

AUTOCRAFT Mn-Mo Product data sheet



COPPER COATED, LOW ALLOY STEEL WIRES



GAS METAL ARC WELDING (MIG) WIRES

AUTOCRAFT Mn-Mo

- A Manganese Molybdenum Steel Wire for the GMAW Welding of Higher Strength steels.
- For Use with Welding Grade CO₂ or Argon Based Shielding Gases.

CLASSIFICATIONS:

ISO AS/NZS 14341:	
AWS/ASME-SFA A5.28:	

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- Ideal for Coarse Abrasion and Low to Moderate Impact Loading.
- Suitable for Use with Short-arc, Spray & Pulsed Arc Transfer Modes.

B G 55A 3 C1/M21/M24 S4M31

B G 57A 3 C1/M21/M24 S4M31

ER80S-D2 ER90S-D2

TYPICAL DIFFUSIBLE HYDROGEN LEVELS TO AS3752:

USING ARGON + 18-25% CO ₂ :				
Yield Stress	580 MPa			
Tensile Strength	680 MPa			
Elongation	24%			
CVN Impact Values	80 J av @ +20°C >47 J av @ -30°C			

TYPICAL WIRE ANALYSIS:

C:	0.08%
Mn:	1.73%
Si:	0.65%
Mo:	0.45%
S:	0.011%
P:	0.017%





DESCRIPTION AND APPLICATIONS:

Autocraft Mn-Mo is a copper coated, low alloy steel wire suitable for the all positional Gas Metal Arc Welding (GMAW) of medium to high strength steels.

Autocraft Mn-Mo produces a low alloy (nominally 1.7% Mn / 0.4% Mo) steel weld deposit of the 550 MPa tensile class. It gives excellent resistance to porosity when welding dirty or rusty plate due to its higher deoxidant levels.

Autocraft Mn-Mo is suitable for the all positional fillet and butt welding of a wide range of higher strength steels, particularly those used in the fabrication of pressure vessels, boilers and pipelines where service temperatures up to $\approx 500^{\circ}$ C are experienced. Other applications include the lower strength fillet and butt welding of components subjected to dynamic loading.

STORAGE RECOMMENDATIONS:

When held under the recommended storage conditions unopened packs of Autocraft Mn-Mo wires are expected to remain in 'factory fresh' condition for at least 12 months.

For storage over 12 months or under adverse (damp or high humidity) climatic conditions the use of heated weather proof store rooms/cupboards /containers maintained at 10-15°C above ambient temperature (with a maximum of 40°C) and at a maximum humidity of 60% R.H. is recommended. Product should be stacked on racks or pallets clear of the floor and walls.

PACKAGING AND OPERATING DATA:

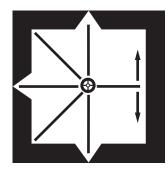
RECOMMENDED* SHIELDING GAS:

AS 4882: SG-AC-18, or SG-AC-20 SG-AO-2 SG-C ISO 14175 / AWS A5.32: M13 C1

 $Ar+CO_2$ (15-25%) or $Ar+O_2$ or Welding Grade CO_2

WELDING POSITIONS:

All positional welding applications.



WIRE Diameter (MM)	VOLTAGE Range (volts)	WIRE FEED SPEED (METERS/MIN)	CURRENT RANGE (AMPS)	PACK TYPE	PACK WEIGHT	PART NO.
0.9	16-28	3.5-15	70-230	Spool	15kg	720049
1.2	18-32	3.5-15	120-350	Spool	15kg	720052

* Spool (ø300mm).





