

## Classifications

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

## Characteristics and typical fields of application

GMAW low-alloyed solid wire for joining of quenched and tempered and thermomechanically rolled fine-grained structural steels with yield strength of 550 MPa. For use in construction, yellow goods, crane and vehicle manufacturing.

## Base materials

S420 – S550

## 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	Tensile strength	Elongation A	Impact energy ISO-V KV J		
	$R_{p0.2}$	$R_m$	$(L_0=5d_0)$	20°C	-40°C	-60°C
	MPa	MPa	%			
u1	650 (≥ 600)	730 (≥ 710)	20 (≥ 18)	150 (≥ 80)	80 (≥ 47)	70 (≥ 47)
u2	650 (≥ 600)	730 (≥ 710)	20 (≥ 18)	135 (≥ 70)	95 (≥ 47)	80 (≥ 47)
s	550 (≥ 520)	680 (≥ 650)	22 (≥ 20)	70 (≥ 47)	(≥ 27)	-

u1 untreated, as welded - shielding gas M13

u2 untreated, as welded - shielding gas M21

s stress relieved (650°C / 4h) - shielding gas M21

## Operating data

	Polarity	DC+	Dimension mm
	Shielding gas	M13	1.2
	(EN ISO 14175)	M21	1.6

## Approvals

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