

Solid Wire, low-alloyed, high strength

Classifications

EN ISO 16834-A AWS A5.28 / SFA-5.28

G 55 5 M Mn3NiCrMo 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								
	С	Si	Mn	Cr	Ni	Mo		
wt%	0.09	0.70	1.50	0.50	0.55	0.25		

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 k	(V J
	MPa	MPa	%	20°C	-40°C
U	650 (≥550)	740 (640 – 820)	20 (≥18)	80 (> 47)	65 (> 47)

u untreated, as welded

Operating data

-	Polarity	DC+	Dimension mm
	Shielding gas	M21	1.0
	(EN ISO 14175)		1.2

Approvals

TÜV (19636), CE