



- ▲ **A Higher Manganese / Silicon Wire for GMAW Welding of Mild & Low Alloy Steels.**
- ▲ **Designed for Use with CO<sub>2</sub> and Argon Based Shielding Gases.**
- ▲ **Wide Range of Minispool, Handispool and Autopak Packaging Options.**

**Classifications:**

AS/NZS 2717.1: (old)	ES6-GC/M-W503AH.
AS/NZS 14341: (new)	B G 49A 3U C1/M21/M24 S6
AWS/ASME-SFA A5.18:	ER70S-6.

**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.

**APPROVALS\*:**

Lloyd's Register of Shipping	Grade 3S, 3YS
American Bureau of Shipping	Grade 3SA, 3YSA

\* Approvals do not include 0.6mm Autocraft LW1-6

**TYPICAL WIRE ANALYSIS:**

C: 0.07%	Mn: 1.55%	Si: 0.88%
S: 0.012%	P: 0.015%	

**TYPICAL DIFFUSIBLE HYDROGEN LEVELS TO AS3752:**

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

**TYPICAL ALL WELD METAL MECHANICAL PROPERTIES:**

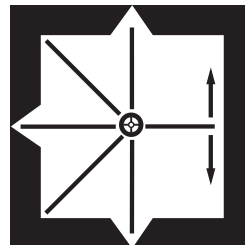
	Argon + 20-25% CO <sub>2</sub> Welding GradeCO <sub>2</sub> :	
Yield Stress	450 MPa	410 MPa
Tensile Strength	550 MPa	525 MPa
Elongation	29%	32%
CVN Impact Val.	120 J @ -20°C	110 J @ -20°C

**RECOMMENDED SHIELDING GAS:**

Ar + 10-15% CO <sub>2</sub> or equivalent	ISO14175: M 21, M24 M14
Ar + 15-30% CO <sub>2</sub> or equivalent	ISO14175: M21, M24
Ar + 5% CO <sub>2</sub> + 3% O <sub>2</sub>	ISO14175: M23
Welding Grade CO <sub>2</sub>	ISO14175: C1

**COMPARABLE CIGWELD PRODUCTS:**

Comweld LW1-6 TIG rod:  
AWS/ASME-SFA A5.18: ER70S-6



All positional welding applications

## AUTOCRAFT LW1-6



## Packaging and Operating Data:

Wire Dia mm	Voltage Range (volts)	Wire Feed Speed (metres/min)	Current Range (amps)	Pack Type*	Pack Weight	Part No
0.6	12–14	3.5–14	35–100	Mini Spool - Packs of 4 x 0.8kg	4 x 0.8kg	721104
				Handi Spool	5kg	721108
				Spool	15kg	720103
0.8	14–22	3.5–14	50–180	Mini Spool - Packs of 4 x 0.8kg	4 x 0.8kg	721105
				Handi Spool	5kg	721109
				Spool	15kg	720114
0.9	15–26	3.5–15	70–230	Handispool	5kg	720161
				Spool	15kg	720090
				AutoPak	250kg	720122A
1.0	16–29	3.5–15	100–280	Spool	15kg	720094
				AutoPak	250kg	720123A
1.2	18–32	2.5–15	120–350	Spool	15kg	720096
				AutoPak	250kg	720124A
1.6	18–34	2.5–10	180–390	Spool	15kg	720095
				** AutoPak	350kg	720125A

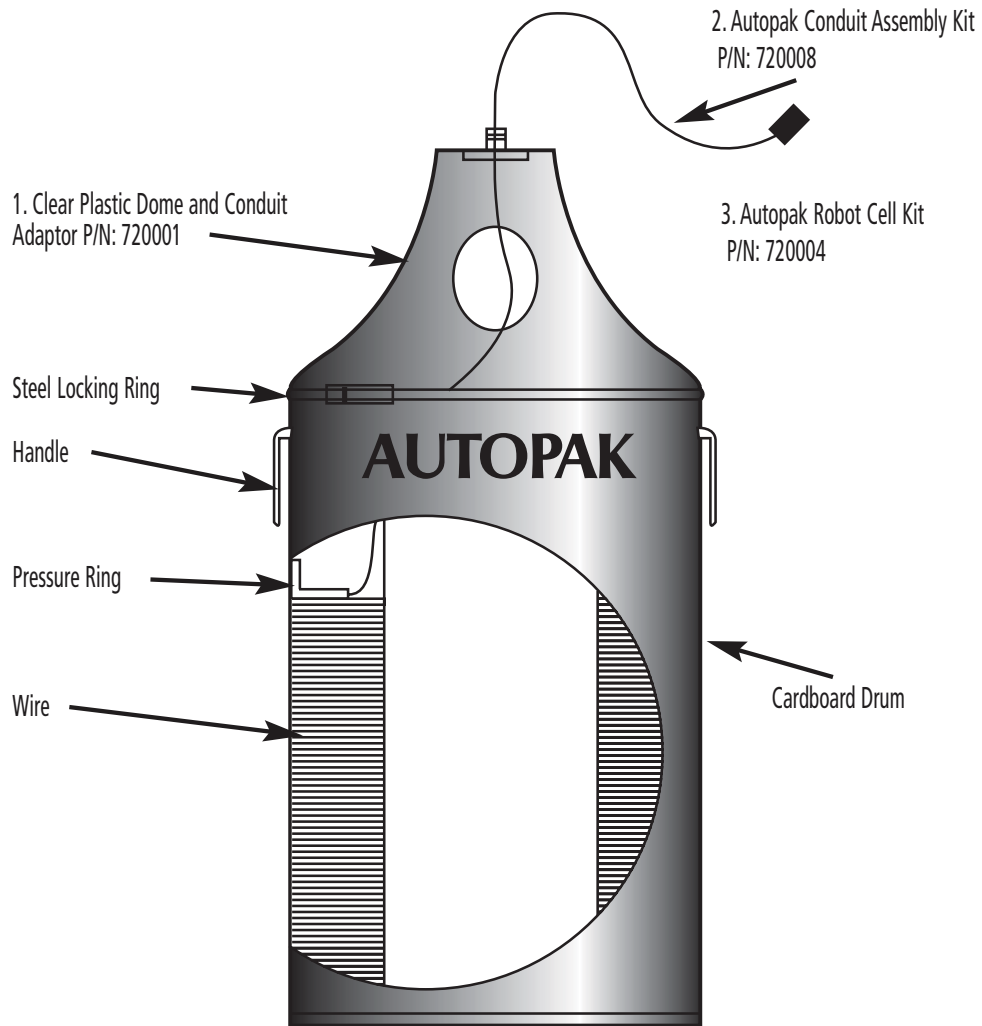
\* Mini Spool (ø100mm); Handi Spool (ø200mm); Spool (ø300mm); AutoPak (ø510mm x H.770mm); \*\* AutoPak (ø650mm x H820mm).

## AUTOPAK® Parts List:

AUTOPAK accessories "Standard Types".	Part Number.
1. Clear plastic AUTOPAK dome (510mm base diam. x 300mm height).	720001
2. AUTOPAK conduit assembly kit	720008
3. AUTOPAK robot cell kit	720004



The advantages of AUTOPAK®.



- ◆ Reduced downtime = Higher productivity outcomes.
- ◆ Straight/Twist free wire = Greater wire accuracy in the joint.
- ◆ Smaller Acceleration weight = Improved arc starting.
- ◆ Fully Enclosed pack and pay-off system = Less stress on wire-feed unit.
- ◆ Compact and manoeuvrable = Less wire slippage and burn backs.
- ◆ = Protection against dust, dirt and moisture.
- ◆ = Ease of use in confined and restricted locations. Autopak occupies only 0.2m<sup>2</sup> of floor space.