

TECHNICAL DATA

Standards

DIN Material Nr. 2.1247

EN 12163/12167	CW112C
USA :	RWMA Class 3

General Properties / Field of Applications

DSI M Ampcoloy940 is a Copper-based, specifically a copper-nickel-silicon-chromium alloy Laser Welding Wire. For joints and deposition welding in any industry. It is commonly used in applications requiring high mechanical properties, like high strength, excellent thermal conductivity, and good corrosion resistance, such as mold components in plastic injection molding.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	515
Tensile strength R_m	[MPa] / [N/mm ²]	690
Hardness	[HB]	94
Elongation A ($L_0 = 5d_0$)	[%]	13

Chemical Composition (Standard Values in %)

Co	Ni	Si	Cr
Base	2.5	0.7	0.4

Compatible Materials (Selection)

Beryllium copper / galvanized steel sheets and copper-silicon and copper-manganese alloys of the same type, e.g. CuSi2Mn, CuSi3Mn / CuCr1Zr

Packaging and available Sizes*

Spool : MA125 mm	Ø mm	0.2 / 0.3 / 0.4 / 0.5 / 0.6 / 0.7 / 0.8 / 1.0 / 1.2
Rod : 500 / 1000 mm	Ø mm	0.2 / 0.3 / 0.4 / 0.5 / 0.6 / 0.7 / 0.8 / 1.0 / 1.2

* Other dimensions available on request

wires@dsilaser.com