# **TL-86B6**

AWS A5.5 E8016-B6 EN ISO 3580-B-E5516-5CM JIS Z 3223 E5516-5CM

### **Characteristics and Applications:**

TL-86B6 is a low hydrogen type electrode. The weld metal contains 5%Cr-0.5%Mo. It provides high tensile strength, good toughness, and good heat resistance. The product is suitable for all-position welding of 5%Cr-0.5%Mo steel such as ASTM A387 Gr.5 for refineries, petrochemical and electric power plants. Proper base metals are including pipe (ASTM A213-T5, A335-P5), drawing steel (A387-5), forging (A182-F5), etc..

#### Notes on usage:

- 1. Clean up the contaminations on the base metal and welding seam so as not to derogate the weld metal quality from particles.
- 2. Dry the electrodes at 350-400 for 60 minutes before using.
- 3. Use back-step method to prevent arc starting from blowholes and hold for 3-5 seconds at every end-up.
- 4. Maintain short arc length. Moving range should be controlled within 3 times of the wire's dia when you are welding with weave method.
- 5. Do not exceed the range of recommended current. Over heat input might decrease the impact value.
- 6. Pre-heat the workpiece at 250~350 and proceed PWHT according to relevant specifications.

#### Typical chemical composition of weld metal (wt%):

С	Mn	Si	Р	S	Cr	Мо
0.070	0.60	0.5	0.02	0.01	4.9	0.55

## Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	PWHT
550(80)	640(93)	23	740 x 1hr

## Welding position:



# Sizes and recommended current range (AC or DC + ):

<u> </u>					
Diameter (mm)		3.2	4.0		5.0
Length (mm)		350	350	450	450
Amps	F	90-130 🔀	100-160		160-210
	V&OH	90-110	110-140		-

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<sup>\*</sup> The information contained or otherwise referenced herein is presented only as "typical" without guarante

No data is to be construed as recommendation for any welding condition or technique not controlled

