

TECHNICAL DATA

Standards

DIN Material Nr. 3.7025

ASTM :	Ti-Grade 1
UNS :	R50250

General Properties / Field of Applications

DSI M Titan Grade1 is an unalloyed (pure Titanium) Laser Welding Wire which comes from the group of reactive metals and has a high affinity to react with oxygen. As a result, a firmly adhering and durable oxide layer forms on the surface of the material, which is responsible for the excellent corrosion resistance of the material. Due to its special properties, titanium 3.7025 is used primarily in the field of chemical and petrochemical apparatus engineering. Other areas of application include medical technology, motorsports, electroplating and the outdoor sector. The metal is also used in heat exchangers and for maritime applications.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	≥ 170
Tensile strength R_m	[MPa] / [N/mm ²]	≥ 240
Elongation A ($L_0 = 5d_0$)	[%]	24
Hardness	[HB 30]	≥ 120

Chemical Composition (Standard Values in %)

C	N	Ti	Fe	O	H
≤ 0.08	≤ 0.03	Rest	≤ 0.02	≤ 0.18	≤ 0.015

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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