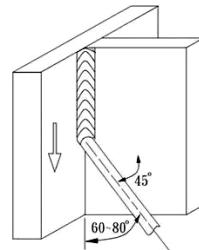


TL-50D

AWS A5.1 E7048
EN ISO 2560-B-E4948 A
JIS Z 3211 E4948

Characteristics and Applications:

TL-50D is designed for exclusive use in vertical downward welding. Slag release and crack resistibility are excellent. It is suitable for the vertical downward welding of steel, structures, and ship buildings, bridge.



Notes on usage:

1. Dry the electrodes at 300-350°C for 30-60 minutes, and then keep at 100-150°C before using.
2. For vertical downward welding, manipulate the electrode as shown in figure, Do not use balance arc.
3. Do not exceed the range of proper currents. Over heat input decrease hurt the impact toughness.

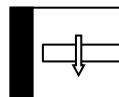
Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S
AWS	≤0.15	≤1.60	≤0.90	≤0.035	≤0.035
EN ISO	≤0.15	≤1.60	≤0.90	≤0.035	≤0.035
Typical value	0.08	1.00	0.55	0.02	0.006

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -30°C (-20°F)
AWS	≥400(58)	≥490(70)	≥22	≥27(20)
EN ISO	≥400(58)	≥490(70)	≥20	≥27(20)
Typical value	445(65)	550(80)	28	78(58)

Welding position:



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

Diameter (mm)	3.2	4.0	5.0
Length (mm)	350	450	450
Amps	VD	110-160	140-210
			210-240

* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and TienTai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by TienTai Electrode Co., Ltd.