

## Dual Shield 55

An all-positional rutile cored wire for welding steels with a minimum yield strength of 550 MPa, for use with M21 shielding gas.

### Specifications

|                        |                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------|
| <b>Classifications</b> | SFA/AWS A5.29 : E91T1-GM21<br>SFA/AWS A5.29 : E91T1-Ni1M21<br>EN ISO 18276-A : T 55 4 Z P M21 2 H5 |
| <b>Approvals</b>       | ABS : 4YQ500 SA H5<br>CE : EN 13479<br>UKCA : EN 13479                                             |

Approvals are based on factory location. Please contact ESAB for more information.

|                            |                          |
|----------------------------|--------------------------|
| <b>Welding Current</b>     | DC+                      |
| <b>Diffusible Hydrogen</b> | < 5 ml/100g              |
| <b>Alloy Type</b>          | Low alloy steel (<1% Ni) |
| <b>Shielding Gas</b>       | M21 (EN ISO 14175)       |

### Tensile Properties

| Testing Condition        | Yield Strength | Tensile Strength | Elongation |
|--------------------------|----------------|------------------|------------|
| <b>M21 shielding gas</b> |                |                  |            |
| As Welded                | 604 MPa        | 663 MPa          | 27 %       |

### Charpy Testing

| Testing Condition        | Testing Temp | Impact Value |
|--------------------------|--------------|--------------|
| <b>M21 shielding gas</b> |              |              |
| As Welded                | -40 °C       | 106 J        |

### Typical Weld Metal Analysis %

| C                        | Mn   | Si   | Ni   |
|--------------------------|------|------|------|
| <b>M21 shielding gas</b> |      |      |      |
| 0.05                     | 1.45 | 0.41 | 0.95 |

### Deposition Data

| Diameter | Amps      | Volts   | Wire Feed Speed | Deposition Rate |
|----------|-----------|---------|-----------------|-----------------|
| 1.2 mm   | 100-300 A | 21-32 V | 3.2-14.5 m/min  | 1.3-5.8 kg/h    |