

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

| Classifications_SAW | | | | | |
|---------------------|-----------------------|--|--|--|--|
| 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_SAW

Wire

*Selected production units only. Please contact ESAB for more information. Visit esab.com to download specific flux/wire combination fact sheets for more details.

| Typical Weld Metal Analysis % | | | | | | | | |
|-------------------------------|-----|-----|---|---|----|------|----|------|
| С | Mn | Si | S | Р | Ni | Cr | Мо | N |
| Exaton 25.22.2.LMn | | | | | | | | |
| 0.02 | 3.8 | 0.6 | - | - | 22 | 24.5 | 2 | 0.12 |

| Typical Wire Composition % | | | | | | | | | |
|----------------------------|-----|-------|---------|---------|------|------|-----|------|------|
| С | Mn | Si | S | Р | Ni | Cr | Мо | Cu | Ν |
| Exaton 25.22.2.LMn | | | | | | | | | |
| <=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 |

| SAW_Typical_Mech_Properties | | | | | | | | |
|-----------------------------|-------------------|----------------|------------------|------------|--------------------------------|--|--|--|
| Wire | Testing Condition | Yield Strength | Tensile Strength | Elongation | Charpy V-Notch Result | | | |
| Exaton 25.22.2.LMn | As Welded | 380 MPa | 570 MPa | 40 % | 75 J @ 20 °C 40 J @ -196 °C | | | |
| Exaton 25.22.2.LMn | As Welded | 320 MPa | 560 MPa | 50 % | 65 J @ -196 °C | | | |