

Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E 46 6 1Ni B 4 2 H5	E 5518-N2 AU	E8018-C3	E5518-C3

Characteristics and typical fields of application

Basic covered Ni alloyed electrode.

Very pure weld metal quality controlled to KTA 1408.2; H₂-content of weld metal ≤ 5 ml/100 g; high toughness values at low temperatures, NDT-tested; CTOD-tested to temperatures as low as -10 °C (-14 °F). Preferred for welding nuclear reactor fabrication steels such as 15 MnNi 63; for fine grained steels up to S420N (S420NL and P355NL2).

Base materials

15 MnNi 63 (TSB 370), C 22.8 S1, GS-C 25,
Feinkornbaustähle S275N - S420N; kaltzähe Feinkornbaustähle S275NL - S420NL;
kaltzähe Sondergüten P275NL2 - P355NL2;
Allgemeine Baustähle, Kesselbleche und Rohrstähle

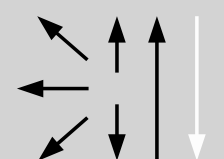
Typical analysis of all-weld metal (wt.-%)

	C	Si	Mn	Ni
wt.-%	0.06	0.25	1.15	0.95

Mechanical properties of all-weld metal

Heat-treatment	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	-60 °C
aw	470	550	25	160	50
sr	420	510	26	160	50

Operating data

	Polarity: DC (+)	Redrying: 300 – 350 °C / 2 h (572 – 662 °F).	ø (mm) 3.2 4.0	L mm 350 350	Amps A 100 – 150 140 – 200
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Approvals

TÜV (02199 + 08011), CE