

Classifications

EN ISO 21952-A	EN ISO 636-A	AWS A5.28 / SFA-5.28
W ZMn4MoSi	W 50 3 Z4MoSi	ER90S-D2

Characteristics and typical fields of application

Medium-alloyed solid wire electrode / rod for welding of higher strength and low alloyed steels in boiler, tank, pipeline and reactor construction.

Base materials

P235GH – P460M, 16 Mo 3; S460MC; A36; A182M; A516 Gr. 70

Typical analysis

	C	Si	Mn	Mo
wt.-%	0.09	0.65	1.80	0.52


Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	MPa	MPa	%	-20°C	-40°C
u	550 (≥ 540)	680 (≥ 620)	(≥ 18)	(≥ 47)	-
s	530 (≥ 510)	650 (≥ 600)	20 (≥ 18)	110 (≥ 80)	(≥ 47)

u untreated, as welded - shielding gas Ar

s stress relieved (610°C / 16 h) - shielding gas Ar

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas (EN ISO 14175)	I1 I3	2.4 × 1000
	Rod marking	+ ER90S-D2/ W4M31	

Approvals

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