

## Exaton 31S

31S is a neutral welding flux for submerged arc welding giving good slag removal and fine bead appearance. It is suitable for surfacing with strip and wire electrodes and can also be used for joining. 31S is intended primarily for welding with strip or wire electrodes of the 310LMO type such as 25.22.2.LMn for urea applications.

### Specifications

<b>Classifications</b>	EN ISO 14174 : S A AB 2
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<b>Welding Current</b>	1200
<b>Density</b>	nom: 0.9 Kg/l
<b>Basicity Index</b>	nom: 1.0

### Classifications

Wire	AWS/EN
Exaton 25.22.2.LMn	14343-A:B 25 22 2 N L
Exaton 25.22.2.LMn	14343-A:S 25 22 2 N L

### Approvals

#### Combined with Wire

\*Selected production units only. Please contact ESAB for more information. Visit [esab.com](http://esab.com) to download specific flux/wire combination fact sheets for more details.

### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	N
<b>Exaton 25.22.2.LMn</b>								
0.02	3.8	0.6	-	-	22	24.5	2	0.12

### Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
<b>Exaton 25.22.2.LMn</b>									
<=0.020	4.5	<=0.2	<=0.015	<=0.015	22.0	25.0	2.1	0.05	0.13

### Typical Wire Composition %

#### FN WRC-92

#### Exaton 25.22.2.LMn

0

### Typical Mechanical Properties

Combined with Wire	Condition	Yield Strength	Tensile Strength	Elongation	Charpy V-Notch
Exaton 25.22.2.LMn	As Welded	380 MPa ( 55 ksi )	570 MPa ( 83 ksi )	40 %	75 J @ 20 °C ( 56 ft-lb @ 68 °F ) 40 J @ -196 °C ( 30 ft-lb @ -320.8 °F )
Exaton 25.22.2.LMn	As Welded	320 MPa ( 46 ksi )	560 MPa ( 81 ksi )	50 %	65 J @ -196 °C ( 48 ft-lb @ -320.8 °F )