



YAWATA L-55W For 490 N/mm² High Tensile Strength Steel

Classification

AWS A 5.1 : E7016
EN 499 : E42 2 B 1 2 H5

Approvals

ABS

Applications

One side welding of pipes and general welding of 490 N/mm² high tensile strength steels for ships, and pressure vessels.

Characteristics

YAWATA L-55W is a low hydrogen type electrode for one side welding in all positions. In low current range in root pass welding of pipes, a sound penetration bead free from blow-holes is obtained due to stable arc, strong arc force, and excellent slag fluidity and coverage.

Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S	Diffusible H ₂
0.07	0.63	0.92	0.012	0.010	≤5 ml/100 g

Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %	Charpy 2V-notch J (kgf.m)
580 (59)	500 (51)	31	0°C, 150 (15.3) -49°C, 102 (10.4)

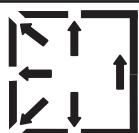
Sizes & Recommended Current Range (AC or DC +)

Diameter/ Length (mm)	2.6/300	3.2/350	4.0/400	5.0/450
Welding Position	Current (A)			
F	50~100	90~140	120~180	120~220
V, OH	40~80	80~120	100~160	140~200
One Side Welding	40~80	60~110	80~140	-

Guideline in Usage

1. Use dry electrodes only. Damp electrodes should be re-dried at 300~350°C for 60 minutes before use.
2. DC (-) should be used for one side welding.
3. 3.2 mm. diameter electrode is recommended for all positions welding of pipes with 6~15 mm. wall thickness.
4. Arc should started on a small plate or the side of the groove and cut after moving crater to the side of the groove.

Welding Positions



All positions, except vertical down