

CIGWELD

AN ESAB BRAND

MIG

AUTOCRAFT LW1-6

PRODUCT DATA SHEET



SOLID WIRE FOR MILD AND LOW ALLOY STEEL



AUTOCRAFT LW1-6

- A Higher Manganese / Silicon Wire for GMAW Welding of Mild & Low alloy steel
- Designed for Use with CO₂ and Argon Based Shielding Gases.
- Wide Range of Minispool, Handispool and Autopak Packaging Options.

CLASSIFICATIONS:

ISO AS/NZS 14341:	B G 49A 3U C1/M20/M21/M24 S6
AWS/ASME-SFA A5.18:	ER70S-6

RECOMMENDED SHIELDING GAS:

AS 4882:	ISO 14175 / AWS A5.32:
SG-AC-18, or SG-AC-10	M20
SG-AC-18, or SG-AC-20	M21* - Cert supplied
SG-ACO-5/2	M23
SG-C	C1

Ar+CO₂ (8-25%) or Ar+CO₂+O₂ or Welding Grade CO₂

SHIPPING APPROVALS:

Det Norske Veritas:	III YMS H5 (M21)
	III YMS H5 (C1)

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:

	USING ARGON + 18-25% CO ₂	WELDING GRADE CO ₂
Yield Stress	450 MPa.	410 MPa
Tensile Strength	550 MPa.	525 MPa
Elongation	29%	32%
CVN Impact Values	120 J @ -20°C	110 J @ -20°C

TYPICAL ALL WELD METAL ANALYSIS:

USING ARGON + 18-25% CO ₂ :				
C: 0.07%	Mn: 1.55%	Si: 0.88%	S: 0.012%	P: 0.015%

DESCRIPTION AND APPLICATIONS:

Autocraft LW1-6 is a high quality copper coated welding wire suitable for the all positional Gas Metal Arc Welding (GMAW) of mild and low alloy steels, used in general fabrication and structural work. The high quality copper coating ensures problem free feeding, smooth current pick-up and minimal contact tip wear. The higher silicon content of Autocraft LW1-6 ensures excellent operator appeal, improved fillet shape / side wall wash at weld toes and very low spatter levels important for welding light to medium gauge sheet and tubular steel sections. Fillet welds exhibit a mitre to slightly convex profile with an even and smooth contour. The higher Manganese / Silicon levels give improved weld metal deoxidation when welding steels with moderate amounts of rust or mill scale.

STORAGE RECOMMENDATIONS:

When held under the recommended storage conditions unopened packs of Autocraft LW1-6 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.

OPERATING DATA:

WIRE DIAMETER (mm)	CURRENT RANGE (amps)	VOLTAGE RANGE (volts)	WIRE FEED SPEED (meters/min)
0.8	50-180	14-22	3.5-14
0.9	70-230	15-26	3.5-15
1	100-280	16-29	3.5-15
1.2	120-350	18-32	2.5-15
1.6	180-390	18-34	2.5-10

*Mini Spool (ø100mm); Handi Spool (ø200mm); Spool (ø300mm); AutoPak (ø510mm x H.770mm);

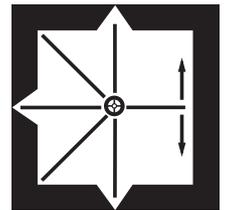
TYPICAL DIFFUSIBLE HYDROGEN LEVELS TO AS3752:

1.0 - 2.0 mls of hydrogen / 100gms of deposited weld metal.

PACKAGING DATA:

WIRE DIAMETER (mm)	TYPE	PACK WEIGHT	PACK PART NO.
0.8	Handi Spool	5kg	721109
	Spool	15kg	720114
0.9	Handi Spool	5kg	720161
	Spool	15kg	720090
1.0	Autopak	250kg	720122S
	Spool	15kg	720094
1.2	Spool	15kg	720096
	Autopak	250kg	720124S
1.6	Spool	15kg	720095

ALL POSITIONAL WELDING APPLICATIONS



COMPARABLE CIGWELD PRODUCTS:

- Comweld LW1-6 TIG rod:
- AWS/ASME-SFA A5.18: ER70S-6
- 1.6mm: 321417
- 2.4mm: 321418

AUTOPAK® PARTS LIST:

AUTOPAK ACCESSORIES "STANDARD TYPES"	PART NUMBER
1. Clear plastic feeder cone	580P010013
2. Conduit wire connector - adapter	356PES0002
3. Conduit 8m	356POTC180
4. Conduit 4m	356POTC140

- Reduced downtime = Higher productivity outcomes.
- Straight/Twist free wire = Greater wire accuracy in the joint.
- Smaller Acceleration weight = Improved arc starting.
= Less stress on wire-feed unit.
= Less wire slippage and burn backs.
= Protection against dust, dirt and moisture.
- Fully Enclosed pack and pay-off system = Ease of use in confined and restricted locations.
- Compact and manoeuvrable = Autopak occupies only 0.2m² of floor space.

1 CLEAR PLASTIC DOME AND CONDUIT ADAPTOR
P/N: 580P010013P & 356PES0002

2 AUTOPAK CONDUIT ASSEMBLY KIT
P/N: 356POTC180 & 356POTC140

3 STEEL LOCKING RING

4 HANDLE

5 PRESSURE RING

6 WIRE

7 CARDBOARD DRUM

