

# TL-56

AWS A5.1 E7028  
EN ISO 2560-B-4928 A  
JIS Z 3211 E4928

## Characteristics and Applications:

TL-56 is an iron powder type, 490 N/mm<sup>2</sup> high tensile steel electrode. It is specifically designed for the speed gravity welding in shipbuilding, bridges and vehicles with good mechanical properties, good crack resistance and high recovering rate (about 125%).

## Notes on usage:

1. Dry the electrodes at 150 °C for 30-60 minutes before using.
2. Clean up the contaminations on the base metal to avoid porosity and crack.
3. Use back-step method to prevent arc starting from blowholes.
4. Do not exceed the range of proper currents. Over heat input might decrease the impact toughness.

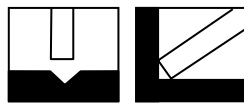
## Typical chemical composition of weld metal (wt%):

C	Mn	Si	P	S
0.1	0.9	0.20	0.025	0.01

## Typical mechanical properties of weld metal:

Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -20°C (0 °F)
500(73)	560(81)	28	67(49)

## Welding position:



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

Diameter (mm)	3.2	4.0	5.0	5.5	6.0
Length (mm)	350	450	550	550	550