

★ STARBOND Ti4 POWDER 45

Grade 4 titanium powder for the fabrication of dental restorations using the laser melting process. Biocompatibility, high strength and a wide range of applications are the hallmarks of this material. Ideally suited for the fabrication of abutments, crowns, bridges, and cast restorations.

Compliant with DIN EN ISO 5832-2

Composition (mass percentage):

Ti: 99 % / N, C, H, Fe, O: <1 %

TECHNICAL PROPERTIES**:	
Proof stress (Rp0.2)	520 MPa
Ultimate tensile strength	590 MPa
Elongation	>25 %
Elastic modulus	110 GPa
Vickers hardness	>200 HV 5/30
Density	4,5 g/cm ³
Melting range	1605-1660 °C
CTE (25 - 600 °C)	10,1 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	4

VERSION	QUANTITY	GRAIN Ø	REF
Starbond Ti4 Powder 45	2500 g	+10/-45 µm	135715

★ STARBOND Ti5 POWDER 45

Light metal alloy with high corrosion-resistant. A very high strength and at the same time low weight characterizes this alloy.

Composition (mass percentage):

Ti: 89 % / Al 6 % / V 4 % / N, C, H, Fe, O: <1 %

TECHNICAL PROPERTIES**:	
Proof stress (Rp0.2)	920 - 1150 MPa
Ultimate tensile strength MPa	1100 - 1300 MPa
Elongation	3 - 10 %
Elastic modulus	110 - 120 GPa
Vickers hardness	320 - 380 HV 5/30
Density	4,5 g/cm ³
Melting range	1600 °C
CTE (25 - 600 °C)	9 x 10 ⁻⁶ K ⁻¹
Type (DIN EN ISO 22674)	4

VERSION	QUANTITY	GRAIN Ø	REF
Starbond Ti5 Powder 45	2500 g	+10/-45 µm	136715

★ TIPLADUR®23 POWDER

Composition (mass percentage):

Ti: 89,4 % / Al 6,2 % / V 4 % / N, C, H, Fe, O: >0,4 %

PRODUCT BENEFITS:

- ★ Biocompatible
- ★ High strength with low density
- ★ Corrosion resistant

TECHNICAL PROPERTIES**:	
Proof stress (Rp0.2)	920 - 1150 MPa
Ultimate tensile strength	1100 - 1300 MPa
Elongation	3 - 10 %
Elastic modulus	110 - 120 GPa
Vickers hardness	320 - 380 HV 5/30
Density	4,5 g/cm ³
Melting range	1660 °C

VERSION	QUANTITY	GRAIN Ø	REF
TiplaDur®23 Powder	2500 g	+10/-63 µm	136720



★ MOGUCERA C POWDER

Our CoCr-metal powder for 3D printing, based on the proven formulation of our Mogucera C casting alloy, impresses with its excellent properties and outstanding processability. This makes it highly versatile for a wide range of applications.

Composition (mass percentage):

Co: 65 % / Cr: 28 % / Mo: 5 % / C, Si, Nb, Mn, Fe <1 %

TECHNICAL PROPERTIES:	
Proof stress (Rp0.2)	508 MPa
Ultimate tensile strength MPa	795 MPa
Elongation	9 %
Elastic modulus	209 GPa
Vickers hardness	288 HV 10
Density	8,3 g/cm ³
Melting range	1310 - 1410° C



★ STARPRINT Ni POWDER

Our NiCr metal powder for 3D printing, based on the proven formulation of our Starbond Ni casting alloy, impresses with its excellent properties and outstanding processability. This makes it highly versatile for a wide range of applications.

Composition (mass percentage):

Ni 60,7 % / Cr 24 % / Mo 11 % / Fe 1,5 % / Si 1,8 % / <1,0 % C

TECHNICAL PROPERTIES:	
Proof stress (Rp0.2)	593 MPa
Ultimate tensile strength MPa	1007 MPa
Elongation	12,4 %
Elastic modulus	160 GPa
Vickers hardness	200 HV 10
Density	8,2 - 8,3 g/cm ³
Melting range	1300 - 1410° C

VERSION	QUANTITY	GRAIN Ø	REF
StarPrint Ni Powder 45	5000 g	+10/-45 µm	131745



NEW GENERATION POWDERS

HIGH-QUALITY METAL POWDERS – MADE IN GERMANY

Our new, state-of-the-art production facility in Germany enables the manufacturing of premium metal powders for 3D printing – both for medical and non-medical applications.

In addition to our proven standards, we offer you the opportunity to have custom specifications produced on-site according to the highest safety and quality standards. We also provide contract manufacturing tailored to your requirements.

Join the Scheftner New Generation and benefit from our years of experience and innovative strength. Contact us now for more information!

CONTACT OUR TEAM FOR CUSTOM SPECIFICATIONS OR CONTRACT MANUFACTURING!



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NEW GENERATION POWDERS

★ PROCESS CONTROL

★ SAFETY

★ PURITY

NON-PRECIOUS ALLOY POWDER

High-quality alloys for 3D printing – for the production of highly complex dental restorations, precise auxiliary components, and versatile use in the jewelry industry, as well as in other demanding applications.

CONTACT OUR TEAM FOR CUSTOM SPECIFICATIONS OR CONTRACT MANUFACTURING!

★ STARBOND EASY POWDER

Proven CoCr Dental Alloy Powder for 3D Printing

The bondable CoCrW dental alloy powder for laser melting processes (LPBF, DMLS, SLM technology) combines the excellent properties of the Starbond Easy dental alloy with the advantages of additive manufacturing. Suitable for indications according to DIN EN ISO 22674, Type 5.

KEY FEATURES & BENEFITS:

- ★ **Proven System**
Compatibility with Starbond Easy for a familiar processing experience.
- ★ **Flexibility in Ceramic Selection**
Thanks to a well-thought-out alloy composition.
- ★ **Laser Melting Process**
Ideal for 3D printing systems (LPBF, DMLS, SLM), enabling highly precise and resource-efficient manufacturing of dental restorations.
- ★ **Flexible Clasp Dentures and Orthodontic Applications**
Perfect for use in prosthetics and orthodontics.

With Starbond Easy powder, users benefit from a reliable system that combines the proven properties of traditional dental alloys, including milling blanks, with the advantages of modern 3D technology.

Composition (mass percentage):

Co: 61 % / Cr: 27,5 % / W: 8,5 % / Si: 1,6 % / C, Fe, Mn: <1 %

TECHNICAL PROPERTIES**:

Proof stress (Rp0.2)	760 MPa
Ultimate tensile strength	1090 MPa
Elongation	15 %
Elastic modulus	225 GPa
Vickers hardness	425 HV 10
Density	8,5 g/cm ³
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	QUANTITY	GRAIN Ø	REF
Starbond Easy Powder 30	5000 g	+10/-30 µm	140730
Starbond Easy Powder 30+	5000 g	+15/-38 µm	140731
Starbond Easy Powder 55	5000 g	+10/-55 µm	140755



★ FUSION AM

High-Quality CoCr Dental Alloy Powder for 3D Printing

Fusion AM is a specially developed CoCr dental alloy powder with proven properties for manufacturing dental restorations using laser melting processes (LPBF, DMLS, SLM technology). Suitable for indications according to DIN EN ISO 22674, Type 5.

The high-quality CoCrWMo composition, developed by Scheftner, enables efficient and precise processing on existing Laser Powder Bed Fusion (LPBF) systems without the need for process or parameter adjustments.

PRODUCT BENEFITS:

- ★ **Compatible with Existing LPBF Systems**
No need for process or parameter adjustments.
- ★ **Proven CoCrWMo Composition**
Designed for superior quality and durability in the dental field.
- ★ **Excellent Flowability**
A precise manufacturing process ensures uniform powder distribution and homogeneous coating.
- ★ **Optimal Processing**
Perfect for 3D printing high-quality dental restorations with outstanding mechanical properties.
- ★ **Ideal for Flexible Clasp Dentures and Orthodontic Applications**
Suitable for use in prosthetics and orthodontics.

With Fusion AM, users benefit from a reliable, high-performance dental alloy specifically developed for modern additive manufacturing.

Composition (mass percentage):

Co: 63,9 % / Cr: 24,7 % / W: 5,4 % / Mo: 5,0 % / Si: 1,0 % / C, Fe, Mn, N: <1 %

TECHNICAL PROPERTIES**:

Proof stress (Rp0.2)	1210 MPa
Ultimate tensile strength	1440 MPa
Elongation	3 %
Elastic modulus	230 GPa
Vickers hardness	540 HV 10
Density	8,7 g/cm ³
CTE (20-600 °C)	14,4 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

VERSION	QUANTITY	GRAIN Ø	REF
Fusion AM	5000 g	+10/-45 µm	137745



★ STARBOND COS POWDER

High-Quality CoCr Dental Alloy Powder for 3D Printing

Starbond CoS powder is based on the proven bonding alloy Starbond CoS and has been specifically developed for manufacturing dental restorations using laser melting processes (LPBF, DMLS, SLM technology). Suitable for indications according to DIN EN ISO 22674, Type 5.

PRODUCT BENEFITS:

- ★ **Optimal Veneering Compatibility**
Perfect bond with ceramic materials for aesthetically superior restorations. Depending on the ceramic, no cooling phase is required. A CTE of 14.4 allows for great flexibility in ceramic selection.
- ★ **Excellent Flowability**
A precise manufacturing process ensures homogeneous powder distribution and uniform coating.
- ★ **Optimized for Laser Powder Bed Fusion (LPBF, DMLS, SLM)**
Designed for maximum precision and efficiency in additive manufacturing.

TECHNICAL PROPERTIES**:

Proof stress (Rp0.2)	720-1130 MPa
Ultimate tensile strength	990-1250 MPa
Elongation	2-10 %
Elastic modulus	195-200 GPa
Vickers hardness	345-490 HV 10
Density	8,8 g/cm ³
Melting range	1305-1400 °C
CTE (25 - 600 °C)	14,4 x 10 ⁻⁶ K ⁻¹
Laser weldable	Yes
Type (DIN EN ISO 22674)	5

VERSION	QUANTITY	GRAIN Ø	REF
Starbond CoS Powder 16	5000 g	-16 µm	133716
Starbond CoS Powder 30	5000 g	+10/-30 µm	133730
Starbond CoS Powder 30+	5000 g	+15/-38 µm	133731
Starbond CoS Powder 45	5000 g	+10/-45 µm	133715
Starbond CoS Powder 55	5000 g	+10/-55 µm	133755

- ★ **Spring-Hard & Flexible Clasp Dentures and Orthodontic Applications**
Ideal for 3D printing high-quality dental restorations with outstanding mechanical properties.
- ★ **Proven Composition**
Identical alloy components ensure seamless processing within existing systems.
Biocompatible and Corrosion-Resistant

With Starbond CoS powder, users benefit from a reliable system that combines the proven properties of traditional dental alloys with the advantages of modern 3D technology.

Composition (mass percentage):

Co: 59 % / Cr: 25 % / W: 9,5 % / Mo: 3,5 % / Si: 1 % / C, Fe, Mn, N: <1 %

★ MODELSTAR S POWDER

High-Quality Casting Alloy Powder for the Most Demanding RPD Work in 3D Printing

Modelstar S Powder is based on the proven dental casting alloy Modelstar S and enables the precise and reliable production of dental restorations using laser melting processes (PBF technology). Suitable for indications according to DIN EN ISO 22674, Type 5.

By using a long-tested dental material, this powder guarantees high stability, flexibility, and excellent processing properties – ideal for demanding applications in prosthetics and orthodontics.

PRODUCT BENEFITS:

- ★ **Perfect for RPD Work**
High-quality casting solutions for partial dentures.
- ★ **Spring-Hard & Flexible Clasp Dentures and Orthodontic Applications**
Ideal for stable, durable, and comfortable dental restoration solutions.
- ★ **Proven Dental Material**
A long-successful composition for reliable results.
- ★ **Excellent Processing Properties**
Optimal flowability for precise and homogeneous powder distribution.
- ★ **Heat Treatment Below 900°C Possible**
High temperature resistance for maximum durability.
- ★ **Compliant with ASTM F75**
Meets the highest quality standards for medical applications.

With Modelstar S Powder, users benefit from a high-performance casting alloy optimized for modern additive manufacturing.

Composition (mass percentage):

Co: 61,5 % / Cr: 28,5 % / Mo: 6 % / C, Fe, Mn, Si: <1 %

TECHNICAL PROPERTIES**:	
Proof stress (Rp0.2)	560 MPa
Ultimate tensile strength	960 MPa
Elongation	20 %
Vickers hardness	340 HV 10
Density	8,4 g/cm ³
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	QUANTITY	GRAIN Ø	REF
Modelstar S Powder 16	5000 g	+0/-16 µm	132716
Modelstar S Powder 45	5000 g	+10/-45 µm	132745



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