

Wironit® LA

Consistent further development



Quality speaks for itself

- > Wironit® LA – universally applicable for clasp partial dentures and combination work
- > Excellent laser welding characteristics for high-strength joints, even in extrem situations
- > Easy to process in BEGO's partial denture system
- > The properties significantly surpass the requirements according to ISO 22674 and other national standards
- > With certificate regarding additional biological material tests at independent institutes

Wironit® LA: The universal alloy

The superior strength characteristics of this cobalt-chromium-molybdenum alloy give the clasp partial denture the required security and reliability. The modulus of elasticity and ductile yield are so favourable that no permanent deformation of the base and clasps results even under great stress. Thanks to an elongation limit of 8 %, clasps can also be activated without any problem.

The ductile yield and tensile strength have been further enhanced in relation to the classic alloy Wironit® extra-hard. For this reason Wironit® LA is mainly used in connection with the combination technique, for which a high degree of strength and rigidity is required.

High degree of corrosion resistance

Wironit® LA's corrosion resistance is based on a balanced ratio of chrome, molybdenum and cobalt. As a consequence, it retains passive characteristics in the mouth, i. e. the alloy protects itself against corrosive influences through a resistant, firmly adhering passive layer. This makes Wironit® LA biocompatible and resistant in the mouth.

Wironit® LA has passed additional biological material tests. A certificate issued by independent institutes attests the tests passed. You are welcome to ask for this certificate.

Easy processing

Extremely high-precision casting results are achieved with BEGO's proven system. Wironit® LA can be easily and reliably processed with all suitable melting techniques.

Wironit® LA has a very fine metallic structure. It gives the finished product superior strength and a particularly dense surface with a bright finish after polishing. This is a major prerequisite for avoiding plaque deposits.



Start looking to the future – Wironit® LA, laser-optimised for biocompatible joints

Optimised for laser welding technology

Normally laser welding work with partial denture alloys is carried out with filler metal materials such as Wiroweld Co-Cr laser wire, containing no carbon. For extensions or in some cases for repair work it may be necessary to make "butt joints". And this is where Wironit® LA's excellent laser welding characteristics are reflected in the strength of the joints.

This is guaranteed by a special alloy technique, controlled content of carbon, addition of tantalum as well as an extended batch test procedure.



The LaserStar LYNX high-performance laser welding unit – perfection in micro-joint technology

Subject to modifications in design, scope of delivery and composition. Whether given verbally, in writing or through practical instructions, our process-related data and recommendations are based upon our own experience and trials and can only be regarded as standard values. Status as at: 10.11.07.

Wironit® LA

The alloy characteristics:

The alloy characteristics:	Standard values
Colour	silver
Density [g/cm ³]	8.2
Melting interval [°C]	1300 – 1340
Casting temperature [°C]	1450
Elongation limit (A ₅) [%]	8.0
Tensile strength (R _m) [MPa]	940
Ductile yield (R _{p 0.2}) [MPa]	640
Modulus of elasticity [GPa]	approx. 220
Vickers hardness (HV10)	360
CE 0197	ISO 22674

Composition in % by weight:

Co 63.5 · Cr 29.0 · Mo 5.0 · Si · Mn · N · C · Ta

Availability and accessories:	Unit	Content	Order No.
Wironit® LA	1 pack	1000 g	50100

Accessori:

Wiroweld, filo Co-Cr laser wire, containing no carbon			
Ø 0.5 mm	1 pack	1.5 m	50005
Ø 0.35 mm	1 pack	2 m	50003
Cobalt-chrome solder	1 pack	5 g	52520
Certificate			82645

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