

TECHNICAL DATA

Standards

DIN Material Nr. 1.4370

EN ISO 14343-A :	W 18 8 Mn / G 18 8 Mn
AWS 5.9 :	ER307 mod.

General Properties / Field of Applications / Important Base Materials

DSI M CroMan307 is a Laser Welding Wire for different alloyed, difficult-to-weld steels and 14% Mn steels. Tough intermediate layers for hard surfacing. Wear and corrosion resistant coatings, valve seats and cavitation protection armour. Resistant to work hardening, very good cavitation resistance, crack-proof, resistant to thermal shock, resistant up to 850°C, insensitive to sigma-phase embrittlement above 500°C. Cryogenic down to -110°C. For operating temperatures above 650°C, consultation with the manufacturer is recommended. Excellent sliding and conveying properties. The microstructure forms fully austenitic without delta ferrite. High-strength, unalloyed and alloyed structural, quenched and tempered steels; Unalloyed and alloyed steels with high-alloy Cr and Cr-Ni steels, Austenitic manganese hard steels.

Steel High Alloyed
Intermediate Hardfacing

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	430
Tensile strength R_m	[MPa] / [N/mm ²]	640
Impact Work KV	[J]	100 at +20°C
Elongation A ($L_0 = 5d_0$)	[%]	35

EN 10204 / 3.1

Chemical Composition (Standard Values in %)

C	Si	Mn	Cr	Ni
0.06	0.8	6.4	18.5	8.1

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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