

## SAW FLUX: Stainless Steel



### WF-311

<b>Specification</b>	EN760
<b>Classification</b>	SA AF 2 54 DC H5

#### Application and Properties:

WF-311 is applied for welding stainless steels including Nb and Ti elements. It has high general corrosion resistance in media containing chloride and hydrogen sulfide for welding duplex stainless steel and super duplex stainless steel.

Slag detachability is good and without slag residues. Regularly shaped welds are deposited without reduction of area or interface notches and surface of welds are smooth appearance and fine ripple. Weld metal shows excellent crack resistance, corrosion resistance and mechanical properties. The weld has good ability of resistance to inter-granular corrosion, pitting and especially to stress corrosion.

<b>Metallurgical Behavior</b>	Si and Mn are neutral
<b>Basicity</b>	1.8 (BIIW)
<b>Grain Size</b>	10-60 mesh
<b>Current</b>	DC+
<b>Redried</b>	300-350°C × 2hrs

#### Mechanical Properties of Deposited Metal

Wire	Tensile strength (MPa)	Elongation (%)	Charpy V notch impact strength (J)	
			-20°C	-40°C
WW-347	≥520	≥30	≥80	≥40
WW-2209	≥690	≥20	≥60	≥40
WW-2594	≥760	≥15	≥60	≥40

#### Chemical Composition of Deposited Metal (%)

Wire	C	Cr	Ni	Mo	Nb	Others
WW-347	≤0.08	18.0-21.0	9.00-11.0	0.75	8C%-1.0	-
WW-2209	≤0.04	21.5-23.5	8.50-10.5	2.50-3.50	0.40-1.0	N: 0.08-0.20
WW-2594	≤0.04	24.0-27.0	8.50-10.5	2.50-4.50	W: 1.0	N: 0.20-0.30