



MB-OF 101 certified Bolzen & Walzplatten / Billets & cakes

Bezeichnung

Sauerstofffreies, hochreines Kupfer für spezielle Anwendungen.

Designation

Oxygen-free copper with high purity for special applications.

Chemische Zusammensetzung

Chemical composition

Parameter	EN 1976:2012 Cu-OFE (CR009A)	ASTM B170 OFE (C10100)	Garantiewerte / Guaranteed values	Typische Werte / Characteristics
Cu	≥ 99,99 %	≥ 99,99 %	≥ 99,99 %	≥ 99,997 %
Ag	≤ 25 ppm	≤ 25 ppm	≤ 25 ppm	10 ppm
As	≤ 5 ppm	≤ 5 ppm	≤ 3 ppm	< 1 ppm
Bi	≤ 2 ppm	≤ 1 ppm	≤ 1 ppm	< 0,5 ppm
Cd	≤ 1 ppm	≤ 1 ppm	≤ 1 ppm	< 0,5 ppm
Fe	≤ 10 ppm	≤ 10 ppm	≤ 10 ppm	< 3 ppm
Mn	≤ 5 ppm	≤ 0,5 ppm	≤ 3 ppm	< 1,5 ppm
Ni	≤ 10 ppm	≤ 10 ppm	≤ 5 ppm	< 1,5 ppm
O	-	≤ 5 ppm	≤ 8 ppm	≤ 5 ppm
P	≤ 3 ppm	≤ 3 ppm	≤ 3 ppm	1,5 ppm
Pb	≤ 5 ppm	≤ 5 ppm	≤ 5 ppm	< 2 ppm
S	≤ 15 ppm	≤ 15 ppm	≤ 15 ppm	8 ppm
Sb	≤ 4 ppm	≤ 4 ppm	≤ 3 ppm	< 1 ppm
Se	≤ 2 ppm	≤ 3 ppm	≤ 2 ppm	< 1 ppm
Sn	≤ 2 ppm	≤ 2 ppm	≤ 2 ppm	< 1 ppm
Te	≤ 1 ppm	≤ 2 ppm	≤ 1 ppm	< 0,5 ppm
Zn	≤ 1 ppm	≤ 1 ppm	≤ 1 ppm	< 1 ppm
Beständigkeit gegen Was- serstoffversprödung / Resistance against hydrogenembrittlement	ja / yes	ja / yes	ja / yes	ja / yes
Elektrische Leitfähigkeit / Electric conductivity	≥ 101 % IACS ≥ 58,58 MS/m	≥ 101 % IACS ≥ 58,58 MS/m	≥ 101 % IACS ≥ 58,58 MS/m	≥ 101,5 % IACS 58,9 MS/m

Vergleich mit internationalen Normen

Comparison with international standards

Norm Regelwerk / Standard	Bezeichnung / Name
EN 1976:2012	Cu-OFE (CR009A)
ASTM B170	C10100