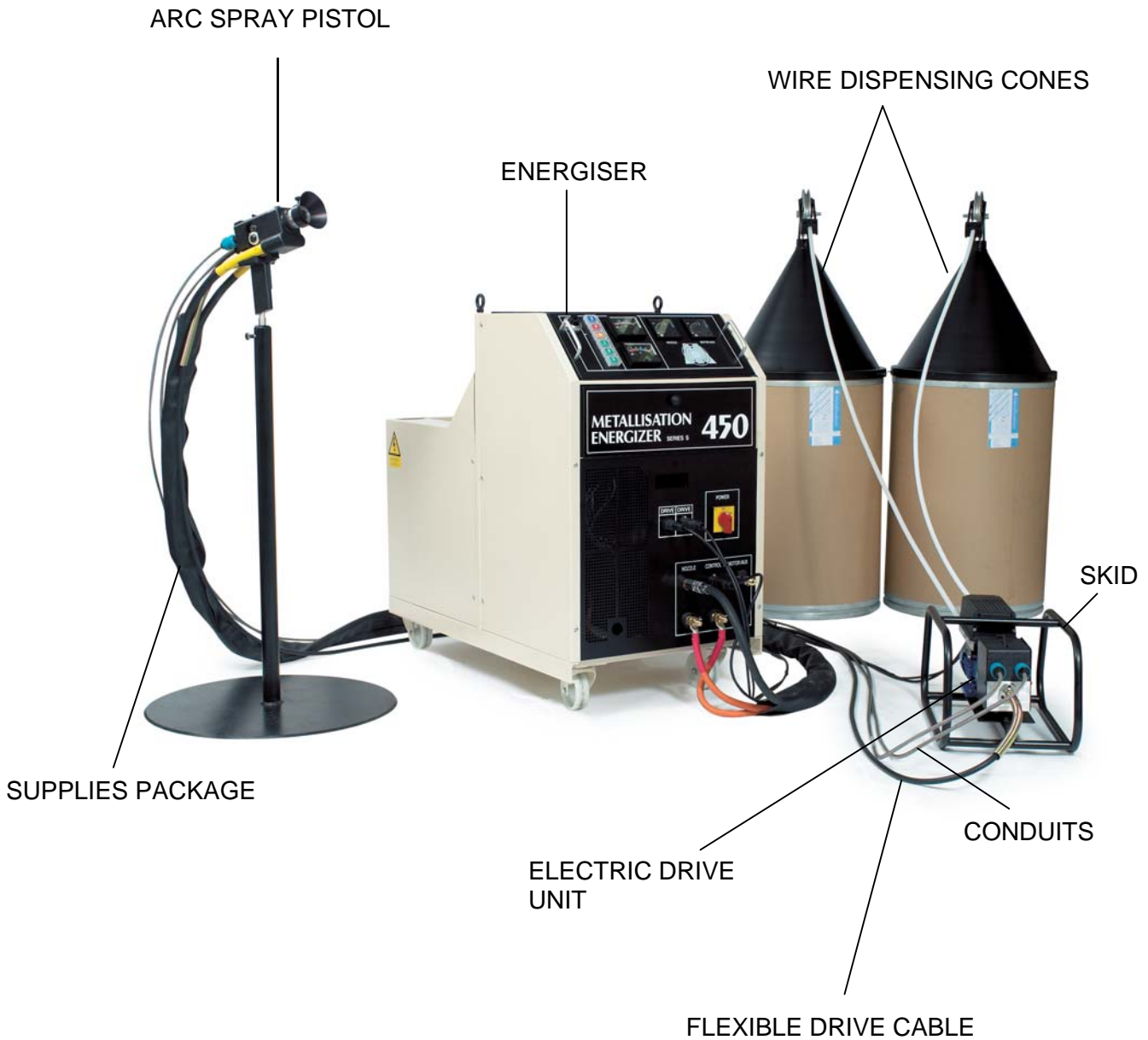


Equipment Specification

140GP Arc Spray System





1 GENERAL

The following specification covers the standard range of 140GP Arcspray system. For the specific offer, please refer to the attached quotation and cross-reference the part numbers for each piece of equipment.

2 BENEFITS

- Push Pull system for a more stable arc ensuring quality coatings with consistent operation.
- Patented Flexible Drive system (Synchronised)
- 5 to 20 Meter supplies packages for spraying accessibility.
- Air-cooled cables reduce pistol supply weight and operator fatigue.
- Good pistol manoeuvrability.
- Lightweight and good balance for ease of handling.
- Suitable for Anti-corrosion and engineering wires, steels, copper and bronzes.
- NEW sealed/lubed for life inverter motor.
- Uses 1.6mm to 2.5mm wire sizes without changing feed rollers.
- Easy to maintain, less than 3 minutes to change contact tubes and nozzles.
- Low running costs as compared with gas systems.
- Variable wire speed control for accurate spray settings.
- Soft start for smooth start ups reducing electrical loading on components.
- Trolley wire dispenser and drive unit for mobility.
- Steel reinforced conduits for extended service life.
- Choice of Three Energisers S250, V300 and S450 for different spray rates.
- Safety interlocks.
- Choice of coating textures.

3 ARC140 PISTOL



The Pistol has been designed to give consistent throughputs with high coating quality. It is a lightweight, heavy-duty unit with robust but compact construction.

Available Pistols:

Part No	Description
ARC140F-CG16	Arc140 Pistol for 1.6mm wires (Engineering)
ARC140-CG16	Arc140 Pistol for 1.6mm wires (all wires)
ARC140-CG20	Arc140 Pistol for 2.0mm wires (all wires)
ARC140-CG23	Arc140 Pistol for 2.3mm wires (all wires)

Technical overview:

- Primarily for spraying Anti-corrosion coatings however engineering coatings can be sprayed.
- Standard 1.6, 2.0 and 2.3mm wire size, 2.5mm available
- No requirement to change feed rollers when changing wire sizes.
- Quality coating.
- CG (constant geometry head) ensuring smooth feed, repeatable wire alignment and no adjustment of contact tubes required.
- The Wire Drive Unit utilises intermeshed steel wormshaft and bronze wormwheels, being driven by a lightweight, flexible drive.
- Lightweight air-cooled conductor cables are fitted; which reduces the operator supported weight and further improves the overall balance of the Pistol.
- Closed arc for improved spray conditions and efficiency.
- Arc140F pistol includes flywheel for better stability at low spray rates with engineering wires

Technical data:

Description	Characteristics
Maximum Current	350 Amps
Weight	2.3 Kgs
Weight – at a held height of 1.2 M	4.5 Kgs – inc Cables and Hoses
Width	102mm
Length	457mm
Height	229mm

Typical performance figures for the ARC140 pistol:

MATERIAL	WIRE SIZE	THROUGHPUT KG/HR @ 350 Amps
Metallisation Wire 02E Zinc	2.0mm 2.3mm	36.0
Metallisation Wire 01E/17E/25E Aluminium & Alloys	2.0mm 2.3mm	8.5
Metallisation Wire 021E Zinc/Aluminium 85/15	2.3mm 3.0mm	31.0
Metallisation Wire 05E Copper	1.6mm	17.5
Metallisation Wire 30E,35E,45E, 55E,57E,60E 65E,80E,84E Steels	1.6mm	15.8
Metallisation Wire 75E Nickel Aluminium	1.6mm	19.0

Throughput is assumed to be independent of wire diameter: preferred diameter shown bold

4 Supplies Package

Available Supplies Package:

Part No	Description
SUP140-EV5P	5M Supplies Package for S250 / V300 Energiser
SUP140-EV10P	10M Supplies Package for S250 / V300 Energiser
SUP140-EV20P	20M Supplies Package for S250 / V300 Energiser
SUP140-EX20CP	Extension to 20M Supplies Package for S250 / V300 Energiser
SUP140-EV5	5M Supplies Package for S450 Energiser
SUP140-EV10	10M Supplies Package for S450 Energiser
SUP140-EV20	20M Supplies Package for S450 Energiser
SUP140-EX20	Extension to 20M Supplies Package for S450 Energiser
7144	PTFE Wire Conduits (Supplied by the meter)
36890	3M Polymer Wire Conduits
6274/5	½" Clamp Pads for PTFE Tubing
6272/3	Clamp Pads for Polymer conduits (36890)

Standard Supplies Package includes:



Power, Air and Control Cables



Flexible Drive Cable



Wire Conduits

Technical overview:

- 5 to 20 meter supplies packages for integration to S250, S450 and V300 Energisers.
- Protective cover supplied for protection in a workshop environment.
- Various wire conduits to suit different applications and wire dispensing methods.
- Supplied with all fittings appropriate to connect to 140 Pistol and S250, S450 and V300 Energisers.
- Steel reinforced conduits for extended service life.
- Lightweight air-cooled conductor cables thereby reducing the operator supported weight and fatigue.
- Supply Package Extensions available for maximum flexibility on-site and in workshop applications.
- S250 and V300 power cables fitted with twist and lock connectors.
- S450 power cables fitted with crimped lugs.
- 7144 PTFE tubing or 36890 conduits are supplied when dispensing from drums to go between the drum dispensing cone and the wire drive unit.

5 ENERGISERS



This range of Energisers have been specifically designed for those users who are likely to spray a varying range of materials with the options of both high and low outputs. Ideally suited for the Anti-corrosion industry and General Engineering Workshop.

Available Energisers:

Part No	Description
2220-EVDUA	S250 Energiser for Inverter Drive
2228-EVDUA	V300 Energiser for Inverter Drive (Engineering)
2232-EVDUA	S450 Energiser for Inverter Drive

Technical overview:

- Specifically designed to suit only Arcspraying.
- Clear displays and large controls give ease of operation.
- Rigid construction & castor mounted offers workshop portability.
- Simple design for ease of maintenance
- S250 and S450 have switched output voltage control
- V300 gives infinitely variable output voltage for precision control on engineering applications.

5.1 S250 Energiser Specification:

Description	Characteristics
Power Requirements	380/440V 50-60Hz 3 Phase
Power Option	220/380/440V 50-60Hz 3 Phase
Fusing Required	20A/Phase (415V input)
Max Power Consumption	11.8 KWH
Duty	0-250 Amps @ 100% Duty Cycle
Output Voltage	0-45Vdc (nominal) Switched High/ Low & 1 - 5
Air Requirements	1.27m ³ /min @ 5.5bar (45cfm @ 80psi)
Weight	210 Kgs
Width	560mm
Length	1015mm
Height	1000mm

5.2 V300 Energiser Specification:

Description	Characteristics
Power Requirements	380/440V 50-60Hz 3 Phase
Power Option	220/380/440V 50-60Hz 3 Phase
Fusing Required	30A/Phase (415V input)
Max Power Consumption	14.2 KWH
Duty	0-300 Amps @ 100% Duty Cycle
Output Voltage	0-45Vdc (nominal) Infinitely variable
Air Requirements	1.27m ³ /min @ 5.5bar (45cfm @ 80psi)
Weight	305 Kgs
Width	560mm
Length	1015mm
Height	1000mm

5.3 S450 Energiser Specification:

Description	Characteristics
Power Requirements	380/440V 50-60Hz 3 Phase
Power Option	220/380/440V 50-60Hz 3 Phase
Fusing Required	40A/Phase (415V input)
Max Power Consumption	21 KWH
Duty	0-250 Amps @ 100% Duty Cycle
Output Voltage	0-45Vdc (nominal) Switched High/ Low & 1 - 5
Air Requirements	1.27m ³ /min @ 5.5bar (45cfm @ 80psi)
Weight	290 Kgs
Width	560mm
Length	1015mm
Height	1000mm

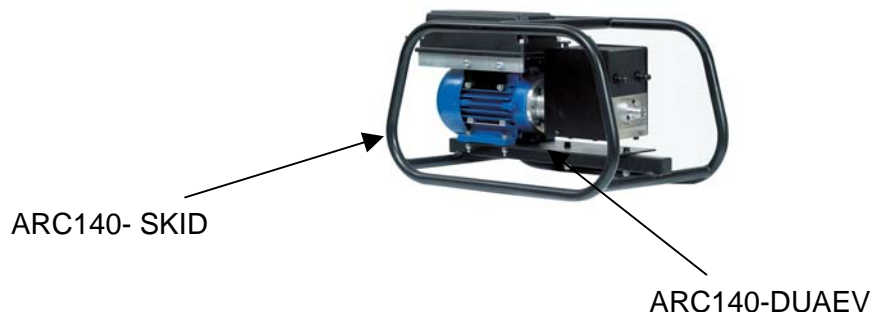
6 WIRE DRIVE UNITS

The ARC140GP Arcspray system drive unit is a push/pull system. With a drive mechanism that operates through an electric inverter controlled drive motor with a flexible drive cable up to the pistol.

Available wire dispensers:

Part No	Description
ARC140-DUAEV	Wire Drive Unit Push / Pull
ARC140-SKID	Skid to mount drive unit when dispensing from drums

ARC140-DUAEV Wire Drive Unit Push / Pull



Technical overview:

- Electric Inverter Drive Motor for smooth wire control.
- Push/pull mechanism positively drives the wire at the dispenser and also at the pistol via the flexible drive, ensuring constant speed at the drive unit and pistol
- Flexible drive cable connection for pistol wire drive.
- Ease of loading and unloading of wires.

7 WIRE DISPENSE

The wire is dispensed in many forms for the ARC140GP Arcspray system, from Standard Spools or Mig Reels to Coils and Production packs for Zinc and aluminium.

Available wire dispensers:

Part No	Description
ARC140-WTEVM	Wire Dispenser Trolley MIG Reels
ARC140-WTEV	Wire Dispenser Trolley 300mm ID Spools
21254	Wire Dispensing Cone (Pulley) for Zinc & Aluminium
2399-2TIER	2 Tier Wire dispenser for Coils

7.1 Wire Dispensing Trolley:



Technical overview:

- Specifically designed to suit Arcspraying with the reels / spools being individually insulated from each other.
- Variable brake tension to ensure wire does not uncoil.
- Designed to ensure a smooth wire feed to the pistol.
- Rigid construction
- Ease of loading and unloading of Spools/Reels.
- Mobile wire dispensing trolley allowing excellent manoeuvrability.
- Mounts the chosen wire drive unit (see section 6) in one package with the dispensing reels.

7.2 Wire Dispensing Cones (Pulley):



Technical overview:

- Suitable for dispensing Zinc and Aluminium wire
- Specifically designed to suit Arcspraying with the each drum being individually insulated from each other.
- Fitted Pulley to ensure a smooth wire feed to the pistol.
- Rigid construction
- Ease of loading and unloading of the wire.
- Drums available in 125kg and 250 Kg for Zinc plus 100Kg for Aluminium.
- Needs to be used with a wire drive unit and skid (see section 6)

7.3 Two Tier Wire Dispenser:



Technical overview:

- Suitable for dispensing raw materials that are only available in wire form
- Wire straighter (for engineering wires) to ensure smooth wire feed to the pistol
- Specifically designed to suit Arcspraying with the each coil being individually insulated from each other.
- Variable brake tension to ensure wire does not uncoil.
- Designed to ensure a smooth wire feed to the pistol.
- Rigid construction
- Lower tier swings out for Ease of loading and unloading of the Coils.
- Castors fitted to the bottom of the dispenser allowing excellent manoeuvrability.
- Needs to be used with a wire drive unit and skid (see section 6)

8 TOOL KIT

Appropriate hand tools are supplied with the Arcspray system along with an operating manual and pistol case.

9 OPTIONS

The Arcspray 140E system can also use a variety of optional extras these include the following items

9.1 Arc Beam:

Part No	Description
ARCBEAM(140)	Arcbeam for 1.6mm ARC140 Pistol

Technical overview:

- Reduces Arcspray footprint.
- Finer Coatings
- Improved Deposit efficiency when spraying onto small components.
- Less apparent porosity.
- Improved hardness.

Technical data:

Description	Characteristics
Maximum Current	350 Amps
Compressed Air	0.7m ³ / min @ 3.5 Bar

9.2 Arc Extensions:

Part No	Description
ARC140EX500	Arcspray deflector extension 1.6mm, 500mm Long
ARC140EX1000	Arcspray deflector extension 1.6mm, 1000mm Long
ARC140EX1500	Arcspray deflector extension 1.6mm, 1500mm Long

Technical overview:

- Suitable for internal bores (min Diameter 75mm) or recesses.
- Variable deflected spray from 0 to 75 Degrees
- Rigid construction

Technical data:

Description	Characteristics
Maximum Current	200 Amps
Compressed Air	0.6m ³ / min @ 4.5 Bar