

Classifications

EN ISO 636-A	EN ISO 636-B	AWS A5.28
W 46 6 W3Ni1	W 55A 6U W0	ER80S-G

Characteristics and typical fields of application

Ni-alloyed welding rod / wire.

Good flow characteristics in out of position welding. Very good impact toughness of weld metal at low temperatures. Tested according to KTA 1408.

Base materials

Low temperature fine grained structural steels up to S460 MPa (67 ksi);
S275N-S460N, S275NL-S460NL, S275M-S460M, S275ML-S460ML, P355N, P460N, P275NL1-P460NL1, P275NL2-P460NL2, L245NB-L450NB, L245MB-L450MB, GE200-GE240,

Nuclear reactor construction steel: 15MnNi6-3

ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. C, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 841 Gr. A, B, C; API 5 L Gr. B, X52, X56, X60, X65

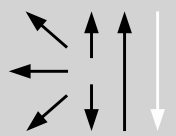
Typical analysis of the TIG rods (wt.-%)

	C	Si	Mn	Ni
wt-%	0.10	0.70	1.40	1.30

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	I1	470	600	25	150	47

Operating data

	Polarity:	Shielding gas:	Marks:	∅ mm	L mm
	DC (-)	(EN ISO 14175) I 1-3	✦ 3 Ni 1	2.0	1000
				2.4	1000
				3.2	1000

Approvals

TÜV (00513), DB (42.132.49), DNV, KTA 1408.1 (08012), CE