# **BW-81T**

# Flux Cored Welding Wire

For 550N/mm<sup>2</sup> class high tensile strength steel



creating better welding solutions

AWS A5.29 E81T-1-Ni1M

#### **Applications & Features**

For butt & fillet welding of 550N/mm<sup>2</sup> high tensile strength steels of structures such as ships, bridges, building and storage tanks etc.

#### **Characteristics**

(1) BW-81T is a titania type flux cored wire designed for all positional single & multi pass welding with Argon/CO<sub>2</sub> mixed shielding gas.
(2) It provides excellent usability with a stable arc, less spatter, good bead appearance, excellent slag removal and minimal welding fumes as compared

(3) Provides excellent welding efficiency due to high deposition rates.

#### **Notes on Usage**

to solid wire.

- (1) The optimum flow for shielding gas is 20~25l/min.
- (2) The distance between tip & base material is to be 20~25mm.
- (3) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec & more.
- (4) Thick heavy plate should be welded under proper preheating & interpass temperatures

Approvals ABS



#### **Part Numbers:**

2094 (1.2mm x 15kg spool), 2094P (1.2mm x 200kg pail pack), 2095 (1.6mm x 15kg spool)

## **Typical chemical composition of weld metal (%)** (Shielding Gas: Argon/CO<sub>2</sub> mix)

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С	Mn	Si	Р	S	Ni
0.05	1.30	0.40	0.013	0.011	0.95

### **Typical mechanical properties of weld metal** (Shielding Gas: Argon/CO<sub>2</sub> mix)

YP	TS	EL	IV (J)		
$N/mm^2(MPa)$	N/mm²(MPa)	%	-20°C	-30°C	
538	605	29.4	124	81	

#### Size & recommended current range (DC+)

	Dia. mm (in)	1.2 (0.045)	1.4 (0.052)	1.6 (0.062)			
	Flat, H-Fillet	180-340	200-360	200-400			
Amp	Vertical Up	120-220	140-260	160-260			
	Vertical Down	120-240	140-260	160-280			
	Overhead	120-220	140-260	160-260			