

Classifications

EN ISO 636-A	EN ISO 21952-B	AWS A5.28
WZ 42 10 W2Ni3	W 1CM	ER80S-Ni3(mod.)

Characteristics and typical fields of application

Low alloyed filler metal for GTAW-welding of cold –tough fine grained structural steels up to S240. Superb impact strength at low temperatures down to -100 °C.

Base materials

Low temperature steel grades and fine grained Ni alloyed steels:
 12Ni14, X12Ni5, 13MnNi6-3, 15NiMn6, S275N-S420N, S275NL-S420NL, S275M-S420M,
 S275ML-S420ML, P275NL1-P420NL1, P275NL2-P420NL2
 ASTM A 633 Gr. E; A 572 Gr. 65; A 203 Gr. D; A 333 und A 334 Gr. 3; A 350 Gr. LF3

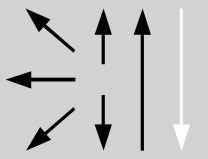
Typical analysis of the TIG rods (wt.-%)

	C	Si	Mn	Ni
wt.-%	0,07	0,15	0,9	3,3

Mechanical properties of all-weld metal

Condition	Yield strength R _{p0,2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact values ISO-V KV J / ft-lbs		
	MPa	MPa	%	20 °C / 68 °F	-60 °C	-100 °C
as welded	440	540	25	180	120	47
s	420	500	28	220	150	70
s	PWHT 581 °C / 4 h					

Operating data

	Polarity: DC (-)	Shielding gas: 100 % Argon I 1	Rod marking: ✦ I3,5Ni / ER80S-Ni3	ø (mm) 2.4
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Approvals

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