



Low-Hydrogen Electrode for Applications
Requiring Crack-Resistant Welds

Xuper® 66 XHD



- Produces moisture and crack resistant deposits
- Excellent properties when welding the freemachining, sulfur-bearing grades.
- Excellent bead control
- Easy slag removal

Xuper® 66 XHD

Xuper 66XHD is a moisture-resistant electrode with high crack resistance. It is particularly suitable for out-of-position welding of both low-alloy and medium carbon steels subject to post-welding cool-down stressing. It is a welder-friendly electrode with excellent bead control and an easy-to-remove slag. Excellent properties when welding the freemachining, sulfur-bearing grades.

It has been formulated to meet critical moisture levels during manufacture. As moisture is the principal cause of time-delayed cracking, its control is perhaps the most critical variable for successful, crack-free welding of low-alloy steels. Controlled baking temperatures are responsible for lowering the moisture content to a value of at least 0.04% by weight of electrode coating. It is this stringent control of moisture content that makes for a "true" low-hydrogen electrode.

PROCEDURE FOR USE

PREPARATION: Clean weld area of scale and/or oxide.

Bevel or chamfer heavy sections to have either a single or double 60° "V" preparation. A nominal preheat of 150°F (65°C) is advised if part is below 40°F (4°C) or over 1" thick. For higher carbon steels higher preheats will be needed for which carbon-equivalent formula should be consulted.

TECHNIQUE: All low-hydrogen electrodes should be used with a non-contact, short arc-gap technique. An arc start block is recommended to prevent starting porosity. Deposit stringer beads or 2x to 3x weave beads.

POST-WELDING: Allow parts to slow cool in still air. For steels with moderate-to-high hardenability controlled cooling is recommended.

TECHNICAL DATA

Typical Values

Tensile Strength:	80,000 psi
Yield Strength:	69,000 psi
Elongation (1=5d) min.:	23%
Max. Hydrogen & Moisture Content:	5ml per 100 grams @ 0.4 moisture content
Recommended Polarity:	DCEP (+) or AC(~)

SUGGESTED WELDING PARAMETERS:

Diameter	Amperage
3/32" (2.4mm)	65 - 80
1/8" (3.2mm)	120 - 135
5/32" (4.0mm)	165 - 175
3/16" (4.8mm)	215 - 235

Note: For storage, always keep electrodes in a sealed container. Damp electrodes can cause cracking, porosity & delayed hydrogen-induced cracking.

TYPICAL APPLICATIONS

- All-Position Pipe Welding
- Earthmoving Equipment
- General Carbon Steel Fabrication
- Bridge Decking Plates
- Clam-Shell Buckets

Observe normal welding practices, respiratory protection and proper air flow pattern advised. For general welding practices, see AWS publications Z49.1 "Safety in Welding and Cutting and Allied Process". Welding is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before beginning welding operations. DO NOT operate welding equipment or use welding materials before you have thoroughly read the proper instruction manual(s). Please refer to the Eutectic internet site for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS, AND/OR THE INSTRUCTIONS OF WELDING EQUIPMENT OR MATERIAL MANUALS, MAY BE HAZARDOUS TO YOUR HEALTH.



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