

ST-308



❖ Specification

AWS A5.9	ER308
JIS	Z3321 YS308
EN	ISO 14343-A W 19 9

❖ Applications

TIG welding of 18%–8%Ni stainless steel..

❖ Characteristics on Usage

ST-308 is a filler rod for TIG welding with pure Ar gas. As the weld metal contains ferrite, its crack resistibility is excellent. Both its bead appearance and weldability are good. Furthermore, resistance to corrosion and mechanical properties is good.

❖ Note on Usage

Use 100% Ar

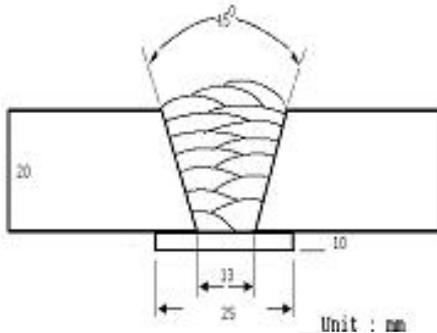
❖ Packing

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

Consumable	Tensile Test		CVN Impact test Joule (ft·lbs)	
	T.S. MPa (ksi)	EL. (%)	-60℃ (-76°F)	-196℃ (-320.8°F)
ST-308	631 (92)	45	104 (77)	33 (24)

❖ Chemical Analysis of the wire(wt%)

Consumable	Chemical Composition (wt%)								
	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
ST-308	0.043	0.36	1.81	0.017	0.004	9.5	19.9	0.13	0.05
AWS A5.9 ER308	≤0.08	0.30 ~0.65	1.0 ~2.5	≤0.030	≤0.030	9.0 ~11.0	19.5 ~22.0	≤0.75	≤0.75

❖ Chemical Analysis of All weld metal(wt%)

Consumable	Chemical Composition (wt%)								
	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
ST-308	0.034	0.39	1.81	0.018	0.005	9.2	19.1	0.12	0.07

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