

# AUTOMELT S33

## AWS Classifications:

EN 760 SA AF 2 54 DC

DIN 32522 B FB 6 54355DCBK

## Characteristics:

Automelt S33 is an agglomerated Aluminate-Fluoride basic type SAW flux for stainless steel welding. Behavior to carbon in stainless steel weld deposit is strictly neutral therefore can be used for extra low carbon stainless steels. It is a non Cr-compensating flux but the loss of Chromium is low. It offers smooth and closed rippled X-ray quality crack resistant weld deposit with good slag detachability.

## Flux Analysis:

Basicity index No.	~3.2	Grain Size (mm)	0.25-2.00
Wall Neutrality No.	-	Current/polarity	DC(+)/AC-800A max.
Flux Analysis	SiO <sub>2</sub> +TiO <sub>2</sub> ~10%; Al <sub>2</sub> O <sub>3</sub> +MnO~35%; CaF <sub>2</sub> ~50%		
Redrying & Baking	300-350°C for one hour before use		

## All Weld Metal Chemistry, wt% (Typical):

AWL Wires	C	Cr	Ni	Mo	Mn	Si	P	S	Cu	Nb
	max						max	max	max	max
Subinox 308L	0.03	19.5-22.0	9.0-11.0	0.75 max	1.0-2.5	0.30-0.65	0.03	0.03	0.75	-
Subinox 316L	0.03	18.0-20.0	11.0-14.0	2.0-3.0	1.0-2.5	0.30-0.65	0.03	0.03	0.75	-
Subinox 347	0.08	19.0-21.5	9.0-11.0	0.75 max	1.0-2.5	0.30-0.65	0.03	0.03	0.75	1xC-1.0%
Subinox 318	0.08	18.0-20.0	11.0-14.0	2.0-3.0	1.0-2.5	0.30-0.65	0.03	0.03	0.75	8xC-1.0%
Subinox 309L	0.03	23.0-25.0	12.0-14.0	0.75 max	1.0-2.5	0.30-0.65	0.03	0.03	0.75	-

## All Weld Metal Mechanical Properties:

With wires	Condition	UTS	E%	CVN Impact
		MPa	(1=4xd)	°C
				J
Subinox 308L	AW	520min	35 min	+20
Subinox 316L	AW	490min	30 min	+20
Subinox 347	AW	520min	30 min	+20
Subinox 318	AW	550min	25 min	+20
Subinox 309L	AW	520min	30 min	+20

AW As Welded Values subjected to change if parameters are varied markedly.

## Typical Applications:

Recommended for high alloy austenitic stainless steel welding.

## Packing Data

Net Wt. Kgs.

Poly lined paper bags (Standard)

30

Steel Drums (on demand)

100

## Special Test :

Test Type	Remarks
Impact Test	* Tested with subinox-308L wire & gives 42J at -196°C
IGC (As per ASTM-A262)	* Passed practice 'E' Test with subinox 308L, Subinox 309L & Subinox 316L wires.



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