HYUNDAI WELDING

Rev. 00

ST-347

HYUNDAI WELDING CO., LTD.

ST-347

❖ Specification

AWS A5.9	ER347
JIS	Z3321 Y347
EN	ISO 14343-A W 19 9 Nb

❖ Applications

TIG Welding of 18%Cr-8%Ni-Nb(STS 347)
and 18%Cr-8%Ni-Ti(STS 321) stainless steel

❖ Characteristics on Usage

As the weld metal contains ferrite, its resistance to crack is good.
Bead appearance and weldability are good.
ST-347 has stabilizing element (Nb) thus providing good integranular corrosion resistance and better heat resistance.
Due to high creep strength at high temperature, suitable for the welding of boiler and gas turbine.

❖ Note on Usage

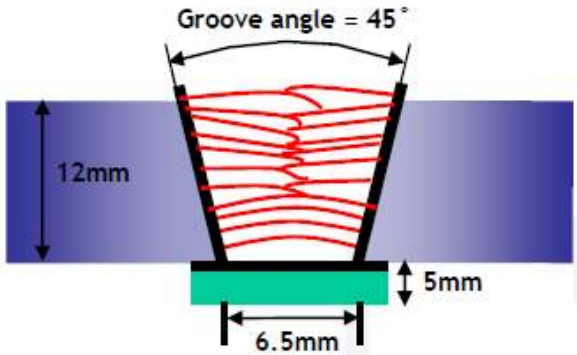
Use 100% Ar gas.

❖ Packing

Dia.	1.6mm (1/16in)	2.0mm (5/64in)	2.4mm (3/32in)	2.6mm (0.10in)	3.2mm (1/8in)
TIG	5kg (11lbs)				

Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



[Joint Preparation & Layer Details]

Diameter(mm)	:	2.4mm
Shielding Gas	:	100% Ar
Flow Rate(ℓ /min.)	:	20~25
Amp./ Volt.	:	160~240
Pre-Heat(℃)	:	R.T.
Interpass Temp.(℃)	:	150 ± 15
Polarity	:	DC(-)

❖ Mechanical Properties of All weld metal(wt%)

Consumable	Tensile Test	
	T.S. MPa (ksi)	EL. (%)
ST-347	726 (105)	32

❖ Chemical Analysis of the wire

Consumable	C	Si	Mn	Ni	Cr	Mo	Cu	Nb
ST-347	0.053	0.41	1.60	9.1	19.2	0.06	0.09	0.7