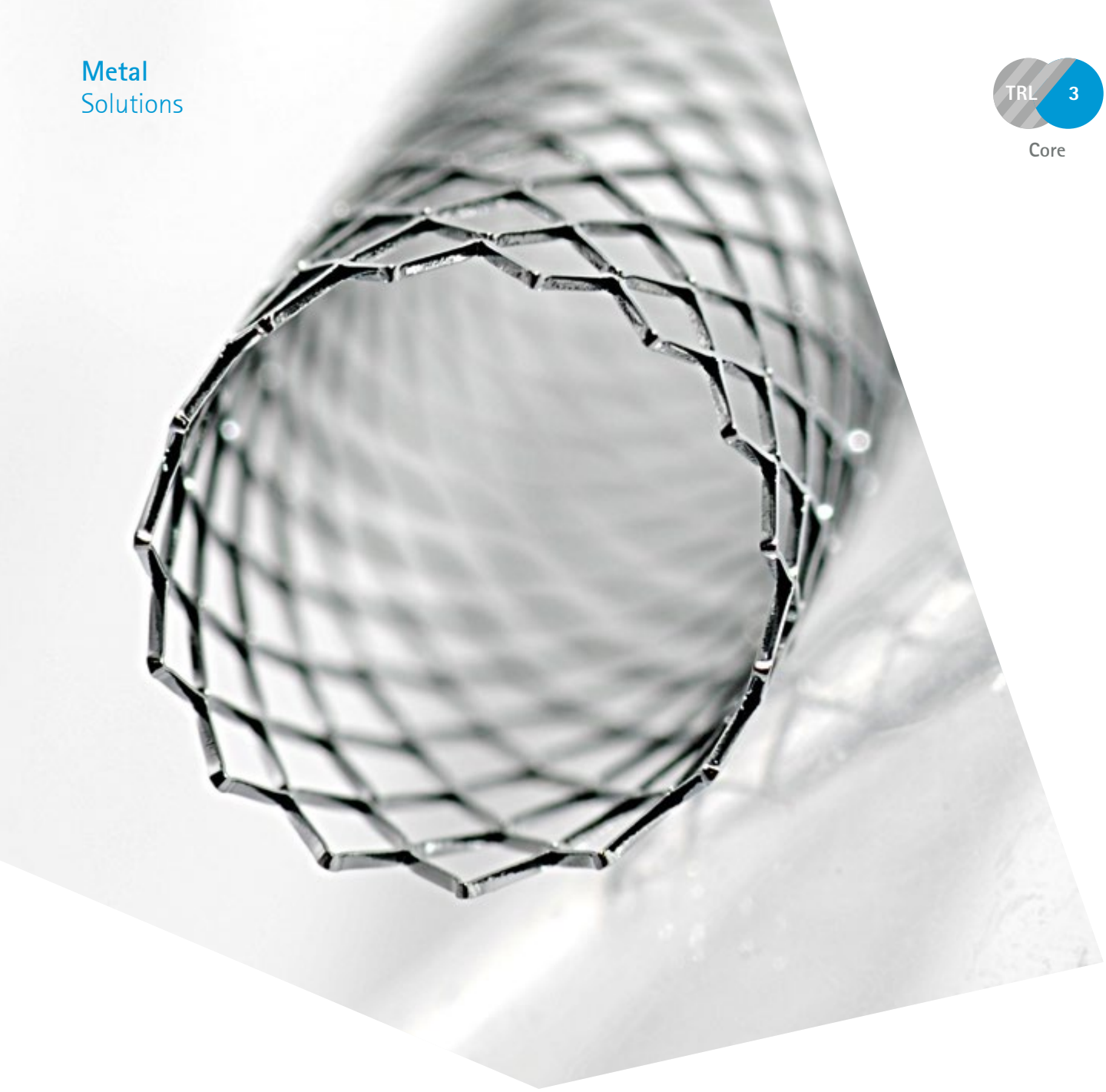
Metal
Solutions

TRL 3
Core



EOS CobaltChrome MP1
for EOS M 100

EOS CobaltChrome MP1
EOS M 100 | 30 µm

EOS CobaltChrome MP1 conforms to chemical composition UNS R31538. Parts built can be machined, welded, polished and coated as required. They are suitable for a wide variety of applications. EOS CobaltChrome MP1 is a cobalt-chrome-molybdenum-based superalloy powder intended for manufacturing parts on EOS metal systems with EOS DMLS processes.

Main Characteristics

- → High carbon CoCrMo based superalloy
- → Good corrosion and wear resistance
- → Good mechanical properties

Typical Applications

- → Orthopedic implants
- → Gas turbines
- → Engine components
- → Jewelry

Product Information

Current TRL	3
DMLS System	EOS M 100
Material	EOS CobaltChrome MP1
Process	CoCr_030_100 M100

Layer thickness 30 µm
Volume rate 1.5 mm^3/s
Porosity <0,2 %

Typical part properties[1]	Yield strength $R_{p0.2}$ [MPa]	Tensile strength R_m [MPa]	Elongation at break A [%]
As manufacturted vertical	830	1 200	13
As manufactured horizontal	1 040	1 340	11

[1] **Part properties are provided for information purposes only and EOS makes no representation or warranty, and disclaims any liability, with respect to actual part properties achieved.** Part properties are dependent on a variety of influencing factors and therefore, actual part properties achieved by the user may deviate from the information stated herein. This document does not on its own represent a sufficient basis for any part design, neither does it provide any agreement or guarantee about the specific properties of a material or part or the suitability of a material or a part for a specific application.

This powder has not been developed, tested or certified as a medical device according to Directive 93/42/EEC (MDD) or Regulation (EU) 2017/745 (MDR) and is not intended to be used as a medical device, in particular for the purposes specified in Art. 2 No. 1 MDR. Insofar as you intend to use the powder as raw material for the manufacture of pharmaceutical products or medical devices (e.g. as raw material which as a material must meet the requirements of Annex 1, Chapter II MDR), the responsibility and liability for all analyses, tests, evaluations, procedures, risk assessments, conformity assessments, approval and certification procedures as well as for all other official and regulatory measures required for this purpose shall lie solely with you both with regard to the pharmaceutical product and/or medical device manufactured by you and with regard to the properties, suitability, testing, evaluation, risk assessment, other requirements for use of the powder as raw material. This also applies to applications with food contact. In this respect, the limitations of liability pursuant to our General Terms and Conditions and the system sales or material contracts shall apply.

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