

Classifications

EN ISO 14343-A

G Z 17 15 Mn W

Characteristics and typical fields of application

Solid wire of G Z 17 15 Mn W type for joining applications with cryogenic austenitic CrNi(N)-steels and cast steel grades and cryogenic 9Ni-steels suitable for quenching and tempering. Good toughness at subzero temperatures as low as -196°C .

Base materials

1.5662 X8Ni9, 1.4311 X2CrNiN18-10

Typical analysis

	C	Si	Mn	Cr	Ni	W
wt.-%	0.20	0.4	10.5	17.5	14.0	3.5

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength	Yield strength	Tensile strength	Elongation A	Impact energy ISO-V KV J	
	$R_{p0.2}$	$R_{p1.0}$	R_m	($L_0=5d_0$)	20°C	-196°C
	MPa	MPa	MPa	%		
u1	450 (≥ 430)	490 (≥ 460)	640 (≥ 600)	33 (≥ 30)	150 (≥ 100)	70 (≥ 47)
u2	500 (≥ 480)	530 (≥ 500)	710 (≥ 680)	34 (≥ 30)	120 (≥ 80)	75 (≥ 47)

u1 untreated, as-welded – shielding gas Ar + 2.5% CO_2

u2 untreated, as-welded – shielding gas CRONIGON® Ni30

Operating data

	Polarity	DC+	Dimension mm	
	Shielding gas (EN ISO 14175)	M11 - M23	Z-ArHeNC-5/5/0,05	1.0
	(CRONIGON® Ni30)		1.2	

Preheating as required by the base metal.

Approvals

TÜV (02890), ABS, BV, DNV, LR, RINA, CE