

TECHNICAL DATA

Standards

DIN Material Nr. 2.4806

EN ISO 18274 :	S Ni 6082 (NiCr20Mn3Nb)
AWS A5.14 :	ERNiCr-3

General Properties / Field of Applications

DSI M NiCr65 is a Laser Welding Wire for welding of nickel-based alloys, creep resistant steels, cryogenic materials and dissimilar joints. Suitable for operating temperatures down to -196°C and up to +900°C. Cleanliness of the workpiece in the weld seam area is a prerequisite for a crack-free connection.

Mechanical Properties

Yield strength R _{p0.2}	[MPa] / [N/mm ²]	410
Tensile strength R _m	[MPa] / [N/mm ²]	640
Elongation A (L ₀ = 5d ₀)	[%]	40
Suitable of operating temperatures	[°C]	-196 up to +900

Chemical Composition (Standard Values in %)

Ni	C	Cr	Fe	Mn	S	Si	Nb + Ta
Base	0.02	20.0	1.0	3.0	<0.1	0.2	2.5

Compatible Materials (Selection)

NiCrFe alloys NiCr15Fe (2.4816) / NiCr23Fe (2.4851) / Alloy 600 / Alloy 601 / Alloy 75
Creep resistant austenitic steels X10NiCrAlTi32-20 (1.4876) / X5NiCrAlTi31-20 (1.4958)
Cryogenic steels X8Ni9 (1.5662) and dissimilar joints with operating temp. >300°C
Incoloy 800 / Incoloy 800H / Incoloy 800HT / UNS N06600 / UNS N06601 / UNS N 06075

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

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