

Classifications

EN ISO 16834-A	AWS A5.28 / SFA-5.28
G 89 5 M21 Mn4Ni2,5CrMo	ER120S-G

Characteristics and typical fields of application

High-strength, medium alloy solid wire electrode for shielded arc welding of quenched and tempered fine grained structural steels. Optimized and tested welding results with the steel alform® 960 x-treme. Outstanding tough weld metal at low temperature. Good resistance to cold cracking due to high purity of the wire surface.
For use in crane and vehicle manufacturing.

Base materials

S960 and higher strength grades, thermo mechanically treated fine grain steels aligned to alform® 960 x-treme

Typical analysis

	C	Si	Mn	Cr	Ni	Mo
wt.-%	0.12	0.80	1.90	0.45	2.35	0.55

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
	MPa	MPa	%	-50°C
u nach EN ISO	≥ 930	≥ 980	14	≥ 47
u untreated, as welded – shielding gas Ar + 15 – 25 % CO ₂				

Operating data

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

Preheating and interpass temperature as required by the base metal.

Approvals

DB (42.132.64), CE