

✚ STARBOND Ti4 POWDER 45

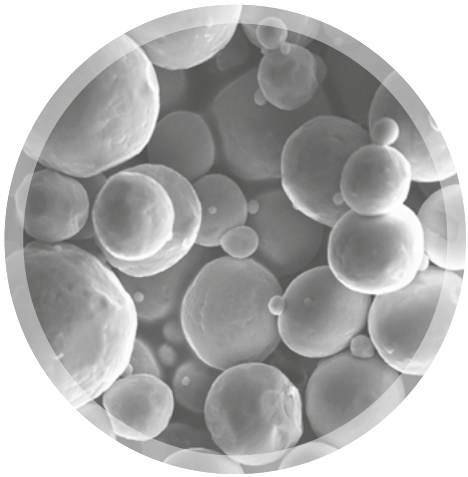
Grade 4-titanium powder for dentures manufacturing in a laser melting or laser sintering process. Starbond Ti4 Powder 45 is biocompatible, with high strength properties and a wide range of indications. Perfectly suitable for the production of bars, crowns, bridges and partial dentures.

- › Manufactured pursuant to DIN EN ISO 5832-2
- › Composition in percent by mass:
Ti: 99% N,C,H,Fe,O: <1%

TECHNICAL PROPERTIES**:	
Proof stress (Rp 0.2)	630MPa
Ultimate tensile strength	720MPa
Elongation	24%
Elastic modulus	105GPa
Vickers hardness	>200 HV 5/30
Density	4,5g/cm³
Melting range	1600°C
CTE (20-600°C)	9,7 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	4

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
Starbond Ti Powder 45	2500g	SLM125 – further systems on request	+10/-45µm	135715

** Standard values; dependent on specific machine settings



Our powders consist of particularly spherical alloy particles, having a very good flowability. The bodies made from our powder mixture achieve excellent properties with the highest density and an above-average elongation.



NON-PRECIOUS METAL POWDER (NPM)

High-quality superalloys for 3D technology for the manufacture of highly complex restorations in mass production using SLM / SLS systems.



STARBOND COS POWDER

CoCrWMo dental alloy powder for dentures manufacturing in a laser melting or laser sintering process. Starbond CoS Powder is based on the proven dental bonding alloy Starbond CoS. The user can thus continue to work in a system with the same alloy components and the same composition, as well as the same positive processing characteristics. The manufacturing process of the powder ensures the best possible flowability.

- › No cooling phase required, depending on ceramics
- › Excellent veneering
- › A CTE of 14.4 permits great flexibility in ceramic selection
- › Biocompatible

TECHNICAL PROPERTIES**:	
Proof stress (Rp 0.2)	720-1130MPa
Ultimate tensile strength	990-1250MPa
Elongation	2-10%
Elastic modulus	195-200GPa
Vickers hardness	345-490 HV 10
Density	8,8g/cm³
Melting range	1305-1400°C
CTE (20-600°C)	14,4 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

- › Extremely corrosion resistance
- › CE certified
- › Composition in percent by mass:
Co: 59% Cr: 25% W: 9,5% Mo: 3,5% Si: 1% C,Fe,Mn,N:<1%

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
Starbond CoS Powder 16 ⁽¹⁾	5000g	PXS Dental* and PXM Dental*	~16µm	133716
Starbond CoS Powder 30 ⁽¹⁾	5000g	LaserCUSING* - and MYSINT*	+10/-30µm	133730
Starbond CoS Powder 45	5000g	EOSINT M* and SLM 125 HL*	+10/-45µm	133715
Starbond CoS Powder 55	5000g	rapidPro*, SLM50* and SLM100*	+10/-55µm	133755

(1) not available in the markets DE, FR, SP, GB, SW // * PXS Dental and PXM Dental are registered trademarks of the company PHENIX Systems // ** Hint-El's rapidPro is a registered trademark of the company Hint-El's GmbH // * SLM 50 and SLM 100 are registered trademarks of the company Realizer GmbH // * LaserCUSING is a registered trademark of the company ConceptLaser GmbH // * EOSINT M is a registered trademark of the company EOS GmbH // * SLM 125H is a registered trademark of the company SLM Solutions GmbH // ** MYSINT is a registered trademark of the company Sisma SpA // ** Standard values; dependent on specific machine settings



STARBOND COS POWDER 30+

CoCrWMo dental alloy powder for dentures manufacturing in a laser melting or laser sintering process. The powder manufacturing process ensures best flowability and thus the guarantee of a homogenous coating. Starbond CoS Powder 30+ is ideally suited for the use on M100*, LaserCUSING* and MYSINT* systems.

- › No cooling phase required, depending on ceramics
- › Excellent veneering
- › A CTE of 14.4 permits great flexibility in ceramic selection
- › Biocompatible
- › Extremely corrosion resistance
- › CE certified
- › Composition in percent by mass:
Co: 59% Cr: 25% W: 9,5% Mo: 3,5% Si: 1% C,Fe,Mn,N: <1%

TECHNICAL PROPERTIES**:			
Proof stress (Rp 0.2)	1130MPa	Density	8,8g/cm³
Ultimate tensile strength	1250MPa	Melting range	1305-1400°C
Elongation	2-10%	CTE (20-600°C)	14,4 x 10 ⁻⁶ K ⁻¹
Elastic modulus	195GPa	Laser weldable	Yes
Vickers hardness	490 HV 10	Type (DIN EN ISO 22674)	5

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
Starbond CoS Powder 30+	5000g	M100*, LaserCUSING* - and MYSINT*-Systems	<75µm	133731

* LaserCUSING is a registered trademark of ConceptLaser GmbH // ** MYSINT is a registered trademark of Sisma SpA // * M100 is a registered trademark of EOS GmbH // ** Standard values; dependent on specific machine settings
Determined after thermal treatment / Simulation of ceramic firing



STARBOND EASY POWDER 30

CoCrW dental alloy powder for dentures manufacturing in a laser melting or laser sintering process. The user benefits from the same outstanding characteristics of our Starbond Easy dental alloy and can thus work in a proven system. Positive processing properties and the alloy components ensures maximum flexibility in ceramic selection and also guarantees excellent veneering.

- › Composition in percent by mass:
Co: 61% Cr: 27,5% W: 8,5% Si: 1,6% C,Fe,Mn: <1%

TECHNISCHE EIGENSCHAFTEN**:	
Proof stress (Rp 0.2)	760MPa
Ultimate tensile strength	1090MPa
Elongation	15%
Elastic modulus	225GPa
Vickers hardness	425 HV 10
Density	8,5g/cm³
Melting range	1310-1410°C
CTE (25-500°C)	14,5 x 10 ⁻⁶ K ⁻¹
CTE (25-600°C)	14,7 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
Starbond Easy Powder 30 ⁽¹⁾	5000g	LaserCUSING*, M100* and MYSINT*-Systems	+10/-30µm	140730

(1) not available in the markets DE, FR, SP, GB, SW // * LaserCUSING is a registered trademark of ConceptLaser GmbH // * MYSINT is a registered trademark of Sisma SpA // * M100 is a registered trademark of EOS GmbH // ** Standard values; dependent on specific machine settings



STARBOND EASY POWDER 30+

CoCrW dental alloy powder for manufacturing of fixed and mobile dentures in a laser melting or laser sintering process. The user benefits from the same outstanding characteristics of our Starbond Easy dental alloy and can thus work in a proven system. The manufacturing process ensures excellent flowability of the material.

- › Composition in percent by mass:
Co: 61% Cr: 27,5% W: 8,5% Si: 1,6% C,Fe,Mn: <1%

TECHNICAL PROPERTIES**:	
Proof stress (Rp 0.2)	755MPa
Ultimate tensile strength	1100MPa
Elongation	9%
Elastic modulus	165GPa
Vickers hardness	420 HV 10
Density	8,6g/cm³
Melting range	1310-1410°C
CTE (25-500°C)	14,5 x 10 ⁻⁶ K ⁻¹
CTE (25-600°C)	14,7 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
Starbond Easy Powder 30+	5000g	LaserCUSING*, M100* and MYSINT*-Systems	<75µm	140731

* LaserCUSING is a registered trademark of ConceptLaser GmbH // ** MYSINT is a registered trademark of Sisma SpA // * M100 is a registered trademark of EOS GmbH // ** Standard values; dependent on specific machine settings
Determined after thermal treatment / Simulation of ceramic firing



MODELSTAR S POWDER 65

CoCr-dental alloy powder for dentures manufacturing in a laser melting or laser sintering process. Modelstar S Powder is based on the Modelstar S partial denture alloy. This guarantees the successful production of dentures with a well-proven dental material.

- › Manufactured pursuant to DIN EN ISO 5832-2 and ASTM F75
- › Composition in percent by mass:
Co: 61,5% Cr: 28,5% Mo: 6% C,Fe,Mn,Si: <1%

TECHNICAL PROPERTIES**:	
Proof stress (Rp 0.2)	560MPa
Ultimate tensile strength	960MPa
Elongation	20%
Vickers hardness	340 HV 10
Density	8,4g/cm³
Melting range	1490-1540°C
CTE (20-600°C)	14,4 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

VERSION	UNIT	SUITABLE FOR PROCESSING IN THE SYSTEMS	GRAIN Ø	REF
ModelStar S Powder 65	5000g	on request	<65µm	132165

** Standard values; dependent on specific machine settings