

TECHNICAL DATA

Standards

DIN Material Nr. 2.4831 / Brand Name : Inconel 625

EN ISO 18274	S Ni 6625 (NiCr22Mo9Nb)
AWS A5.14	ERiCrMo-3

General Properties / Field of Applications

DSI M NiCr625 is a Nickel-based Laser Welding Wire, corrosion and oxidation resistant. For welding of same and similar nickel-based alloys. Suitable for operating temperatures from -196°C up to +1000°C. Due to the risk of embrittlement between 600°C and 850°C, use in this temperature range should be avoided. For welding on heat shields, seawater applications, gas turbine engine ducting and other heat and corrosion affected applications.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	500
Tensile strength R_m	[MPa] / [N/mm ²]	760
Hardness	[HRC]	26-30
Elongation A ($L_0 = 5d_0$)	[%]	35

Chemical Composition (Standard Values in %)

Ni	C	Cr	Mo	Mn	Si	Nb + Ta	Fe
Base	0.02	22.0	9.0	0.2	0.2	3.3	1.5

Compatible Materials (Selection)

Inconel 625 / Cast iron / NiCrMo-alloys like NiCr22Mo9Nb (2.4856) / X8Ni9 (1.5662)
NiCrofer 4221hMo / Hastelloy G / Hastelloy G3 / Incoloy 800 / UNS N06625

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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