TM-88

AWS A5.28 E80C-Ni1
EN ISO 17632-A-T 46 6 1Ni M M21 1 H5

Characteristics and Applications:

TM-88 is a gas shielded metal cored wire for welding 550N/mm^2 high tensile steel for low temperatures that features smooth spray arc, slag-free welds, low spatter, low diffusible hydrogen and low fume emission. The weld metal contains about 1% Ni and makes excellent low temperature impact toughness down to -60°C. It welds with a wider penetration profile and higher deposition efficiency than solid wire.

Multi-layer welding can be performed without removing slag. It is suitable for welding root passes, wind tower fabrication, steel structures, storage vessels and multi-layer welding on heavy plate thickness.

Notes on usage:

1. Use DC(+) polarity.
2. Use 80%Ar+20%CO_2 as shielding gas.
3. Inter-pass temperature should be under 150℃ while in multiple-pass welding.
4. Keep the product dry, while it is stored or delivered.

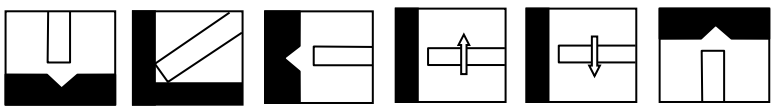
Typical chemical composition of weld metal (wt%):

	C	Mn	Si	P	S	Ni
AWS	≦0.12	≦1.50	≦0.90	≦0.025	≦0.030	0.80-1.10
EN ISO	-	≦1.4	≦0.80	-	-	0.6-1.2
Typical value	0.05	1.25	0.47	0.012	0.007	0.98

Typical mechanical properties of weld metal:

	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation %	Charpy V-Notch J (ft-lbf) -60°C(-76°F)
AWS	≧470(68)	≧550(80)	≧24	≧27(20)
EN ISO	≧460(67)	530-680(77-99)	≧20	≧47(35)
Typical value	550(80)	610(88)	32	102(75)

Welding position:



Sizes and recommended operating range (DC＜+＞):
Stick out: 15-25 (mm)，flow rate: 20-25 (l/min)

Position \ Diameter (mm)	ϕ1.2mm
F, HF	230A-320A / 26V-34V
F, H, VU, OH	90A-110A / 13V-15V

FLUX CORED WIRES

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