

**Root runs with radiographic quality****GENERAL DESCRIPTION**

Highly crack resistant due to a very low hydrogen deposit. Recommended for applications where excellent mechanical properties and X-ray controlled joints are required.  
Extremely good welding properties in all positions except vertical down.  
Special moisture resistant coating.

**APPLICATIONS**

Medium and heavy mild steel fabrication work under conditions of high restraint and structural steels.  
Critical applications requiring toughness at subzero temperatures.  
Pipe welding, boiler plates, ship building, and so on.

**CHEMICAL COMPOSITION (%) (Typical values, all weld metal)**

C : 0.05 – 0.10	Mn : 1.30 – 1.60	Si : 0.40 – 0.70	P : < 0.02	S : < 0.02
Fe : Balance				

**MECHANICAL PROPERTIES (Typical values, all weld metal)**

Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 420 MPa	500 – 660 MPa	≥ 20 %	≥ 47 J (-40°C)

**GENERAL INFORMATION**

<b>Welding positions</b>	All, except vertical down			
<b>Shielding gas</b>	NA			
<b>Packing</b>	5 Kg in a plastic box			
<b>Polarity</b>	AC or DC, electrode either to the + or – pole (see Tips & Tricks)			
<b>Diameter (mm)</b>	2.5	3.2	3.2	4.0
<b>Length (mm)</b>	350	350	450	450
<b>Approx. current (A)</b>	60 - 90	90 - 130	90 - 130	120 - 180

**Tips & Tricks**

Weld with a short arc.  
Welding of root passes: straight polarity (electrode negative).  
Welding of filling passes: reverse polarity (electrode positive).  
Always use dry electrodes to obtain the highest possible mechanical characteristics.  
If the coating has taken up moisture despite of its special coating, it can be rebaked at 250°C (480 °F) for 2 hours.

*The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.*