

TECHNICAL DATA

Standards

DIN Material Nr. 3.3548

EN ISO 18273 :	S Al 5183 / AlMg4,5Mn0,7 (A)
AWS A5.10 :	ER5183

General Properties / Field of Applications

DSI M AluCA is a Laser Welding Wire for Magnesium and Manganese alloyed Aluminium with a max. Magnesium content of 5%. The alloy shows an excellent weldability and mechanical strength combined with good corrosion resistance against seawater. For joint and deposition welding of Al-Mg alloys and for Al-casting alloys.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	130
Tensile strength R_m	[MPa] / [N/mm ²]	280
Elongation A ($L_0 = 5d_0$)	[%]	18
Hardness	[HB]	85
Coefficient of thermal expansion	[1/K]	23,7*10 ⁻⁶

Chemical Composition (Standard Values in %)

Al	Mg	Mn	Cr	Ti
Basic	4.9	0.6	0.1	0.08

Compatible Materials (Selection)

EN AW-5083 (AlMg4.5Mn0,7) / EN AW-5019 (AlMg5) / EN AW-6005A (AlSiMg(A))
 EN AW-6061(AlMg1SiCu) / EN AW-6082 (AlSi1MgMn) / EN AW-7020 (AlZn4,5Mg1)

Packaging and available Sizes*

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

* Other dimensions available on request

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