Instructions for use & technical data
ARUM TI-5

CopraTi-5

Specifications	**printing date: 11/26/2018**
Manufacturer:	Whitepeaks Dental Solutions GmbH & Co. KG Langeheide 9 - 45239 Essen - Germany
product:	**ARUM TI-5**
product type:	Titan Grade 5 – milling blank
product shape:	metal disc ~98,3mm Ø in different diameters and thicknesses metal rod blank in 8 to 24.5 mm diameter in various lengths
CE-mark:	CE 0483
applied standards:	DIN ISO 5832-3 and ASTM F136 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 agains the alloy or its components.

composition:		**mechanical properties:**	
titanium (Ti)	~ 90%	density	~ 4,43 g/cm³
iron (Fe)	max. 0,25%	vickers hardness	~ 341 HV10
aluminium (Al)	5,5 – 6,5%	CTE(25°C – 500°C)	~ 9,7 10^{-6} K^{-1}
vanadium (V)	3,5 – 4,5%	yield strength	min. 760 MPa
oxygen (O)	max. 0,13%	tensile strength	min. 825 MPa
hydrogen (H)	max. 0,012%	fracture strain	min. 8%
nitrogen (N)	max. 0,05%	reduction in area	min. 15%
carbon (C)	max. 0,08%		

description

ARUM TI-5 is a high-quality titanium alloy (grade 5-ELI) for the CAD / CAM technology. This industrially manufactured material ensures consistent quality, has high tensile and hardness values

ARUM TI-5 naturally is biocompatible.

indication:

ARUM TI-5 (titanium alloy Grade 5-ELI) single crowns up to big bridges and bar constructions in anterior and posterior region and superstructures

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.

Stand: 01.03.2017