

TECHNICAL DATA

Standards

DIN Material Nr. 3.7035

ASTM :	TI-Grade 2
UNS :	R50400

General Properties / Field of Applications

DSI M Titan Grade2 is a pure titanium grade Laser Welding Wire feature an excellent strength-to-density ratio and good corrosion resistance. This makes them suitable for the manufacture of components in weight-saving structures with reduced mass forces, and also for components requiring high corrosion resistance. In addition, thermal stresses in titanium structures are lower than in other metallic materials, due to the low thermal expansion of titanium. The materials are also widely used in the medical sector because of their outstanding biocompatibility.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	≥ 275
Tensile strength R_m	[MPa] / [N/mm ²]	≥ 345
Elongation A ($L_0 = 5d_0$)	[%]	20
Hardness	[HB 30]	≥ 150
Modulus of elasticity	[kN/mm]	105

Chemical Composition (Standard Values in %)

C	N	Ti	Fe	O	H
≤ 0.08	≤ 0.03	Rest	≤ 0.3	≤ 0.25	≤ 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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