

Classifications

EN ISO 16834-A	AWS A5.28 / SFA-5.28
W 55 6 ZMn3Ni 0,9 MoCr	ER100S-G

Characteristics and typical fields of application

Medium-alloyed TIG rod and wire of type W 55 6 ZMn3Ni 0,9 MoCr / ER100S-G for quenched and tempered and thermomechanically treated fine-grained structural steels. Excellent weld metal toughness at low temperatures. Meets sour gas requirements. Application in crane manufacturing, automotive industry and for components of off-shore equipment.

Base materials

S500Q/QL/QL1, S550Q/QL/QL1, P500QL, P550QL

Typical analysis

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.08	0.50	1.60	0.27	0.90	0.40


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			
				20°C	-20°C	-60°C	-70°C
u	650 (≥ 600)	730 (≥ 710)	20 (≥ 18)	160 (≥ 100)	90 (≥ 55)	55 (≥ 47)	40 (≥ 27)
s	550 (≥ 520)	680 (≥ 650)	22 (≥ 20)	200 (≥ 130)	160 (≥ 100)	65 (≥ 47)	40 (≥ 27)

u untreated, as welded - shielding gas Ar

s stress relieved (650°C / 4 h) - shielding gas Ar

Operating data

	Polarity	DC-	Dimension mm
	Shielding gas (EN ISO 14175)	I1	1.0
	Rod marking	+ W ZMn3Ni0,9MoCr	1.2
			2.4 × 1000

Approvals

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