

CopraTi-4

Specifications

printing date: 17.03.2016

Manufacturer:	Whitepeaks Dental Solutions GmbH & Co. KG Langeheide 9 - 45239 Essen - Germany
product:	CopraTi-4
product type:	Titan Grade 4 – milling blank
product shape:	metal disc ~ 98,3mm Ø in different diameters and thicknesses
CE-mark:	X 0483
applied standards:	DIN ISO 5832-2 and ASTM F67 manufacturing and testing according to DIN EN ISO 13485 and medical products guideline 93/42/EEC annex II excluding section 4
veneer porcelain:	all standard veneering porcelains for titanium
contra indikation:	do not use proven allergy or hypersensitivity against the alloy or its components.

composition:

titanium (Ti)	> 99%
iron (Fe)	max. 0,50%
carbon (C)	max. 0,10%
nitrogen (N)	max. 0,05%
oxygen (O)	max. 0,40%
hydrogen (H)	max. 0,0125%

mechanical properties:

density	~ 4,51 g/cm ³
vickers hardness	~ 180 – 210 HV10
CTE (20°C)	8,7 * 10 ⁻⁶ /(m*K)
yield strength	min. 483 MPa
tensile strength	min. 550 MPa
fracture strain	min. 15%
reduction in area	min. 30%

description

CopraTi-4	Is a high-quality, bio-compatible pure titanium blank (grade 4) specially designed for CAD/CAM applications. This industrial manufactured material guarantees a constant quality. Grade 4 shows more mechanical strength properties and is easier to mill than Grade 2.
CopraTi-4	naturally is biocompatible

indication:

CopraTi-4 (pure titanium Grade 4)	single crowns, medium bridges and bar constructions in anterior and posterior region and superstructures
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Instruction for use:

- Cut out, smoothen frameworks and single elements with suitable milling burs for titanium.

Cleaning:

- Fettle and smoothen the surfaces of milled frameworks with special, titanium suitable cross-cut burs or separating discs in only one direction to avoid a blistering in the porcelain
- Sandblast the frameworks with 110µ (2-3 bar pressure) aluminum oxide and steam clean or dip them in methylalcohol. Never use hydrofluoric acid!

Bonding of ceramic:

- Remove oxides after firing by blasting with glass beads. Finish with rubber stones and polishing paste
- Please follow the instructions for use of your chosen veneering porcelain manufacturer

Hazard note! During dry milling of titanium, chips and swarfs can ignite themselves and cause fire.