

TECHNICAL DATA

Standards

Brand Name : TURBALLOY 120

AWS A5.28 :	ER120S-1
ASME :	SFA 5.28

General Properties / Field of Applications

DSI M 94Plus is a low alloyed Laser Welding Wire with supreme performance. Its applicable for welding high-strength fine-grain steels for components exposed to high stress and critical operation conditions while exhibiting excellent toughness down to -60°C. Typical applications are steam turbines, military and defence equipment, marine (shipbuilding), concrete pumps, pressure vessels.

Mechanical Properties

Yield strength $R_{p0.2}$	[MPa] / [N/mm ²]	≥725
Tensile strength R_m	[MPa] / [N/mm ²]	≥830
Charpy-V-Value (ISO-V)	[J]	RT ≥70 / -50°C ≥68
Elongation (4d/5d)	[%]	≥14

Chemical Composition (Standard Values in %)

C	Si	Mn	Ni	Cr	Mo
0.09-0.11	0.30-0.50	1.40-1.80	1.6-2.5	0.10-0.35	0.30-0.55

Compatible Materials (Selection)

QT and HY steels (HY80, HY100) / ASTM A592 / A514 / A517 / S690Q-S890Q
S690QL-S890QL / S600QLN-890QLN

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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