



Product Data Sheet
NSW 347
AWS E347 – 16

I. APPLICATIONS:

It is used for welding of 18%Cr-8%Ni-Ti (AISI 321) and 18%Cr-8%Ni-Cb (AISI 347) because of its excellent creep-rupture property at high temperature.

II. DESCRIPTION:

NSS-347 is composed with 19%Cr-9%Ni-Cb and is more stable resistance to intergranular corrosion than NSS-308L with the addition of columbium as carbon stabilizer.

III. INSTRUCTION FOR WELDING:

- Remove dirt such as oil and dust from the groove.
- Normally, preheat is not necessary.
- Keep the arc length as short as possible.
- Reheat the electrode at 200-250°C for about one hour before use.

IV. TYPICAL CHEMICAL COMPOSITION OF WELD METAL (%):

C	Si	Mn	Ni	Cr	Cu	Nb+Ta
0.05	0.44	1.73	10.06	19.93	-	0.68

V. TYPICAL MECHANICAL PROPERTIES OF WELD METAL:

Tensile Strength N/mm ² (Ksi)	Elongation %
638 (93)	39

VI. WELDING POSITIONS: ALL POSITIONS

VII. SIZES AVAILABLE AND RECOMMENDED CURRENTS (AC or DC +):

Size	Diameter (mm)	1.6	2.0	2.5	3.2	4.0	5.0
	Length (mm)	250	250	300	350	350	350
Ampere	Flat	30-45	35-60	55-80	70-120	100-150	150-220
	V-up, OH	25-40	30-50	50-70	65-105	85-135	-