

Classifications

EN ISO 16834-A	AWS A5.28
G 89 6 M21 Mn4Ni2CrMo	ER120S-G

Characteristics and typical fields of application

Low-alloyed solid wire electrode for shielded arc welding of quenched and tempered fine grained structural steels.

Outstandingly tough weld metal at low temperatures when deposited with gas mixture. Good resistance to cold cracking due to high purity of the wire surface. Used in crane and vehicle manufacture.

Base materials

S890QL (Dillidur 890; Weldox 890; XABO 890),
S890MC (alform 900 M; Domex 900),
USS-T1
ASTM A 709 Gr. 100 Type B, E, F, H, Q, HPS 100W

Typical analysis of solid wire (wt.-%)

	C	Si	Mn	Cr	Mo	Ni
wt-%	0.10	0.80	1.80	0.35	0.60	2.30

Mechanical properties of all-weld metal

Heat-treatment	Shielding gas	Yield strength	Tensile strength	Elongation	Impact work	
		R _{p0.2}	R _m	A (L ₀ =5d ₀)	ISO-V KV J	
		MPa	MPa	%	+20 °C	-60 °C
aw	M21	890	950	15	90	47

Operating data

	Polarity: DC (+)	Shielding gas: (EN ISO 14175) M2, M3	ø mm 1.0	Spool: B300 B300
			1.2	

Approvals

TÜV (07675), DB (42.132.12), CE