

Classifications

EN ISO 14341 / 21952-A	EN ISO 14341 / 21952-B	AWS A5.28	Mat. No.
G 46 4 M21 2Mo G MoSi	G 55A 4 M21 1M3 G 52 M21 1M3	ER80S-G(A1)	1.5424

Characteristics and typical fields of application

GMAW solid wire electrode for the welding of low alloy and creep resistant steels.

All-purpose, low-alloyed solid wire electrode, useable both with CO₂ and with gas mixture.

Applications include the welding of low alloyed and creep resistant steels in boiler, tank, pipeline and reactor construction.

Base materials

16Mo3, 20MnMoNi4-5, 15NiCuMoNb5, S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE300

ASTM A 29 Gr. 1013, 1016; A 106 Gr. C; A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr. B, C, D; A 335 Gr. P1; A 501 Gr. B; A 533 Gr. B, C; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 516 Gr. 70; A 633 Gr. C; A 678 Gr. B; A 709 Gr. 36, 50; A 711 Gr. 1013; API 5 L B, X42, X52, X60, X65

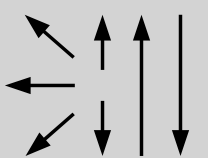
Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Mo
wt.-%	0.10	0.60	1.15	0.50

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	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	-40 °C
aw	CO ₂	450	550	24	80	
aw	M21	490	600	23	90	47

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M1 – M3 und C1	ø mm	Spool: B300 B300 B300
			0.8	
			1.0	
			1.2	

Approvals

TÜV (01831), DB (42.132.14), CE