

HOBART 81N1M



SUMMARY

- > Fast-Freezing Slag
- > Nominal 1% Nickel Deposit
- > Excellent Impact Toughness
- > H4 Low-Hydrogen Deposit
- > Low Spatter and Excellent Slag Removal
- > Excellent Out of Position Performance
- > Assists in Minimizing the Risk of Hydrogen-Induced Cracking
- > Improves Operator Appeal, Reduces Clean-Up Time

CLASSIFICATION

- > AS/NZS ISO 17632-B - T554T1-1MA-N2-UH5
- > AWS A5.29: E81T1-Ni1MJ H4

DESCRIPTION AND APPLICATION

Hobart 81 is a Titania type flux cored wire designed for all positional welding of fillet and butt-welds with excellent vertical up welding characteristics. A true positional user friendly wire, providing enhanced weldability with good bead appearance, less spatter and a stable arc that produces good impact toughness, makes this product a standout performer. Hobart 81 is a H4 consumable suitable for welding 600 Mpa high tensile strength steel, Bisalloy™ 60, 70 and 80 quenched and tempered steels in the mining industry, dragline repairs, construction, machinery, bridges, storage tanks and piping.

OPERATIONAL DATA

WIRE SIZE (MM)	WELDING CURRENT RANGE (A)	ARC VOLTAGE RANGE *(V)
1.6	160-380	22-36

Recommended electrical stick out is 15-25mm.

Welding Current DC +

*Voltage is determined by arc current and wire arc length.

Welding currents and voltage shown are operational guides only.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

SHIELDING GAS	C	Mn	P	S	Si	Ni
75% Ar/25% CO ₂	0.05	1.01	0.011	0.009	0.28	0.91

TYPICAL DIFFUSIBLE HYDROGEN

Hydrogen Equipment	75% Ar/25% CO ₂
Gas Chromatography	3.7ml/100g

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Gas Type	75% Ar/25% CO ₂
Yield Stress	593 MPa
Tensile Strength	637 MPa
Elongation	28%
CVN Impact Values	119J @ -40°C

In as welded condition.

APPLICATIONS

- > High-Strength Low-Alloy Steels
- > Excellent Impact Toughness
- > Heavy Equipment Fabrication
- > Single and Multi-Pass Welding
- > Structural Fabrication
- > Bridge Fabrication
- > Shipbuilding

PACKAGING DATA

WIRE SIZE (MM)	PACK SIZE AND TYPE	PART NO.
1.6	15kg	H8-081T13016-158

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