

Dual Shield 9100

AWS A5.29 E91T1-GC / JIS Z3313 T622T1-1CA-G

Description

- Dual Shield 9100 is an all position flux cored wire designed to give 60kgf/mm² minimum tensile strength with charpy V-notch impacts of 20ft-lbs at -40 °F minimum.
- In addition, Dual Shield 9100 provides a stable arc with low spatter levels when using CO₂ shielding gas.

Shielding Gas : 100%CO₂

Application

- Welding of 60kgf/mm² high tensile strength steels for steel frames, bridges, pressure vessels and penstocks. It can replace E8018-C3 electrodes.

Benefits

- Arc is stable, spatter is low, and bead is smooth with good shape and appearance. The easily removed slag covers the bead evenly. The diffusible hydrogen content is typically less than 5ml/100gr weld metal.
- It assures high welding efficiency since deposition rate is high and all-position welding is easily performed without the need to adjust current settings.

Typical Mechanical Properties of All Weld Metal

Yield Point N/mm ² {kgf/mm ² }	Tensile Strength N/mm ² {kgf/mm ² }	Elongation (%)	Impact Value J(kgf · m)
			-20 °C
590 {60}	650 {66}	26	65 {6.6}

Typical Undiluted Weld Metal Analysis %

C	Mn	Si	P	S	Ni	Mo
0.05	1.25	0.48	0.013	0.008	0.95	0.22

Special Information

- Preheating at 50-150 °C is required depending on plate thickness, restraint and heat input.

Approvals

ABS, KS, JIS