

Description:

HOBART TM-80Ni1M is solid wire and cut lengths copper coated wire for mild steel and 550N/mm² grade steel. It is a micro-alloyed wire for automated, gas shielded arc welding of pipelines. The precise addition of micro-alloying elements yields a weld metal that features excellent low temperature impact energy down to -50°C, along with exceptional ductility and high resistance to cracking. Further quality features of this wire include exceptional welding and flow properties. Hot, fill and cap pass welding of up to X80 grade.

Typical Wire Analysis (wt%)

--	C	Mn	Si	P	S	Ni	Mo	Cu
AWS A5.28 ER80S-G	Not specified							
Typical value	0.07	1.55	0.72	0.01	0.009	0.82	0.06	0.01

Typical Mechanical Properties of Weld Metal

Shielding Gas	Yield strength MPa(ksi)	Tensile strength MPa(ksi)	Elongation (%)	Charpy V-Notch J (ft-lbf)
80% Ar+20%CO ₂	510(74)	599(87)	31	150 (110) -51°C(-60°F)
AWS A5.28 ER80S-G	Not Specified	≥ 550MPa	Not Specified	Not Specified

Sizes and Recommended Operating Range (DC+)

Diameter (mm)	0.9	1.2	1.6
Weld position	Flat & Horizontal		
Current (Amps)	160-240	260-340	290-390
Voltage (Volts)	22-26	25-30	26-35
Stick-out (mm)	10-20	13-19	13-19

Sizes Available

MIG Wire (mm)	0.9 /1.0 /1.2 /1.6
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* The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brother Company expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by Hobart Brother Company.

