

ES FLUX 161

SAW

ESWECO
The Art of Welding

Type High-basic

EN 760: SA FB 1 65 DC

Description

ES FLUX 161 is designed for the single-wire, multi-run butt welding of mild, medium and high tensile steels with impact strength requirements down to $-40^{\circ}\text{C}/-60^{\circ}\text{C}$.

Due to the non-alloying effect, ES FLUX 161 is designed for use with a suitable alloying wire. ES FLUX 161 can be used on DC \pm .

Density

1.1 kg/dm³

Basicity index

2.8

Flux consumption, kg flux/kg wire

| Voltage | DC+ | AC |
|---------|-----|----|
| 26 | 0.6 | |
| 30 | 0.9 | |
| 34 | 1.2 | |
| 38 | 1.4 | |

Typical all weld metal composition, %

| Wire | C | Si | Mn | Cr | Ni | Mo |
|--------|------|------|------|----|----|-----|
| ES EA2 | 0.06 | 0.25 | 1.0 | - | - | 0.5 |
| ES EA4 | 0.10 | 0.21 | 1.45 | - | - | 0.5 |

Typical mech. Properties all weld metal

| Wire | Yield Stress MPa | Tensile strength MPa | Charpy V | |
|--------|---------------------|-------------------------|----------|-----|
| | | | °C | J |
| ES EA2 | 470 | 560 | +20 | 130 |
| | | | 0 | 120 |
| | | | -20 | 80 |
| | | | -30 | 45 |
| | | | -40 | 35 |
| ES EA4 | 540 | 620 | +20 | 170 |
| | | | 0 | 160 |
| | | | -20 | 140 |
| | | | -40 | 115 |
| | | | -50 | 45 |

Classifications

| Wire | EN 756 | SFA/AWS A5.17 |
|--------|----------------|-------------------------|
| ES EA2 | S 46 4 FB S2Mo | F8A6-EA2-A2/F7P6-EA2-A2 |
| ES EA4 | S 50 4 FB S3Mo | F8A6-EA4-A4/F8P6-EA4-A4 |