

TECHNICAL DATA

Standards

DIN Material Nr. 2.4668 / Brand Name : Inconel 718

AMS :	5832
AWS :	ERNiFeCr-2

General Properties / Field of Applications

DSI M NiCr718 is a Nickel-based superalloyed Pulse Laser Welding Wire primarily with chromium, iron, niobium and molybdenum. Mainly used for welding components which encounter cryogenic temperatures including aircrafts and rocket components (MRO). This alloys displays good tensile and fatigue strength at temperatures from cryogenic -423°C to 700°C. This alloy can be age hardened and is resistant to post weld cracking.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	915
Tensile strength R_m	[MPa] / [N/mm ²]	1090
Elongation A ($L_0 = 5d_0$)	[%]	22

Chemical Composition (Standard Values in %)

Ni	Cr	Fe	Nb	Mo	Co	Ti	Si	Mn
Base	19.0	17.0	5.0	3.0	1.0	1.0	<1.0	<1.0

Compatible Materials (Selection)

Aircraft components / liquid fuel rocket systems / cryogenic tanks / springs / fasteners

Packaging and available Sizes*

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