

## Dual Shield Prime 71 LT H4

A seamless, copper free, cored wire designed to weld thick steel components. The diffusible hydrogen level is consistently below 4ml/100g of deposited weld metal and with the seam of the wire being laser welded this ensures no moisture pick up. The wire is not copper coated which means there is no chance of copper flakes contaminating feed liners, torches and contact tips. Dual Shield Prime 71 LT H4 is designed to weld medium strength steels (>420 MPa, >61 ksi yield strength) and provides excellent impact toughness down to -40 degrees C. Dual Shield Prime 71 LT H4 is designed to be used with either CO<sub>2</sub> (C1) or Ar/CO<sub>2</sub> (M21) shielding gas mixtures.

### Specifications

#### Classifications

EN ISO 17632-B : T494T12 1C1A H5  
 EN ISO 17632-B : T494T12 1M21A H5  
 SFA/AWS A5.20 : E71T-1C/1M/9C-J/9M-J-H4  
 SFA/AWS A5.20 : E71T-12C-J/12M-J-H4  
 JIS Z 3313 : T49 4 T1-1 C/M A-H5  
 KS D 7104 : YFL-A503R/YFL-C503R  
 EN ISO 17632-A : T42 4 P C1 1 H5  
 EN ISO 17632-A : T42 4 P M21 1 H5

#### Approvals

ABS : 4Y400SA H5  
 CE : EN 13479  
 CWB : E491T1-C1A4-CS2-H4 (E491T-12J-H4)  
 CWB : E491T1-M21A4-CS2-H4 (E491T-12MJ-H4)  
 DNV : IV Y40MS H5 (C1)  
 DNV : IV Y40MS H5 (M21)  
 LR : 4Y40S H5  
 UKCA : EN 13479

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

|                     |                        |
|---------------------|------------------------|
| Welding Current     | DC+                    |
| Diffusible Hydrogen | < 4 ml/100g            |
| Alloy Type          | C Mn                   |
| Shielding Gas       | M21, C1 (EN ISO 14175) |

### Typical Tensile Properties

| Condition                                 | Yield Strength | Tensile Strength | Elongation |
|-------------------------------------------|----------------|------------------|------------|
| <b>C1 Shielding gas According to AWS</b>  |                |                  |            |
| As Welded                                 | 450 MPa        | 525 MPa          | 32 %       |
| <b>M21 Shielding gas According to AWS</b> |                |                  |            |
| As Welded                                 | 480 MPa        | 540 MPa          | 32 %       |

### Typical Charpy V-Notch Properties

| Condition                                 | Testing Temperature | Impact Value |
|-------------------------------------------|---------------------|--------------|
| <b>C1 Shielding gas According to AWS</b>  |                     |              |
| As Welded                                 | -40 °C              | 54 J         |
| As Welded                                 | -30 °C              | 97 J         |
| <b>M21 Shielding gas According to AWS</b> |                     |              |
| As Welded                                 | -30 °C              | 117 J        |
| As Welded                                 | -40 °C              | 78 J         |

### Typical Weld Metal Analysis %

| C    | Mn   | Si   | Ni   |
|------|------|------|------|
| 0.04 | 1.30 | 0.40 | 0.45 |

MILD STEEL

GAS-SHIELDED FLUX-CORED WIRES (FCAW/MCAW)



## Dual Shield Prime 71 LT H4

### Deposition Data

| Diameter | Current   | Voltage | Wire Feed Speed | Deposition Rate |
|----------|-----------|---------|-----------------|-----------------|
| 1.2 mm   | 170-310 A | 25-35 V | 6.0-16.5 m/min  | 2.5-6.2 kg/h    |
| 1.6 mm   | 180-420 A | 24-38 V | 3.0-13.0 m/min  | 1.8-7.5 kg/h    |