

BALIMED ARGENTA

Improving patient outcomes
by preventing infections

**ANTI-
MICROBIAL
COATING**



Medical



BALIMED ARGENTA – Accelerating patient recovery with antimicrobial effectiveness

The surface of the instrument is coated with TiN doped with silver. Once the surface comes into contact with moisture, small amounts of silver ions (Ag⁺) are released from the coating. These ions are highly reactive and suppress the growth of microorganisms.

Coating properties BALIMED ARGENTA

Coating material	TiN:Ag*
Coating hardness H_{IT} [GPa]	25 – 29
Coefficient of friction (dry)	~ 0.5
Process temperature [°C]	< 350
Coating thickness [µm]	1.5 – 4.0
Coating temperature [°C]	< 600
Coating color	gold

* Multilayer coating: TiN bottom + AgTiN+TiN top (top layer is optional)
All given data are approximate values and depend on application, environment and test conditions.

In addition to its antimicrobial properties, the BALIMED® ARGENTA coating offers excellent anti-stick performance. Furthermore, it is highly durable with outstanding wear and scratch resistance.

A variety of applications

- Minimally invasive surgical (MIS) instruments
- Surgical instruments
- Orthopaedic instruments
- Dental instruments
- Trauma implants

Key properties

- Exceptional antimicrobial performance thanks to silver doping within the TiN coating
- Customizable silver content and enhanced silver ion release capabilities
- Outstanding wear and scratch resistance
- High biocompatibility
- Autoclave stability

Tested for biocompatibility

- Cytotoxicity ISO 10993-5
- Irritation ISO 10993-10, ISO 10993-23
- Sensitization ISO 10993-10



Upgrade your medical instruments with BALIMED ARGENTA Contact us!

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For our global locations,
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www.oerlikon.com/balzers

ISO 9001

for all our worldwide
coating centers

ISO 13485

Antzuola (Spain)
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