Technical data sheet KERA® S-Powder / EP-M150

Process information

Machine: EP-M150

Technology: MPBF (Metal Powder Bed Fusion)

Manufacturer: Eplus3D Tech. Co. Ltd.

- 200W Laser
- Laser spot size: 60 µm
- Layer Thickness 30 µm
- Maximum scan speed: 8 m/s
- Oxygen level during process: <0,5 %

Material information

Material: Kera® S-Powder

Charge: SP4033-21

Particle Size: 10-45 µm

Particle Size Distribution: D90 = 41,9 um

Chemical composition

Kera® S-Powder is free of Be, Cd, Pb und Ni according to DIN EN ISO 22674

Co %	Cr %	W %	Si %	Mn %	Fe %
61,65	27,75	8,45	1,61	0,25	0,2

Heat treatment

Stress release annealing after building the platform as per IFU Kera® S-Powder: 850°C maximum, Holding time: 30 min.

Storage conditions

Kera® S-Powder should be stored in the tightly sealed original canister; best case: with the addition of a silica gel bag at room temperature.

Results

Analysis	Unit	Result
Proof stress (Rp 0.2)	MPa	809
Elongation	%	17
Elastic modulus	GPa	237
Ultimate tensile strength	MPa	926

All tests were carried out by the accredited and independent testing laboratory Dr. Sommer Material Technology GmbH.

Dental frameworks made of Kera® S-Powder, which are manufactured with the specific laser melting parameters on the EP-M150 Dental, achieve optimal component quality and meet the indication-relevant requirements of DIN EN ISO 22674 for a type 5 alloy.

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