

## Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5	AWS A5.5M
E 50 6 Mn1Ni B 4 2 H5	E 5518-GA	E8018-G (E8018-C3 mod.)	E5518-G (E5518-C3 mod.)

## Characteristics and typical fields of application

Basic covered MnNi alloyed electrode. High toughness at temperatures as low as  $-60\text{ }^{\circ}\text{C}$  ( $-76\text{ }^{\circ}\text{F}$ ). High radio-graphical soundness;  $\text{H}_2$ -content  $\leq 5\text{ ml/100 g}$  (HD).

CTOD- and NDT tested.

Particularly suitable for welding fine grained structural steels, for steel construction and bridge building applications, gas storage spheres.

## Base materials

Fine grained structural steels S355N - S500Q; low temperature fine grained structural steels P355NL1 – S500QL; low temperature special grades P355NL2 – S500QL1; general purpose structural steels; pipe steels L360NB – L415NB, L360MB – L485MB, X 52 – X 70; ASTM A516 Gr. 65; A572 Gr. 55, 60, 65; A633 Gr. E; A612; A718 Gr. I; A537 Gr. 1-3

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

	C	Si	Mn	Ni
wt-%	0.07	0.25	1.50	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	500	580	23	140	50
sr	470	560	25	140	50

## Operating data

	Polarity: DC ( + )	$\varnothing$ (mm)	L mm	Amps A
		3.2	350	100 – 150
		4.0	350	140 – 200
		4.0	450	140 – 200
		5.0	450	170 – 250

## Approvals

TÜV (00531), DB (10.132.37) ABS, BV, DNV, GL, LR, VG 95132-1, CE