

METAL SOLUTIONS

EOS Copper Cu

Material Data Sheet

EOS COPPER CU

High purity copper to reach good electrical and thermal conductivity. Suitable for a wide variety of applications.

MAIN CHARACTERISTICS

- High purity copper
- Good electrical and heat conductivity
- Process developed to achieve best possible conductivity using the EOS M 290

TYPICAL APPLICATIONS

- Heat exchangers
- Electronics
- Variety of industry applications requiring good conductivity

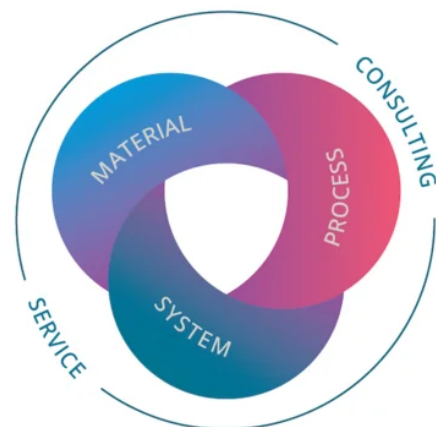
The EOS Quality Triangle

EOS uses an approach that is unique in the AM industry, taking each of the three central technical elements of the production process into account: the system, the material and the process. The data resulting from each combination is assigned a Technology Readiness Level (TRL) which makes the expected performance and production capability of the solution transparent.

EOS incorporates these TRLs into the following two categories:

- Premium products (TRL 7-9): offer highly validated data, proven capability and reproducible part properties.
- Core products (TRL 3 and 5): enable early customer access to newest technology still under development and are therefore less mature with less data.

All of the data stated in this material data sheet is produced according to EOS Quality Management System and international standards



POWDER PROPERTIES

Powder Chemical Composition (wt.-%)

Element	Min.	Max.
Cu		Balance
O	-	0.35
Other Elements Total	-	0.5

Powder Particle Size

GENERIC PARTICLE SIZE DISTRIBUTION	15 - 45 μm
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HEAT TREATMENT

Description

Copper can be heat treated to reach different mechanical properties and conductivity values

Steps

Hold 1 h at ~ 1000 °C in argon atmosphere, slow cooling with argon

HEADQUARTERS

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Status as of 27.07.2024. Subject to technical modifications. EOS is certified according to ISO 9001.

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