

## Cooper Alloy: MET GRCop-42

Alternative designation: GRCop-42 / Cu3Cr3Nb

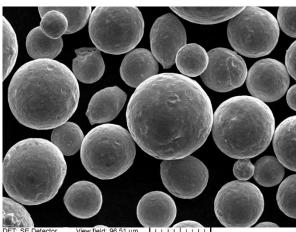
## **Description and general material properties**

MET GRCop-42 is a dispersion strengthened copper alloy with high strength and a good resistivity against low cycle fatigue (LCF). With a conductivity reaching up to 75% of IACS, CuCrNb-alloys were originally designed for use in high heat flux applications, like for example in combustion chambers and nozzles, and therefore offer high oxidation resistance in harsh environment.

## **Powder characteristics**

Chemical composition		
Element	Min [wt%]	Max [wt%]
Cr	3,1	3,4
Nb	2,7	3,0*
0		0,04
Al		0,005
Fe		0,005
Si		0,005
Cu	Balance	Balance

\* Cr/Nb ratio of 1,12-1,15



DET: SE Detecto WD: 9.8234 mm HV: 10.0 kV View field: 96.51 um SEM MAG: 3.00 kx 20 um Name: GR\_COP\_42\_HTM1\_2021\_P011\_CGG\_pic5

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