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

**Download Process Data Sheet (PDF)**

## TYPICAL APPLICATIONS

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

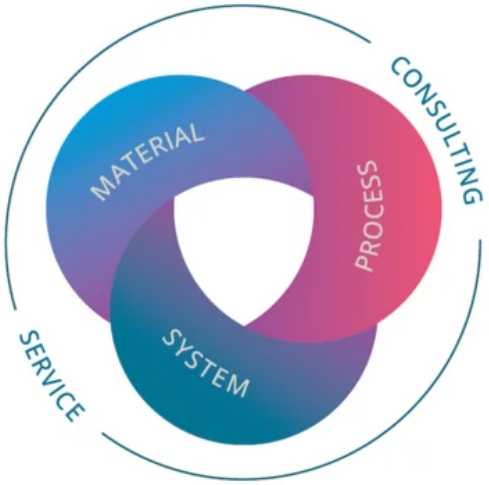
# The EOS Quality Triangle

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** |

# 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

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Status as of 19.04.2025. Subject to technical modifications. EOS is certified according to ISO 9001.