

Coatings for advanced dental technology

Optimum machining quality for dental components



Cutting Tools



High-end coatings for improved productivity and outstanding surface quality in dental machining

Dental technology requires maximum precision while working with materials that are difficult to cut, placing high demands on microtools. Applying advanced coatings is an effective way to significantly reduce the resulting tool wear and production costs. With tailored coating solutions from

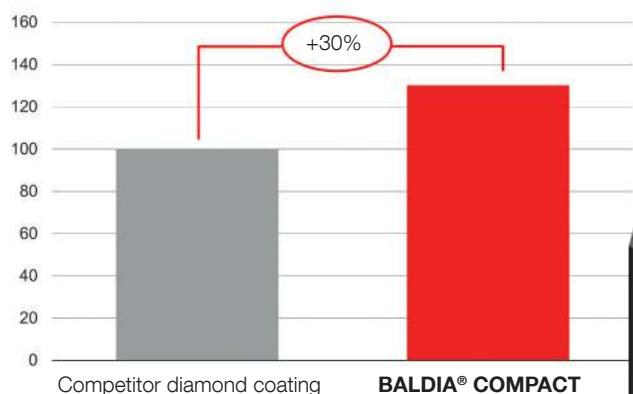
Oerlikon Balzers, dental laboratories benefit from:

- Outstanding abrasive wear resistance resulting in extended tool life
- Highest surface finishing accuracy
- Faster cutting speeds and increased productivity

Diamond coatings: The preferred choice for machining zirconia

Diamond is the hardest known material, making diamond coatings ideal for machining abrasive dental materials.

Tool service life (hours)



Dental micro end mill

Tool:	Tip Ø1 Shank Ø4 Lg 60 mm, Carbide TSF22
Workpiece:	Dental zirconia crown (ZrO ₂)
Cutting data:	Dry N = 30,000 rpm V _f = 1,200 mm/min A _p = 0.4 mm
Source / Customer:	Ziacom Medical S.L.
Benefit:	The BALDIA® COMPACT diamond coating proved to be the preferred solution for milling zirconia, with a 30% increase in tool life.

Optimum coatings for high-performance materials in dental technology

Prosthesis	Recommended Coatings
Zirconia / Glass Ceramic	BALDIA® COMPACT
Chrome Cobalt / Titanium	BALIQ® TISINOS BALINIT® TISAFLEX
Wax, PMMA / PEEK	BALINIT® MAYURA

Dentistry and Implantology	Recommended Coatings
Abutments	BALIMED® TICANA BALIMED® A
Dental Screws	BALIMED® C BALIMED® DLC
Dental Instruments	BALIMED® C, BALIMED® DLC BALIMED® A, BALIMED® CNI



Contact us now for your ideal coating!

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