

# **SM-308LSi**



## ❖ Specification

**AWS A5.9** ER308LSi

**JIS Z3321** YS308LSi

## ❖ Applications

SM-308LSi is the same as ER308L, except for higher silicon content.  
(for a low ferrite or full austenitic base metal)

## ❖ Characteristics on Usage

SM-308LSi is an austenitic type stainless steel wire , the weld metal contains ferrite and crack sensitivity is extremely good. The Usability, such as arc stability and assimilability of welds to base metal is extremely excellent.

Resistance to corrosion and mechanical properties of weld metal are great.

## ❖ Note on Usage

Use 100% Ar gas or Ar+ 2~5 % O2 gas

## ❖ Packing

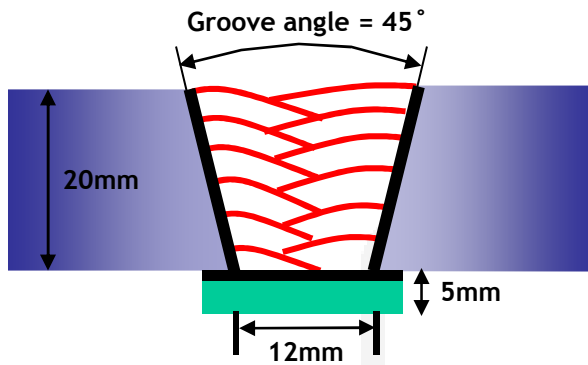
Dia.(mm)	0.8	0.9	1.0	1.2	1.6
Spool (kg) *including ball pac	12.5				



## Mechanical Properties & Chemical Composition of All Weld Metal

### ❖ Welding Conditions

Method by AWS Spec.



[ Joint Preparation & Layer Details ]

<b>Diameter(mm)</b>	: 1.2mm
<b>Shielding Gas</b>	: Ar+2% O <sub>2</sub>
<b>Flow Rate(ℓ /min.)</b>	: 15~20
<b>Amp./ Volt.</b>	: 230/27
<b>Stick-Out(mm)</b>	: 20
<b>Pre-Heat(℃)</b>	: R.T .
<b>Interpass Temp.(℃)</b>	: 150±15
<b>Polarity</b>	: DC(+)

### ❖ Mechanical Properties of All weld metal

Consumable	Tensile Test		CVN Impact test (Joule)	
	TS(MPa)	El(%)	0℃	-196℃
SM-308LSi	610	40.4	77.3	39.0

### ❖ Chemical Analysis of the wire(wt%)

Consumable	Shielding Gas	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Cu
SM-308LSi	Ar+2% O <sub>2</sub>	0.027	0.79	1.96	0.016	0.001	10.02	20.78	0.111	0.336
AWS A5.9 ER308LSi		≤0.03	0.65~ 1.00	1.0~ 2.5	≤0.03	≤0.03	9.0~ 11.0	19.5~ 22.0	≤0.75	≤0.75

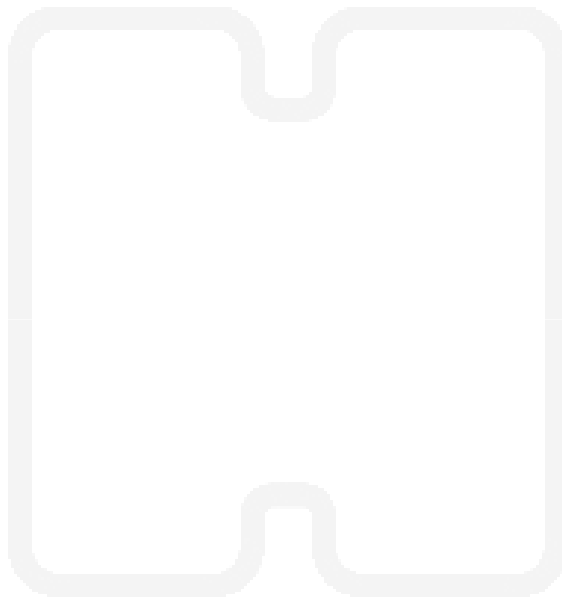
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**Mechanical Properties  
& Chemical Composition of All Weld Metal**

❖ **δ – Ferrite No.**

Consumable	Shielding Gas	Diagram			FERITSCOPE MP-30 * (FISCHER)
		Schaeffler	DeLong	WRC(1992)	
SM-308LSi	Ar+2% O2	13.5	16.8	14.7	7.0



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