal
 - Static and dynamic tests

- Pre tendering
- Patent analysis
- Preliminary risk analysis
- Identification of essential requirements
- Drawing up project plans
- Prototyping
- Statistical testing
- Stress testing
- Clinical testing
- Osteo-integration testing
- Research on materials, components and packaging
- Chemical cleaning validation (ESCA/SEM/EDX)
- Biological cleaning validation (Bio burden e pyrogenic)
- Biocompatibility validation (Cytotoxicity)
- Sterilization cycle validation
- Packaging validation (accelerated ageing)
- Definitive technical designs
- Definitive plans and control cycles
- Definitive product specifications
- Project validation
- Establishing the definite technical file
- Presentation to the certification body for CE Mark
- CE Mark



Manufacturing **Milano-Division:** turning & 5 axis milling center



Nowadays companies tried to offer products and services that not only satisfy but even exceed the customers expectation, reducing, at the same time, their costs to be always competitive.

CAPABILITIES

35 Mobile spindle CNCs with bar width from 1 mm to 25 mm

2 Five axis work centres with bar width 42 mm

3 Five axis milling center with automatic loader (Robot)

1 Quality control laboratory with 2D optical scanning machines and 3D mechanical probing machine (DEA)

A company with ISO 9001 and 13485 certification will be able to reach important improvement in terms of organizational efficiency and quality of the product minimizing wastes, avoiding errors and increasing the productivity.

Used materials

Titanium of different grades:
gr.2, gr.3, gr.4, gr.5 ELI F136 and gr.5 ELI F1295

Stainless steel:

303, 304, 316L, 316LVM, 420-A, 420B, 430, 630, etc.

Special alloys:

(TZM, NILVAR, Cr Co)

Quenched and

tempered steels:

ST 137, ST 329, ET6 88, ET6 100, X 205 Cr12 KU, ecc.

Hardening steels:

18Ni- CrMo5, 16CrNi4, C60, 100Cr6, 39NiCrMo3, ecc.

Aluminium:

(all alloys t4, t5, t6, ERGALL 55, AVIONAL, ANTICORODAL, BT3).

Special plastic:

Delrin, PEEK (DIN 7728 Standard), o and glass reinforced PEEK





Manufacturing **San Marino-Division:** Injection molding & 5 axis milling center

CAPABILITIES

3 Injection Molding Machinery with clamping force magnitudes up to 45 metric ton.

2 Five axis milling center with automatic loader (Robot)

Injection moulding is in area ISO 7; advanced molding technology that allows the production of complex components in large quantity and with limited costs.

All the raw materials used, such polyethylene, CFR Peek, Radel, PLDL, PLLA comply with medical field standards. All products are marked with laser marking, punching, micro milling to allow traceability of the item.



Finishing



- Deburring department
- Shot Peening department
- Sand blasting department
- Tumbling department
- Polishing and elettro-polishing department
- Washing and decontamination department (class ISO 5)
- Titanium elettro-polishing department
- Titanium anodizing process department (class I-II)
- Citric and nitric acid passivation department



Packaging Delivery Punctuality

Packaging of the product begins in observance of validated procedures.

For sterile products, the key point in this process is the clean room ISO 7 and ISO 8.

We can handle different type of packaging: blisters, tyvek pouches or vacuum pouches.

The packaging process ends with labelling.

The products are then sent for the sterilization process by external supplier with validated sterilization cycles.



Extremities

Screws for :

- Hallux Valgus/Osteotomies
- Arthrodesis/Osteosynthesis
- Flat foot correction in child or adult
- Osteotomies and fractures
- Stabilisation - totally intra osseous fixation
- Valgus pronated congenital essential child and adolescent

Self-drilling and self-tapping, cannulated Titanium alloy Ti6Al4V. Progressive conical shape for a better compression
No dorsal impingment.

Some particular screw, implant or pins can be realized in PLLA resorbable material with injection molding technology. These products have mechanical properties guaranteed for at least 18 months.



Spine

- Spine:**
- Monoaxial and polyaxial pedicle screws
- Hooks
- Straight and angled bars
- Cage (titanium and PEEK)

Forward-thinking vision

20 21

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- Cage (titanium and PEEK)

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- Hooks
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Trauma:

- Nailing system
- LCP locking compression plate & screws
- Screws systems
- Hexternal fixator

Trauma

Trauma metallic components

material: Titanium, AISI, CrCo and aluminium



Trauma:

- Plates in CFR Peek
- Screws in PLLA/PDLA*
- Cambre in PLLA/PDLA*
- Pin in PLLA/PDLA*

* Resorbable implants have shown many advantages, for example:

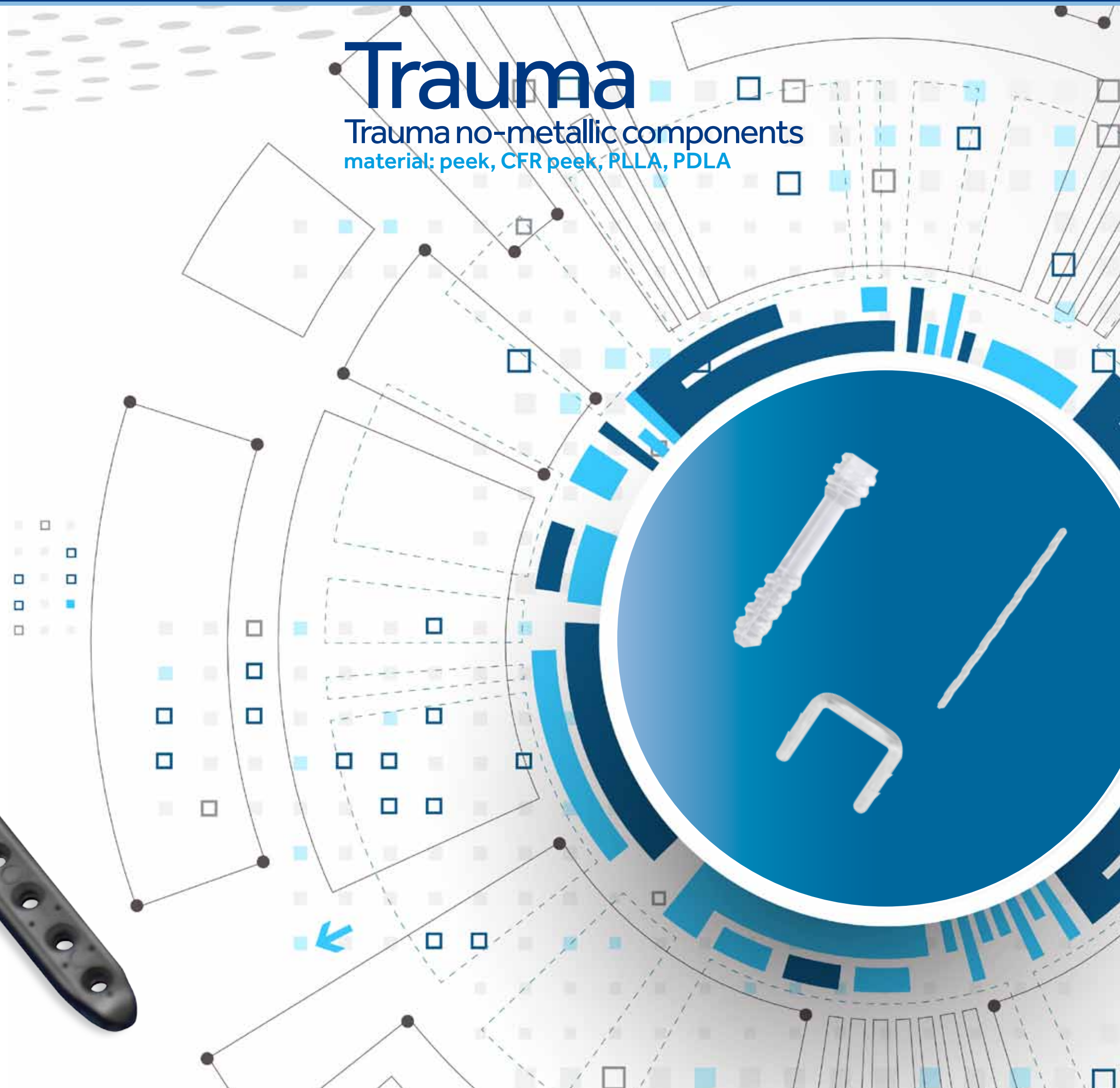
- make bone consolidation easier
- eliminate the need to remove the synthesis device
- eliminate the visual distortion due to the metal material during the MRI control
- avoid the release of metal ions in bone tissues cage (titanium and PEEK)



Trauma

Trauma no-metallic components

material: peek, CFR peek, PLLA, PDLA



Dental

Dental and Maxillo :

- Complete monophasic dental system
- Complete bi-phasic dental system
- Torque ratchet
- Prosthetic components
- Guided surgery
- Cad cam solution

Maxillo

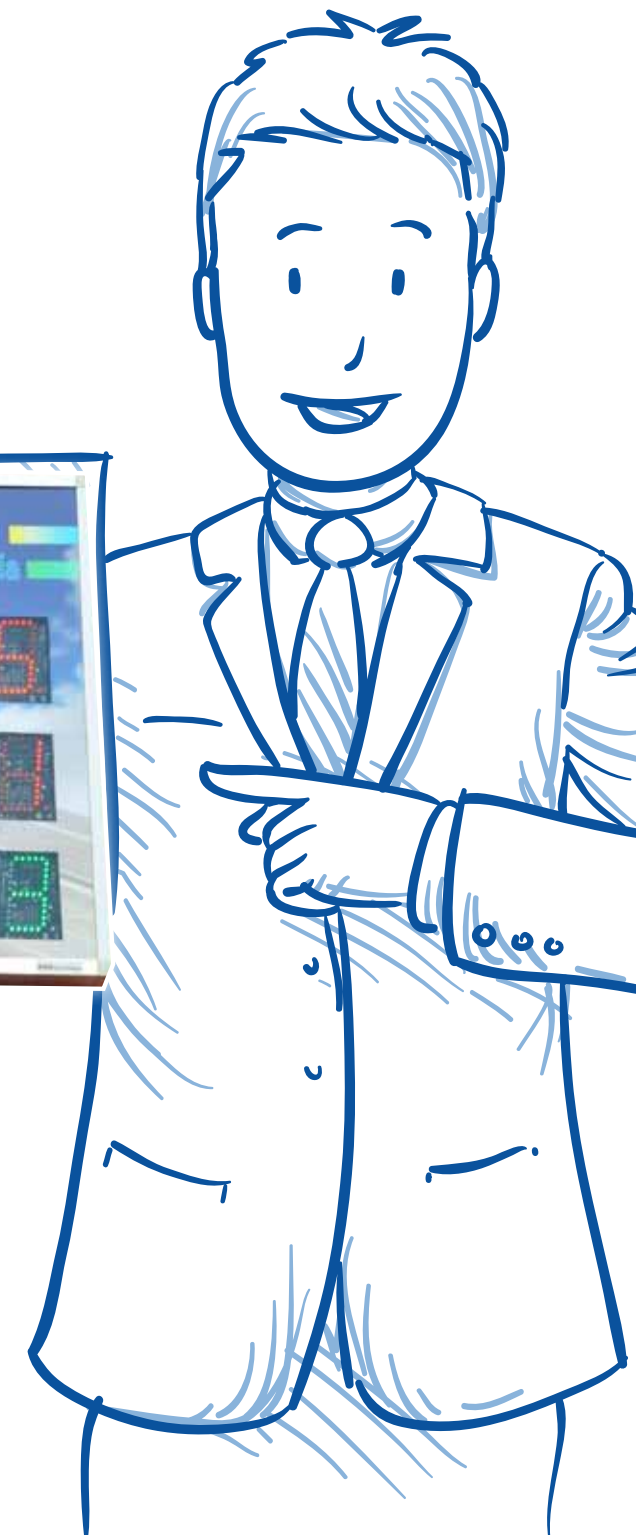


Ecology



Nowadays, industrial companies and respect for the environment should match each other.

Leghe Leggere Lavorate fights against pollution thanks to a rational approach regarding the three main mechanics matters: electricity and heat retrieval, waste material disposal and oil treatment.





Meet us!

