BÖHLER DMV 83-IG

Solid wire, low-alloyed, creep resistant

Classifications

EN ISO 21952-A	AWS A5.28	AWS A5.28M
G MoVSi	ER90S-G	ER62S-G

Characteristics and typical fields of application

GMAW wire for boiler, plate and tube steels. Designed specially for 14MoV6-3 (1/2 Cr 1/2 Mo 1/4 V). Approved in long-term condition up to +560 °C service temperature. Tough, cracking resistant deposit with good creep rupture strength.

The wire shows very good feeding characteristics, resulting in smooth welding and wetting behaviour.

Base materials

Creep resistant steels and similar alloyed cast steels
1.7715 14MoV6-3

Typical analysis of solid wire (wt.-%)

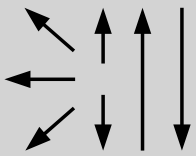
	C	Si	Mn	Cr	Mo	V
wt.-%	0.08	0.6	0.9	0.45	0.82	0.35

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	+20 °C
a	**610** (≥ 355)	**710** (≥ 620)	**20** (≥ 18)	**70** (≥ 47)

a annealed, 700 °C/2h / furnace down to 300 °C / air – shielding gas Ar + 18 % CO_2

Operating data



Polarity:	Shielding gases:	ø (mm)
DC (+)	Argon + 15 – 25 % CO_2 100 % CO_2 Using 100 % CO_2 the mechanical properties will be different.	1.2

Preheating and interpass temperatures 200 – 300 °C. Tempering at 700 – 720 °C for at least 2h followed by cooling in furnace down to 300 °C and still air.

Approvals

TÜV (1322.), SEPROZ, CE