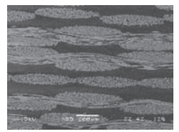
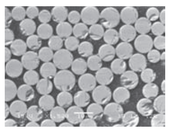
Trilor®: the solution for a non-metal dentistry

1. The Product

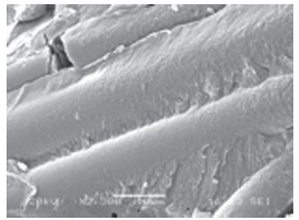
Trilor®, developed by Bioloren Srl, is a new techno-polymer consisting of thermo-setting resin and a multidirectional reinforcement of fibreglass.
Fiber-Reinforced Composite (FRC) composites are the materials used in racing cars, airplanes and many other fields where the demand for high toughness, low weight and great resistance to efforts are essential requirements.



The woven fibre structure reproduces that of the fabric, in a multi-directional configuration, to offer the best performances.



The Matrix/fibre interface is the most critical point of composite structures. Thanks to an extremely precise and reliable industrial production method, Trilor® offers a level of adhesion between the fibres and the resinous matrix, which can greatly amplify the technological characteristics of the material.



2. Physical properties

Tensile Strength	380 Mpa
Flexural Strength	540 Mpa
Tensile Elongation	2%
Flexural Modulus	26 Gpa
Tensile Modulus	26 Gpa
Compressive Strength (perpendicular)	530 MPa
Charpy Impact Strength	300 KJ/cm^2
Rockwell Hardness (scale R)	111 HRR
Barcol Hardness	70
Shore D. Hardness	90
Density	1,8 g/cm^3

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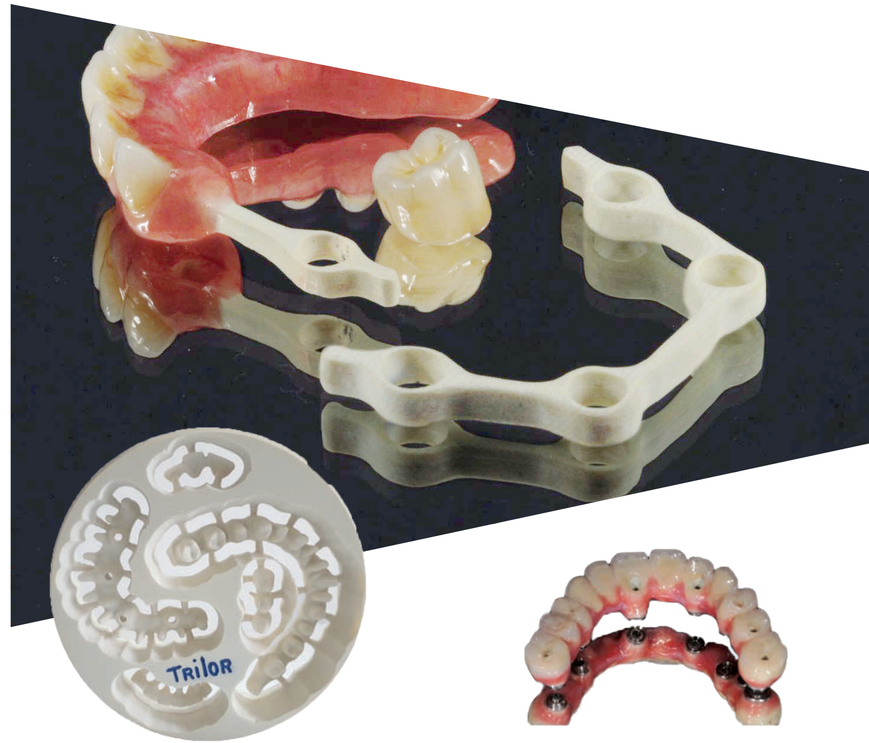


MADE IN ITALY

TRILOR® ARCH
Applications

TRILOR® ARCH

Hi-Tech material for manual use for:
- Reinforcement bar for immediate and delayed loading
- Transfer key of implant positions
- Surgical guide
- Easy manual production of implant based bridges and suprastructures.

Note: TRILOR® material has to be covered with acrylic resin or composite.
TRILOR® ARCH comes in thickness of 3,5 mm - 5,5 mm. - 7,5 mm.

TRILOR® ARCH clinical case



TRILOR® THE MOST VALID ALTERNATIVE AND REPLACEMENT FOR METALS IN PROSTHETIC DENTISTRY

- No casting
- No galvanism in the mouth
- No oxidation or corrosion
- No thermal shock (due to low thermal conductivity)
- Excellent biocompatibility
- Light weight

TRILOR® Tecnical Data:

		Resilience:	300 KJ/cm²
Colour:	white	Modulus of elasticity:	26 GPa
Tensile strength:	380 MPa	Density:	1,8 gr/cm³
Flexural strength:	540 Mpa	Water absorption:	not water soluble
Compressive strength:	530 Mpa	Min. wall thickness:	0,4 mm

TRILOR® ARCH clinical case



TRILOR® BLANKS
Hi-Tech Dental Fiber-Composite

TRILOR® developed by Bioloren S.r.l. is a new Hi-Tech Fiber Composite material consisting of epoxy resin matrix and a multidirectional glass fiber reinforcement. Epoxy-fiber-composite structures have become the material of choice in race cars, airplanes and many other fields where a combinations of hight strength, low weight, and fatique resistance are key requirements.
In the dental field this glass-fiber-composite technology was introduced by Bioloren more than 20 years ago when the company developed their first metal-free fiber root posts. As metal-free alternative TRILOR® is covering a wide range of indications as material for permanent and temporary dental restorations. TRILOR® is registered by the FDA for the US-market and has CE-mark for Europe.

TRILOR® Tecnical Data:

Colour:	white / pink
Tensile strength:	380 MPa
Flexural strength:	540 Mpa
Compressive strength:	530 Mpa
Resilience:	300 KJ/cm²
Modulus of elasticity:	26 GPa
Density:	1,8 gr/cm³
Water absorption:	not water soluble
Min. wall thickness:	0,4 mm



TRILOR® Indications:

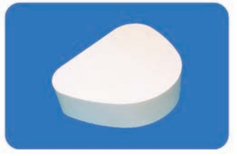
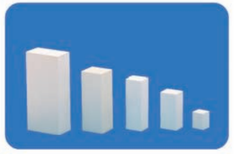
- Copings
- Substructures
- Frameworks for anterior or posterior crowns
- Bridges
- Telescopic restorations
- Bar attachments on implants
- Drilling guide for implant placement

TRILOR® clinical case



TRILOR® BLANKS
Milling Discs and Blocks

TRILOR® Hi-Tech Fiber-Composite are available as discs and blocks for a wide range of dental milling systems. The various discs come in a variety of thicknesses for cost and material saving milling processes.
For most of the dental milling systems standard procedures suitable for PMMA or the other composite blocks may be used. TRILOR® BLANKS may be milled also with a wet milling strategy.

TRILOR® BLANKS are available in many different dimensions, e.g.

98 mm Ø standard discs (thickness 10 mm - 25 mm). TRILOR® BLANKS are available also in discs and blocks for the most common milling systems.

TRILOR® BLANKS FOR DENTAL CAD/CAM TECHNOLOGY

- multi-purpose hi-tech fiber composite
- wide range of clinical indications
- perfect balance of high strength with physiological elasticity

TRILOR® THE MOST VALID ALTERNATIVE AND REPLACEMENT FOR METALS IN PROSTHETIC DENTISTRY

- No casting
- No galvanism in the mouth
- No oxidation or corrosion
- No thermal shock (due to low thermal conductivity)
- Excellent biocompatibility
- Light weight

TRILOR® clinical case