



Safe and
bio certified

Wirobond® 280

Non-precious premium metal-ceramic alloy

- Wirobond® 280 defines a standard in non-precious metal-ceramic alloys, as its Vickers hardness of 280 HV10 makes it exceptionally easy to work out.
- Extremely corrosion resistant due to optimal interaction of the essential elements chrome and molybdenum
- Excellent melting and casting properties
- No slow cooling required*, even with longspan restorations
- Reliable metal-ceramic bonding
- High strength with all spans, ensuring a wider range of applications
- Reliable fabrication based on the proven BEGO system
- Biocompatible and corrosion-resistant

* Exception: Creation (Willi Geller), Reflex® (Fa. Wieland Dental + Technik GmbH & Co. KG)

Partners in Progress



Ideal processing properties – Wirobond® 280 – The name says it all

- Low Vickers hardness of 280 (HV10) ensures excellent machinability, making it very easy to process and work out frameworks
- Excellent melting properties, the casting point is easily detectable
- Flows highly fluid without leaving residues in the crucible, which extends the service life of the crucible and reduces operating costs
- Can usually be cooled normally after firing, even with long-span restorations, due to its optimized coefficient of thermal expansion
- The bond strength has been tested with a large number of commercially available ceramics

Wirobond® 280 under close scrutiny

- High corrosion resistance is attained by the interaction of chrome, tungsten and the essential element molybdenum
- The alloy forms a dense, adhesive passive layer, which ensures its biocompatibility
- The certificate can be requested from BEGO or downloaded at www.bego.com in the services section

Wirobond® 280 – first choice for dental technicians, dentists and patients

- Reliable and costeffective allowing patients to obtain a high-quality dental restoration
- The alloy of choice for patients as, due to its minimal thermal conductivity (sensitivity to heat/cold), it provides for a high degree of oral comfort
- The patient can choose between different types of supply:
 - regardless of whether a standard fixed restoration,
 - combination work or implant-supported restoration



Outstanding bonding strength with all leading ceramic materials

Product details

Alloy characteristics	Standard values
• Alloy type (ISO 22674)	5
• Density	8.6 g/cm ³
• Preheating temperature	900–1000 °C
• Solidus, liquidus temperature	1355, 1430 °C
• Casting temperature approx.	1500 °C
• Young's modulus	215 GPa
• Proof strength (R _{p0.2})	515 MPa
• Ultimate strength (R _m)	680 MPa
• Elongation after fracture (A ₅)	14 %
• Vickers hardness (HV10)	280 HV10
• Coefficient of thermal expansion (CTE) 25–500 °C, 10 ⁻⁶ K ⁻¹	14.3

Composition in % by mass

• Co 60.2 · Cr 25.0 · W 6.2 · Mo 4.8 · Ga 2.9 · Mn · Si

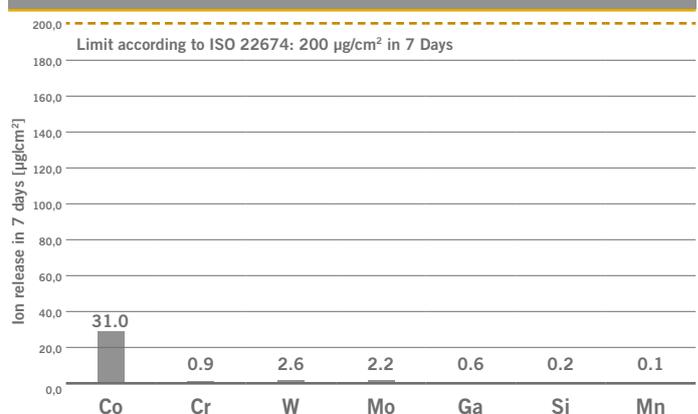
Availability	Presentation	Content	REF
• Wirobond® 280	1 Pack	1000 g	50134
• Wirobond® 280	1 Pack	250 g	50135

Accessories

• Wiroweld CoCr laser wire, carbon-free			
Ø 0.5 mm	1 Pack	1.5 m – 2 g	50005
Ø 0.35 mm	1 Pack	2 m – 1.5 g	50003
• Wirobond® soldering rods	1 Pack	4 g	52622

ISO 22674 · ISO 9693-1

Ion release from Wirobond® 280 in 7 days



We reserve the right to modify the design, pack contents and composition. Technical information and recommendations are based on our experience and tests and should be regarded as guidelines. Date of issue: March 2017