

TECHNICAL DATA

Standards

Material : correspond to Stellite 12

AWS 5.21 :	ERCCoCr-B
DIN EN 14700 :	T Co 3-50-CTZ

General Properties

DSI M Co12F is the toughest Cobalt-base alloyed Laser Welding Cored Wire, providing the highest corrosion and thermal resistance of all cobalt-base alloys. It is used on components that are exposed to high temperatures. It's resistant to thermal shocks, corrosion, abrasion, erosion, cavitation and impact stress. Typically used for valve seats, bearing surfaces, hot shear blades and for other components in the chemical industry. The weld is machinable by hard metal tools.

Mechanical Properties

Tensile strength R _m	[MPa] / [N/mm ²]	900 - 1000
Max. operation temperature	[°C]	720
Hardness	[HRC]	45 - 48

Chemical Composition (Standard Values in %)

Co	Cr	W	C	Fe	Mn	Si
Base	29	8.0	1.4	≤ 3	0.8	1.0

Field of Applications (Samples)

Valve seats, flow control components. Turbine engine parts, exhaust valves. Steam and gas turbine blades. Surgical instruments and implants. Cutting tools, dies, and wear-resistant coatings. Bearing surface, hot shearing blades.

Packaging and available Sizes*

Spool : SH 253 / BS 300	Ø mm	1.2 / 1.6
Rod : 500 / 1000 mm	Ø mm	1.2 / 1.6

* Other dimensions available on request

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