

Classifications

EN ISO 14171-A	EN ISO 14171-B	AWS A5.23
S2Ni3	-	ENi3

Characteristics and typical fields of application

Union S 2 Ni 3,5 is a coppered wire for submerged arc welding of unalloyed and low alloyed fine grain steel grades and especially 3,5%Ni steel grades with matching wire composition for cryogenic application down to (at -80°C / -105°C).

The wire is alloyed with 3,3% Nickel to obtain great toughness in the weld metal.

It is suitable for cryogenic application such as pressure vessel and liquefied gas storage equipment manufacturing till a minimum temperature of -105 °C (e.g. for CO₂ and Ethane) and arctic off-shore constructions.

This wire composition has been designed mainly for multi-pass welding procedures (not recommended for 2-run technology, neither for Tandem-process).

Typical welding procedures :

- single wire
- especially for as welded condition, however also for PWHT

Typical analysis of the wire (wt.-%)

C	Si	Mn	P	S	Ni
0.09	0.15	0.90	≤0.010	≤0.010	3.3

Typical fluxes to combine

SAW fluxes	EN ISO 14174
UV 421 TT	SA FB 1 55 AC H5

Packaging Formats

Diameter (mm)	Spooltype	Weight (kg)
3.0	B450 / K415-100	25
4.0	B450 / K415-100	25