

STARBOND EASY POWDER

CoCrW dental alloy powder for dentures manufacturing in a laser melting 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 %



| 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 | +10/-70 µm | 140731 |
| Starbond Easy Powder 55 | 5000 g | +10/-55 µm | 140755 |

FUSION AM

Fusion AM is a CoCr dental alloy powder with improved properties for the production of dental restorations by laser melting. The dental alloy is a CoCr composition already known on the market and has been redesigned and improved by Scheftner. Due to its composition, the powder is suitable for PBF equipment already on the market, without the need for process and parameter changes. The manufacturing process of the powder ensures the best flowability and consequently the safety of a homogeneous coating.

- Cobalt-chromium alloy for the production of dental prostheses and dental applications
- Biocompatible & corrosion-resistant
- Free from nickel, cadmium, beryllium and lead
- Indications according to DIN EN ISO 22674, type 5
- Composition in percent by mass:
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 |

** Guide values, depending on specific machine settings // Determined after thermal post-treatment



STARBOND COS POWDER

CoCrWMo dental alloy powder for dentures manufacturing in a laser melting 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
- Excellent veneering
- A CTE of 14.4 permits great flexibility in ceramic selection
- Biocompatible

| 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 45 | 5000 g | +10/-45 µm | 133715 |
| Starbond CoS Powder 55 | 5000 g | +10/-55 µm | 133755 |

| 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) | 4 |

- Corrosion-resistant
- Free from nickel, cadmium, beryllium and lead
- Composition in percent by mass
Co: 59 % Cr: 25 % W: 9.5 % Mo: 3.5 % Si: 1 % C, Fe, Mn, N: <1 %

MODELSTAR S POWDER

CoCr-dental alloy powder for dentures manufacturing in a laser melting 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.

- Compliant with ASTM F75
- Composition in percent by mass
Co: 61.5 % Cr: 28.5 % Mo: 6 % C, Fe, Mn, Si: <1 %

| TECHNISCHE EIGENSCHAFTEN**: | |
|-----------------------------|---|
| 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 |



Scheftner
Dental Alloys

S&S Scheftner GmbH Tel. +49 (0) 6131 947 140
+Laist-Straße 52 Fax +49 (0) 6131 947 14 40
Mainz / Germany www.scheftner.dental

Made in Germany