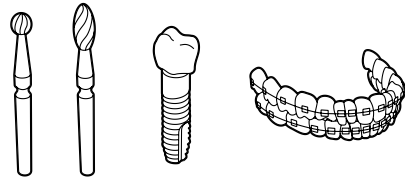


Zapp is Certified According to ISO 9001/TS 16949



Datasheet Dental Applications

Dental Applications

- Dental implants and abutments
- Rotating instruments
- Orthodontics
- CAD/CAM blanks

Application Dental Implants and Abutments

Due to its outstanding biocompatibility, its self-forming protective passivation layer and its exceptionally high stability, pure titanium is the material of choice over all other metals and alloys for dental applications. The mechanical-technological and microstructural properties are adjusted to ensure that Ergitan® (pure titanium) satisfies the requirements of both ISO 5832-2 and ASTM F 67. This results in the decisive advantage that additional customer-specific requirements such as high strength and above-average elasticity can be achieved through a large variety of manufacturing methods.

For abutments, Ergitan® (titanium alloy 3.7165) meets the requirements of both ISO 5832-3 and ASTM F 136. Its increased fatigue strengths make it especially well-suited to this application.

Typical Grades for Dental Implants and Abutments

Grades

Pure titanium grade 2

Pure titanium grade 3

Pure titanium grade 4

Pure titanium grade 4 High Tensile

Titanium alloy, grade 5 ELI

APPLICATION ROTATING INSTRUMENTS

The wide range of materials, whether in the form of wire or bar, is specifically matched for the use as shaft material for polishers or as raw material for drills and milling cutters. Key advantages include increased corrosion resistance, good machinability and high purity grade. Special treatment also keeps our low-stress rods distortion-free on the finished part even after heat treatment. These specific production processes are the basis for the use for instruments such as root canal files.

Typical Grades for Rotating Instruments

Grades

1.4105

1.4034/ 1.4035

1.4197

1.4310

1.4568

Application Orthodontics

In combining the large range of materials with the product forms wire, bar, profile and strip, it is possible to manufacture products for the use in removable and permanently fixed technology, whether as wire for dental braces or as brackets, expansion screws or molar bands. Nickel-free materials and CoCr alloys complete the material portfolio also for special demands.

Typical Grades for Orthodontics

Grades
1.4310
1.4301
1.4303
1.4305
1.4456
9.9007
9.9035

Application CAD/CAM Blanks

MEDICAL ALLOYS extensive product portfolio also includes CAD/CAM blanks.

Whether pure titanium, titanium alloys or cobalt-chromium: the outstanding material properties are matched for high-precision milling of crowns, bridges and individually developed constructions. The CAD/CAM blanks are available in standard thicknesses and diameters, with or without step.

Typical Grades for CAD/CAM Blanks

Grades
3.7035
3.7065
3.7165
Cobalt-Chromium-Molybdenum
Cobalt-Chromium-Tungsten

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Further information regarding our products and locations are available in our image brochure and under www.zapp.com

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