



## **Weltrode WC 6500 AC-DC**

**Highest Tensile Strength All Position Welding Electrode For Welding Dissimilar Steels Without Cracking**

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### **Why Do Welders Choose Weltrode WC 6500 AC/DC**

Weltrode WC 6500 is an all position coated electrode, that has been formulated with improved arc stability, AC/DC weldability and slag release, with highest strength and ductility making this electrode the first choice for difficult - to - weld repairs. Weltrode WC 6500 is the most dynamic, all purpose electrode introduced to the market in the past decade.

### **Special Features**

- ✦ Unique “ Fast - Freeze “ Coating Simplifies Vertical Down And Up Welding. Drag Rod Capabilities For Difficult To Weld Applications.
- ✦ Super Tensile Strength Without Heat Treatment Enabling The Weld Deposit To Have High Elongation And Ductility While Still Providing Extraordinary Holding Power.
- ✦ Welds From Weltrode WC 6500 Ensures Practically Less Distortion, Warpage And Stress. Fine Grain Structure Created In The Weld Metal With Weltrode WC 6500 Eliminates Any Possibility Of Crack. The Judicious Use Of Elements In The Electrode Reinforces The Grain Structure Of The Weld To Prevent Cracking.



- ✦ Superior Flux Chemistry Of Weltrode WC 6500 Provides For A Total And Highly Effective Flushing Away Of Surface Contaminants Such As Oil, Grease, Rust Etc To Give Most Reliable Welds In These Conditions
- ✦ High Corrosion And Heat Resistance
- ✦ Shock And Impact Resistance Equivalent To Manganese Alloy Steels And Other Steels Designed For Impact Applications
- ✦ Sound, Secure And Mechanically Sound Welds On All And Any Steels Including Dissimilar Steels, Controlled Weld Puddle Allows For Filling Holes And Joining Dissimilar Steels.

## Applications

With Exceptionally High Strength And Crack Resistance It Is Suitable For Repairing Tools, Dies, Spring Steel And Any Dissimilar Metal Combinations, Except For The Aluminium And Copper Alloys.

Also Recommended For Repairing Worn Parts And As An Underlay For Hardfacing. For Joining Of High Tensile Steels, High Temperature And Corrosion Resistant Alloys.

## Typical Properties

<b>Tensile Strength</b>	
As Welded	<b>136,000 Psi</b>
As Work Hardened	<b>205,000 Psi</b>
<b>Hardness</b>	<b>Brinell 320</b>
<b>Yield Strength</b>	<b>95,000 Psi</b>
<b>Elongation</b>	<b>35%</b>



## International Specification

AWS/ASME IIC SFA 5.4 E312-17

DIN 8556 E29.9 R 23

ISO 3581 E29.9 R 23

BS 2926 - 1984 29.9R

## Recommended Amperage Settings

Diameter (mm)	5/64 (2.0)	3/32 (2.5)	1/8 (3.25)
Minimum Amperage	30	35	60
Maximum Amperage	55	70	110

## Welding Techniques

Clean Weld Area. The Area In Which Weld Is To Be Made Should Be Free Of Rust, Grease, Paint And Other Material Which Cause Weld Contamination. Bevel Heavy Sections To Be Joined. Preheat High Alloy And High Carbon Steels To That Required By Base Metal. Adjust Amperage Within Recommended Range And Deposit Electrode, Maintaining A Short To Medium Arc Length. Tilt The Electrode 15 Degrees In The Direction Of Travel. Raise Amperage Slightly And Drag Weld Inclining The Electrode 45 Degrees In The Direction Of Travel For Rapid Filletting. Back-Whip Craters And Remove Slag Between Passes Where Ever Possible. Peening To Release Stresses Is Beneficial.

Use Any Constant Current AC Transformer Or DC Generator/Rectifier Providing A Minimum Of 55 Volts Open Circuit.

DC Reverse Polarity (Electrode + ) Or AC.