

# SMT-625

## Conformances

AWS A5.14/ ASME SFA5.14 ERNiCrMo-3  
JIS Z3334 SNi6625 (NiCr22Mo9Nb)  
EN ISO 18274 Ni 6625 (NiCr22Mo9Nb)  
KR L92S  
ABS AWS A5.14 ERNiCrMo-3 (-196°C ≥34 J)

LR 9Ni H15  
BV AWS A5.14 ERNiCrMo3  
DNV-GL -MS  
NV 1.5Ni, 9Ni  
NK KSWL92

## Applications

- LNG Storage Tank, Equipments for gas desulfurization,
- Petrochemical plants
- Heat exchangers
- 9% nickel steel

## Features

- Good impact toughness at extra low temperature
- Dissimilar steels(B24Inconel 601, Incoloy800/800H or combination of these with other alloys)

## Welding Position

### Current

GMAW: DC+(Pulse)  
GTAW: DC-

### Shielding Gas

Ar  
Ar + He

## Diameter / Packaging

Diameter	MIG	TIG
mm (in)	12.5kg (27.6lbs)	5kg (11lbs)
0.9 (0.035)	√	
1.0 (0.040)	√	
1.2 (0.045)	√	
1.4 (0.052)	√	
1.6 (1/16)	√	
2.0 (5/64)		√
2.4 (3/32)		√
3.2 (1/8)		√

### Typical Chemical Composition of the Wire (%)

C	Si	Mn	P	S	Cr	Ni	Mo	Nb+Ta
0.02	0.05	0.03	0.012	0.001	22.0	64.6	8.7	3.6

### Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp °C(°F)	CVN-Impact Value J (ft.-lbs)
-	770 (117,000)	40.0	-196 (-321)	100 (74)

### Typical Welding Parameters

Diameter, Polarity Shielding Gas	Amp. (A)	Volt. (V)
	1.2mm (0.045 in) DC+	
Ar, Ar + He	140	28
	2.4mm (3/32 in) DC-	
Ar	110	12

SMAW

SAW

GMAW

GTAW

FCAW

Non-FERROUS

APPENDIX