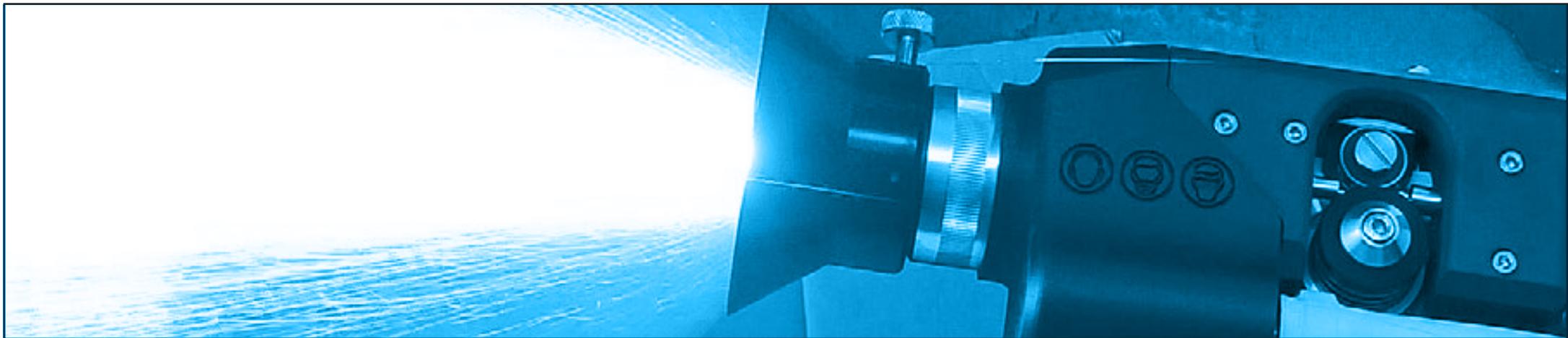


# ARC145/150-RC



Equipment Spec

# Introducing the ARC145/150-RC



The most comprehensive remote control arc spray unit for automatic spray applications to date!

Completing the family of robust versatile twin wire arc spray systems is the remote control range of **NEW ARC145/150(19) and ARC145/150P**. All four systems are based on our manual ARC145/150 push pull and ARC145/150P push systems but RC versions are optimised for automation. Designed with state-of-the-art features and options, the energisers sophisticated control technology

enables quick and easy switching between closed loop and open loop spraying. The display screens show clear and concise details for parameter feedback. These details are monitored at over 500 times/sec to enable superior coating results. The energiser can be connected directly to a PLC in an automation system like a robot to enable control and parameter feedback.

**ROBUST  
TWIN  
WIRE ARC  
SPRAY**



- Automation Integration
- Powerful & versatile
- Sturdy & robust
- Outstanding performance



A complete arc spraying system combining our NEW ARC145/150(19) or ARC145/150P RC pistols & NEW (19) Model 250/350/500 Amp Energiser.

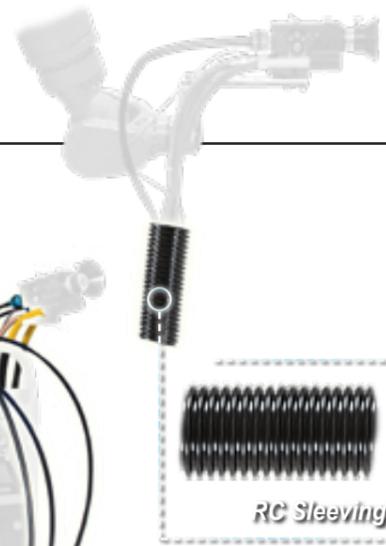
**SOPHISTICATED**

**CLEAR CONTROLS**





# System Overview



## RC PUSH / PULL PISTOL

- Industrial 3D printed parts.
- Carbon fibre reinforced.
- Spray voltage measured at pistol.
- Light yet sturdy design.
- Reversible V-Rollers.
- Contact tips and air concentrator.
- Robot/automation mounting points.

## RC '19' SERIES ENERGISER

- Fan on demand saves power and reduces noise.
- Robust push button controls of current, nozzle and aux air.
- Industrial plugs / sockets.
- Rear handle.
- Remote PLC connectivity.

## '19' SERIES DRIVE UNIT

- Compact design.
- Quick release MIG reel carriers which are easy to disassemble to feed in small access manholes.
- Lighter weight.

## SUPPLIES PACKS

- Lengths to suit.
- Industrial connections.
- Robust manifold & cover.
- Lightweight cooled conductors.
- Robot mounting kits

**NEW FOR 2019**

**ROBUST PARTS**

**POWERFUL**

**VERSATILE**

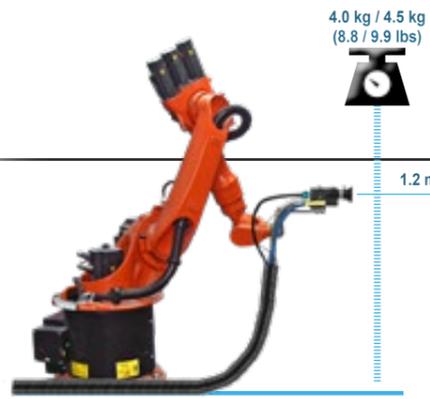




# Pistol

The pistol has been designed to give consistent through-puts with high coating quality at 350A (ARC145) or 500A (ARC150). Thanks to the introduction of 3D printed parts it is now even lighter, whilst retaining its heavy-duty, robust and compact design. The synchronised wire drive allows for longer supplies whilst spray voltage is measured at the pistol for improved reliability and diagnostics.

**IDEAL FOR REMOTE SPRAYING**



## OPTIONS

Part No.	Description
ARC145(19)RC-CT**	ARC145(19) for remote control for **mm wires
ARC150(19)RC-CT**	ARC150(19) for remote control for **mm wires
ARC145PRC-CT**	ARC145P for remote control for **mm wires
ARC150PRC-CT**	ARC150P for remote control for **mm wires
** 1.6, 2.0, 2.3 or 2.5 mm	
ARC150-PAK-VERT	Pistol Mount Vertical Air Knife Bracket Assembly
6910	Super Spreader Shroud Assy (With Solid Pipes)
ARC150-KS-VERT	Air Knives & Super Spreader Pipes Vertical Support Bracketry Assembly

Reversible U-Rollers mean twice the life



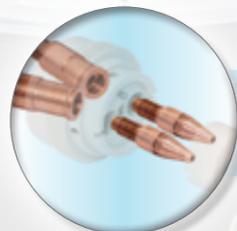
Carbon fibre toughness for the harshest environments.



ROBUST ROBOT MOUNTING

INDUSTRIAL 3D CARBON FIBRE PRINTED

STRENGTH, DURABILITY & FLEXIBILITY COMBINED



Contact tube & tip arrangement

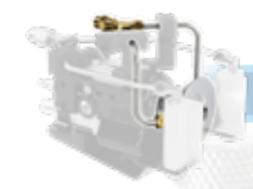


Designed for robot mounting



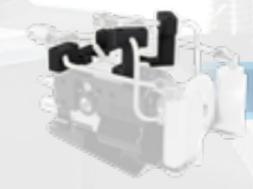
### Air Knives

The Air Knife Bracket assembly ensures limited dust enters the substrate and also keeps the substrate cool.



### Super Spreader

The Super Spreader assembly option gives wider spread and better control.



### Vertical Support

Adding support to the solid pipes that make up the Air Knives and Super Spreader.



Carbon Fibre Toughness



Improved Maintenance Access



Reduced Weight Design

# '19 Series' Energiser



The energiser has been specifically designed for those users who are likely to spray a varying range of materials. Ideally suited for the automation of both engineering and corrosion protection applications.



Energy saving  
**AUTO-STANDBY mode**

## OPTIONS

Part No.	Description
S245(19)-PLC-RC	S245(19) ARC145-RC Energizer with closed loop current control, remote control of pistol, current & air pressures, inclusive of Pendant (250A) (415Vac)
S345(19)-PLC-RC	S345(19) ARC145-RC Energizer with closed loop current control, remote control of pistol, current & air pressures, inclusive of Pendant (350A) (415Vac)
S500(19)-PLC-RC	S500(19) ARC150-RC Energizer with closed loop current control, remote control of pistol, current & air pressures, inclusive of Pendant (500A) (415Vac)

Dust proof controls & closed loop indicator



Pendant for manual control



Sturdy control connections



Remote PLC RJ45 Connection



IP65 Gorilla Glass LED gauges



Claw and whip-check air connection on rear.

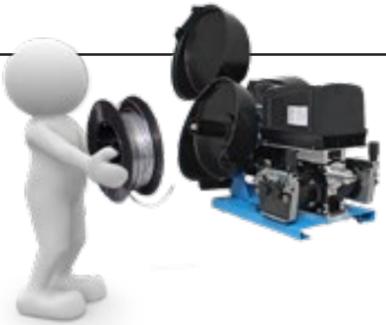


100% DUTY CYCLE

INDUSTRIAL CONNECTIONS

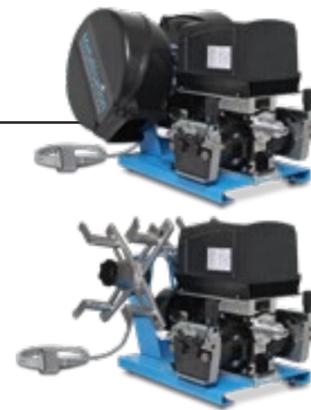


# '19 Series' MIG / SPOOL Wire Dispense



The drive unit is now more compact than ever, but that doesn't mean it's any less durable. The addition of a top set of driven rollers provides an even more reliable, positive wire feed. Quick

release MIG covers make it easy to disassemble & fit through small manholes. Alternatively there is the option to dispense from layer spools which also features the quick release feature.



## OPTIONS

Part No.	Description
DR**(19)-**M	ARC**(19) Drive unit for MIG Dispensing (**mm)
ARC145(19)-DDA-M	ARC145(19) Pull Only Drive Unit Assy for MIG Dispensing 1.6mm Wires
DR**(19)-**S	ARC**(19) Drive unit for SPOOL Dispensing (**mm)

\*\*\*145 or 150 \*\* Sizes available: 1.6mm, 2.0mm, 2.3mm, 2.5mm

Quick release  
MIG covers



Additional top set  
of driven rollers



Heavy duty (0.55kW)  
electric inverter drive



Profiled drive rollers for  
1.6, 2.0, 2.3 or 2.5mm



Ultimate performance &  
reliability of wire feeding



WIRE SPECIFIC ROLLERS

GROOVED & SMOOTH SETS

REVERSIBLE FOR LONG LIFE

NEW  
COMPACT  
DESIGN

Adjustable  
Wire  
Tension



Profiled  
Drive  
Rollers



Maintenance  
Free  
Gearbox



# '19 Series' Drum Dispense



Through the Metallisation wire dispensing cone, wire is neatly guided to a dispense point, then over the pulley to give a free passage of wire from the drum to pistol. As before the drive unit is now more compact than ever, and there is still the addition of a top set of driven rollers providing even more reliability.



## OPTIONS

Part No.	Description
DR**(19)-**D	ARC145(19) Drive unit for Drum Dispensing (**mm)
***145 or 150 ** Sizes available: 1.6mm, 2.0mm, 2.3mm, 2.5mm	
21252-51A	Wire Dispensing Cone with Adjustable Reeling Pulley Assembly (51CM)
21252-56A	Wire Dispensing Cone with Adjustable Reeling Pulley Assembly (56CM)
21252-59A	Wire Dispensing Cone with Adjustable Reeling Pulley Assembly (59CM)
6274/5	Clamp Blocks (Pair) 1/2"
7144	1/2" Dia Ptfе Tubing

Plastic drum cone with viewing window



Variable position clamp pad assembly



150 / 250 KG FOR ZINC

200 KG FOR ZINC / ALUMINIUM

60 KG FOR ALUMINIUM



21252-51A  
21252-56A  
21252-59A



6274/5



7144



Smooth  
Pulley  
Action



Large  
Viewing  
Window



Built  
To  
Last



# Modular Wire Guide System

Our Modular Wire Guide System offers an innovative solution to the problem of arc failures due to points of high friction on the wire around bends. 45° modules can be linked together to create turns of 90°, 135° or 180° from the wire dispensing system. This also allows for improved consistency and longer runs.

**SMOOTH  
LOW FRICTION  
FEEDING**

## Connections to suit PTFE and Hansen Conduits



**PTFE CONDUITS:**  
2 VARIANTS AVAILABLE TO  
ACCOMMODATE DIFFERENT  
WIRE SIZES



**HANSEN CONDUITS**



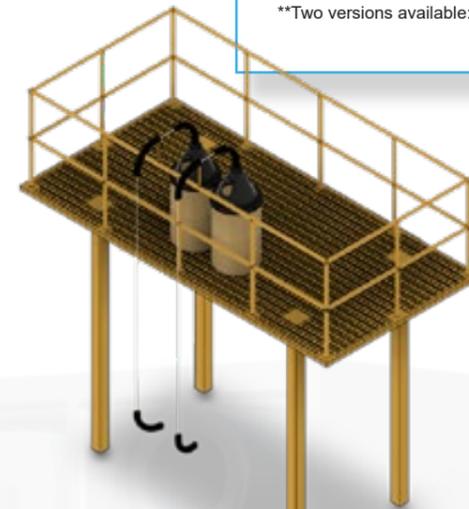
OPTIONS FOR ALL WIRES

SAVES FLOOR SPACE

## OPTIONS

Part No.	Description
<b>COMPLETE ASSEMBLIES</b>	
30393H	Wire dispensing cone (plastic with viewing window), 51cm drums inc 90° wire module to suit "Hansen" type conduits
30393P	Wire dispensing cone (plastic with viewing window), 51cm drums inc 90° wire module to suit PTFE conduits MAX Ø2.5
<b>INDIVIDUAL PARTS</b>	
30390**	45° Wire Guide Module MAX Ø2.5mm wire
30391**	End Cap Connectors (A&B) 1/2" Outlet Thread
8535	1/2" BSP to Hansen coupling
8548 & 8549	Transition Bush 1/2" BSP Male to 1/2" BSP female with leading edge & 1/2" BSP to 1/2" OD PIPE

\*\*Two versions available: **Standard** - MAX Ø2.5mm wire and **LW** - Large Wires (2.5-5.0mm)



Example Set-Up

The above illustrates the flexibility of the system when wire drums are situated further away and on a different level



Reduces Downtime

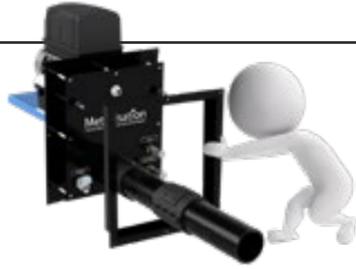


Smooth Low Friction Feed



Roller & Bearing System

# Arcspray Integrated Accessories



The Bulkhead Booth mounts attach to a booth wall allowing connection of the flexible drive, conduits, control cable, auxiliary air and air knives. The Manifold Plate Assembly allows the system specific supplies to seamlessly connect the system through the booth wall. It neatly holds and guides the supplies coming from the Assembly providing the ultimate connection freedom whilst providing unique acoustic properties.

**DESIGNED SPECIFICALLY FOR RC**

## OPTIONS

Part No.	Description
DR1XX(19)-BULK-**	ARC1XX Drive Unit Bulkhead Assembly (19), ** Dispense
DR1XX(19)-BULK-MAN-**	ARC1XX Drive Unit Bulkhead Manifold Assembly (19), ** Dispense
DR1XX(19)-BULK-COND-D	ARC1XX Drive Unit Bulkhead Conduit Assembly (19) Drum Dispense
**Drum or MIG Dispense	
WSM-ARC-PC-AC-C	Arc Wire Speed, Power and Air Consumption Monitoring Console
WSM-ARC-PC-AC-C-DUAL	Dual Arc Wire Speed, Power and Air Consumption Monitoring Console
WSM-RMA-ARC	Wire Speed Reader Module Assembly (ARC Systems)

Capable of accommodating multiple wall depths



### Consumption Monitoring Console

Single and dual version consumption monitors including a Siemens PLC that interfaces with the various sensors & makes the information available to other industrial control systems via Ethernet connection.



### Wire Speed Monitor

The WSM-RMA-ARC Wire Speed Reader Module Assembly attaches to the drive unit and works in conjunction with the monitoring console

**BULKHEAD MOUNTS**

**MONITORING CONSOLES**

**PISTOL ACCESSORIES**

Manifold or direct connection options



**Designed for Robot Booths**



**Wire Speed Monitoring**



**Remote Control**

**Metallisation**  
Thermal spray equipment and consumables



# Supplies Package

The system supplies connect from the energiser or trolley to the pistol. They include the power, air & control cables & wire conduits in the suitable size for the system (up to 20m). Refer to system configuration pages to select supplies lengths.

## OPTIONS

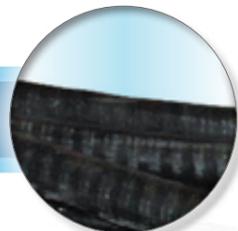
Part No.	Description
SUP145(19)-**M	Arcspray 145(19), **M Supplies Package for Electric Drive, S245(19)-S345(19)
SUP150(19)-**M	Arcspray 150(19), **M Supplies Package for Electric Drive, S500(19)
<small>**145 Lengths available: 5,10,15,20 m. 150 Lengths available:10, 15, 20 m</small>	
SUP145 BULK-IN	Arcspray145, 5m Input Supplies Package for Electric Drive, S245/S345-RC
SUP145 BULK-OUT	Arcspray145, 3.5m Output Supplies Package for Electric Drive, S245/S345-RC
SUP150 BULK-IN	Arcspray150, 5m Input Supplies Package for Electric Drive, S500-RC
SUP150 BULK-OUT	Arcspray150, 3.5m Output Supplies Package for Electric Drive, S500-RC



Twist & lock power cables and quick release air hose



Industrial connections as standard



Robust conduits



CONDUCTOR CROSS SECTION



Lightweight air-cooled conductors reduces operator fatigue



**ROBUST & STURDY COVERS**

FOR S245 / S345(19)/ S500(19) ENERGISERS

ROBOT SUPPLIES SUPPORT KITS



# Remote Pendant & Optional Accessories



A number of accessories are available to further enhance the arc spraying process:

-  Remote Pendant (included).
-  The Arcbeam Kit.
-  Arc Extension.

They are easily integrable and designed specifically for the Metallisation arc spraying systems.

**FOOTPRINT REDUCING  
ARCBEAM**

**MANUAL CONTROL  
PENDANT**

## OPTIONS

Part No.	Description	Part No.	Description
<b>ARCBEAM SYSTEM KIT</b>		<b>ARC EXTENSION</b>	
ARCBEAM(***)1.6	Arcbeam System Kit for ARC*** using 1.6mm or 2.0mm wires	ARC***-EXT-XX-YY	Arcspray *** Extension Deflector XXmm Long YYmm Wires
ARCBEAM(***)2.3	Arcbeam System Kit for ARC*** using 2.3mm or 2.5mm wires	***145 or 150 XX = Lengths available (150mm, 500mm, 1000mm, 1500mm) YY = Wire Sizes available (1.6mm, 2.0mm, 2.3mm, 2.5mm)	
21601/*	3/8" QR Air Hose (* x 6 / 11 / 16 / 21 m)	21601/*	3/8" QR Air Hose (* x 6 / 11 / 16 / 21 m)

## REMOTE PENDANTS



The remote pendant allows remote operation of the system. It connects into the energiser in a dedicated socket on the rear of the energiser. A remote pendant is included as part of the system.

## ARCBEAM KIT



The Arc beam system kit reduces the arcspray footprint by forming a cone of compressed air outside the spray stream. This provides several benefits such as finer coatings and improved deposit efficiency when spraying onto small components.

The kit includes the non-opaque parts visible in the exploded illustration to the left.

## ARC EXTENSION



The Arc extension is suitable for internal bores (min diameter 75 mm) or recesses and has a variable deflected spray from 0 to 75 degrees. It is available in 4 standard lengths, 0.15 m, 0.5 m, 1 m and 1.5 m. Refer to the Detailed Specifications section of this document for further information.

The extension includes the non-opaque parts visible in the illustration to the left.

# Typical System Configurations

Metallisation has the right configuration for all requirements. Below are some typical set ups. Variations of these configurations may be possible. Please contact Metallisation to discuss your specific application requirements.



**THE PERFECT SOLUTION FOR EVERY APPLICATION**

TYPICAL EXTENDED CONFIGURATIONS		
Extended Supplies	Pistol Supplies	Total Max
10 m	145 = 5 / 10 / 15 / 20 m 150 = 10 / 15 / 20 m	50 m
20 m		
10+20 m	10 m	
20 + 20 m		

**Note:** Maximum total supplies pack length is 50 m. This can be a combination of 30+20 or 40+10.

## STANDARD CONFIGURATIONS



Most commonly used for on-site anti-corrosion applications where loading of the smaller MIG reels is more feasible than using drum material.

### PUSH / PULL SYSTEM WITH WIRE IN MIG REELS

- 1 (19) Model Energiser - 250A, 350A or 500A.
- 2 Drive Unit & MIG Reels (can be mounted on Energiser, wall, floor or trolley).
- 3 145 = 5 / 10 / 15 / 20 m. 150 = 10 / 15 / 20 m supplies from wire drive to pistol.
- 4 ARC145(19) or ARC150(19) Pistol.

## EXTENDED CONFIGURATIONS



**MIG:**  
Most commonly used in hard to reach areas such as boilers/vessels where access to the energiser is limited. Also used to spray longer objects where easy movement around the workpiece is needed.

**DRUM:**  
For very long access applications where there is a benefit to remotely site the energiser away from the spraying area and maintain the benefit of having wire in drums.

**BULKHEAD:**  
To attach to a booth wall allowing connection of the flexible drive, conduits, control cable, auxiliary air and air knives.

### PUSH / PULL SYSTEM WITH DRIVE ON FLOOR OR VIA BOOTH BULKHEAD

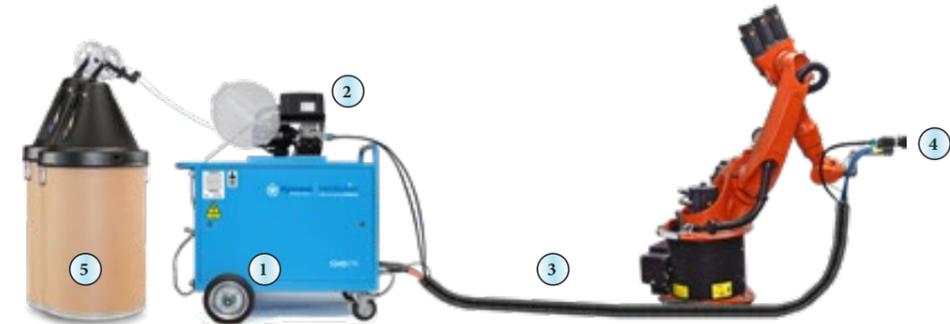
- 1 (19) Model Energiser - 250A, 350A or 500A.
- 2 Extension Supplies can be 10 or 20 m complete supplies or a combination of: 10+20 (making 30 m) or 20+20 (making 40 m) - joined with sleeve.
- 3 Drive Unit (on floor / shelf) & MIG Reels (or drum) with quick release connections.
- 4 145 standard supplies: 5, 10, 15 or 20 m (maximum of 10 m when using 20+20 extension). 150 standard supplies: 10, 15 or 20 m (maximum of 10 m when using 20+20 extension).
- 5 ARC145(19) or ARC150(19) Pistol.
- 6 Bulkhead options.



Most commonly used for in-house or on-site anti-corrosion applications where drums can easily be handled.

### PUSH / PULL SYSTEM WITH WIRE IN DRUMS

- 1 (19) Model Energiser - 250A, 350A or 500A.
- 2 Push / Pull Drive Unit (can be mounted on Energiser, wall, floor or trolley).
- 3 145 = 5 / 10 / 15 / 20 m. 150 = 10 / 15 / 20 m supplies from wire drive to pistol.
- 4 ARC145(19) or ARC150(19) Pistol.
- 5 Wire in drums or coils (use 2-tier wire dispenser - 3 m max. wire to drive).



Push system versions of the RC systems are also available (Illustrated above is the 145P and S345(19) system).

### PUSH SYSTEM WITH WIRE IN DRUMS

- 1 (19) Model Energiser - 250A, 350A or 500A.
- 2 Drive Unit (can be mounted on Energiser, wall, floor or trolley).
- 3 5m supplies from wire drive to pistol.
- 4 ARC145P or ARC150P Push Pistol.
- 5 Wire in drums or MIG.

# Detailed Specifications



## PISTOL

### Detailed Specifications

- Industrial 3D printing technology.
- Closed arc for improved spray conditions and efficiency.
- Air concentrator for fine coatings and contact tip cooling.
- Push button design for easy operation and maintenance.
- Standard 1.6, 2.0, 2.3 and 2.5 mm wire size.
- Contact tips accessible and easily changed without dis-assembling the spray head.
- Lightweight air-cooled conductor cables are fitted; which reduces the operator supported weight and further improves the overall balance of the pistol.
- Long contact tube and tip arrangement – improved coating quality and reliability due to optimised heat dissipation.
- Spray voltage measured at the pistol for improved reliability and diagnostics with long supplies packs.
- Profiled drive rollers suitable for 1.6/2.0 mm and 2.3/2.5 mm wires. Rollers have 2 grooves and can be reversed for long life operation.
- Retrofittable to (16) range energisers (NB: requires drive modification).

### Key Information

	ARC145	ARC150
Width	95 mm (3.7 ")	95 mm (3.7 ")
Length	265 mm (10.4 ")	265 mm (10.4 ")
Height	127 mm (5 ")	127 mm (5 ")
Weight	1.71 kg (3.8 lbs)	1.79 kg (3.9 lbs)
Weight – at a mounted height of 1.2 m	4.0 kg (8.8 lbs)	4.5 kg (9.9 lbs)
Maximum Current	350 Amps	500 Amps

### ARC145 Typical Performance Figures

MATERIAL	WIRE DIAMETER	THROUGHPUT (KG / HR @ 250 A)	THROUGHPUT (KG / HR @ 350 A)	COVERAGE m <sup>2</sup> / kg / 100 μm
Metallisation Wire 02E Zinc	2.0 mm 2.3 mm	26.0	36.4	1.07
Metallisation Wire 01E Aluminium	2.0 mm 2.3 mm	6.3	8.8	3.11
Metallisation Wire 21E Zinc/Aluminium 85/15	2.0 mm 2.3 mm	17	23.8	1.28
Metallisation Wire 05E Copper	1.6 mm	12.5	15(@300 A)	0.91
Metallisation Wire 30E,35E,45E,55E,57E,60E,65E,80E,84E Steels	1.6 mm	11.3	13.6(@300 A)	1.02
Metallisation Wire 75E Nickel Aluminium	1.6 mm	13.6	16.4(@300 A)	1.09
Metallisation Wire 10E Aluminium Bronze	1.6 mm	11.3	13.6(@300 A)	1.37
Metallisation Wire 15E Phosphor Bronze	1.6 mm	15.8	19(@300 A)	0.91
Metallisation Wire 70E/71E Monel	1.6 mm	14.3	17.2(@300 A)	1.02
Metallisation Cored Wire 103T FeCrB	1.6 mm	12	14.4(@300 A)	1.18

### ARC150 Typical Performance Figures

MATERIAL	WIRE DIAMETER	STAND OFF DISTANCE	THROUGHPUT (KG / HR @ 500 A)	SUBSTRATE COVERAGE m <sup>2</sup> / kg / 100 μm	COVERAGE QUANTITY kg / m <sup>2</sup> / 100 μm
Metallisation Wire 01E Aluminium	2.5 mm	100 mm	12.60	3.64	0.27
		150 mm		3.11	0.32
Metallisation Wire 02E Zinc	2.5 mm	100 mm	52	1.14	0.88
		150 mm		1.07	0.94
Metallisation Wire 02E Zinc (With Super Spreaders)	2.5 mm	100 mm	52	1.13	0.89
		150 mm		1.06	0.95
Metallisation Wire 21E Zinc/Aluminium 85/15	2.5 mm	100 mm	34	1.33	0.75
		150 mm		1.28	0.78
Metallisation Wire 28E Arcotec	2.3mm	*	12	3.85	-
Metallisation Wire 72E Inconel 625	1.6mm	*	13.6(@300A)	1.02	-

\*Unless specified all figures are based on spraying at around 4-6" (100mm-150mm) from nozzle to target piece.

Throughput is assumed to be independent of wire diameter. All data provided is an approximation and is offered as guidance only as performance can vary depending on application and parameters.

# Detailed Specifications



## S245/S345/S500(19)-PLC ENERGISER

### Detailed Specifications

- 250 / 350 / 500 Amp Continuous operation (100% duty cycle).
- Large 'Site Capable' wheels and rigid handle offers portability on site and in workshop.
- Dust proof push button control - for current setting.
- Fan on demand (energy saving and noise reduction when not spraying).
- PLC control for improved reliability and ease of maintenance / fault finding.
- Sealed electrical control circuit - reduces dust ingress for added reliability.
- Specifically designed to suit only ARC spraying.
- LED and Ethernet fault alarm feedback.
- LED mode indicator for closed / open loop mode.
- Closed Loop Current Control – easily switchable / reliable spray rate / over-current protection.
- Robust industrial connections as standard for all control cables.
- Claw and whip-check air connection.
- Air regulators with 'lock-off' potential.
- Digital air pressure switches with display for easy setting and diagnostics.
- Thermal switch on rectifiers.
- Heat sink increased for better thermal dissipation.
- Easy access energiser panels & external fuse bank for reduced Mean Time to Repair (MTTR). Shake-proof terminals minimise risk of loose control connections.
- Switched output voltage control.
- 220V/380V/415V input supply options available (hard wired).
- Remote operation E-stop kit allows energiser to be started/stopped remotely via a pendant or interfaced into an automation E-stop circuit. It comes with a plug that can be wired as required.

### Key Information

	S245(19)	S345(19)	S500(19)
Dimensions (W x L x H)	670 mm x 1220 mm / 910 mm 26.4 " x 48 " x 36 "		
Weight	243.8 kg (537.5 lbs)	253.8 kg (559.5 lbs)	288.8 kg (637 lbs)
Input Power Requirements	380/415/460 V 50-60Hz 3 Phase		
Optional Input Power	200/220 V 3 phase 50/60hz		
Fusing Required	21 A @ 415 Vac 23 A @ 380 Vac 40 A @ 220 Vac 44 A @ 200 Vac	26 A @ 460 Vac 29 A @ 415 Vac 31 A @ 380 Vac 55 A @ 220 Vac 60 A @ 200 Vac	37 A @ 460 Vac 40 A @ 415 Vac 44 A @ 380 Vac 76 A @ 220 Vac 84 A @ 200 Vac
Max Power Consumption	15 KVA (46 Vdc/250 A output)	21 KVA (46Vdc/350 A output)	29 KVA (46 Vdc/500 A output)
Typical Power Consumption	8.5 KVA (Zinc 26 Vdc/250 A output) 12 KVA (Aluminium 35 Vdc/250A output)	12 KVA (Zinc 26 Vdc/350 A output) 16 KVA (Aluminium 35 Vdc/350 A output)	16 KVA (Zinc 26 Vdc/500 A output) 22 KVA (Aluminium 35 Vdc/500 A output)
Duty	0-250 AMPS @ 100% Duty Cycle	0-350 AMPS @ 100% Duty Cycle	0-500 AMPS @ 100% Duty Cycle
Output Voltage	0-49 Vdc (nominal) Switched High/Low & 1 - 5		
Air Requirements	1.5 m <sup>3</sup> /min @ 5 bar (53 cfm @ 72.5 psi)		



### DIGITAL DISPLAYS

- Easy to read with scale and numerical display.
- Higher accuracy than traditional gauges.
- Warning alert status (ammeter turns red if over-current).
- Wide viewing angle with high contrast for ease of viewing inside or out.
- IP65 rated and Gorilla glass screens.

# Detailed Specifications



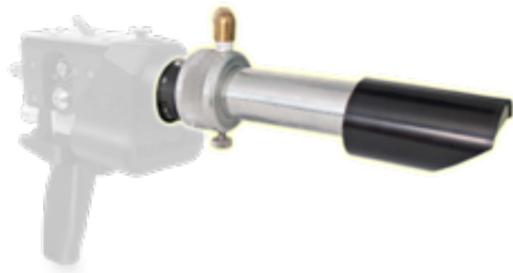
## ARCBEAM SYSTEM KIT

### Detailed Specifications

- Reduces Arcspray footprint by forming a cone of compressed air outside the spray stream.
- Finer coatings resulting in lower porosity.
- Improved Deposit efficiency when spraying onto small components (less overspray).
- Increased hardness due to higher oxide content.
- Air hoses with quick release connections to connect the accessories to the auxiliary air supply on the energiser.

### Technical Information

Maximum Current	350 Amps / 500 Amps
Compressed Air	0.7 m³ / min @ 3.5 Bar



## ARC EXTENSION

### Detailed Specifications

- Available in 4 standard lengths: 0.15 m, 0.5 m, 1 m, 1.5 m.
- Suitable for internal bores (min Diameter 75 mm) or recesses.
- Variable deflected spray from 0 to 75 Degrees.
- 1.6 mm to 2.5 mm zinc or zinc/aluminium wires can be sprayed through any length extension.
- 1.6 mm engineering wires can be sprayed through any length extension.
- 2 mm to 2.5 mm aluminium wires can only be sprayed through the 0.15 m extension.
- With wire conduit lengths >10 m, extension lengths should not exceed 1 m.

### Technical Information

Maximum Current	300 Amps
Compressed Air	0.7 m³ / min @ 4.5 Bar



## AIR KNIVES & SPREADER

### Detailed Specifications

- The Air Knife Bracket assembly ensures limited dust enters the substrate and also keeps the substrate cool.
- The Super Spreader assembly option gives wider spread and better control.

### Technical Information

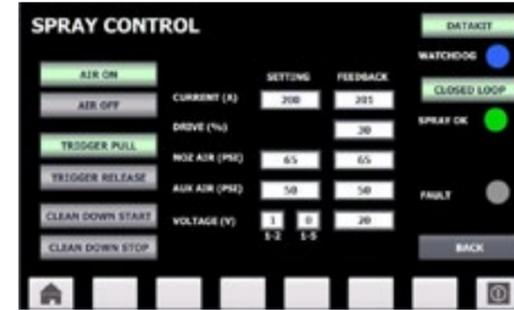
Air Knives Compressed Air	0.71 m³ / min @ 6 Bar
Spreader Compressed Air	0.57 m³ / min @ 2.5 Bar

# Detailed Specifications

## REMOTE CONNECTION

### Detailed Specifications

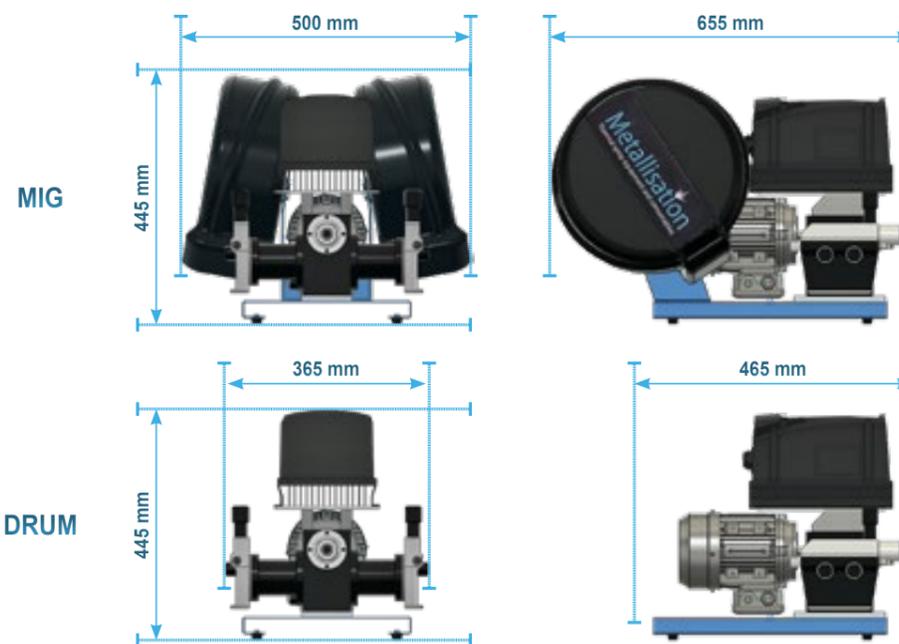
- Metal spray equipment is frequently connected to a remote device that forms part of a larger network controlling a complete process.
- The (19) range of RC energisers can be connected to an Ethernet network thanks to the Data Kit which is factory-fitted as standard.
- Metallisation energisers are fitted with a Siemens LOGO! Logic module with Ethernet interface. The available communication protocols are Siemens S7 and Modbus.



### Signals Available:

- Monitoring:**
- Spray current
  - Voltage
  - Air pressures (Bar or PSI)
  - Status indication – e.g. Open/closed loop control, spray OK, fault
  - Detailed fault indication
- Control:**
- Spray current
  - Air pressures
  - Start/stop spraying
  - Start/stop clean down (air only, no voltage)
  - Fault reset
  - Open/closed loop control selection
  - Data Kit/pendant control selection

## DRIVE UNIT DIMENSIONS



### MIG Configuration

Width	500 mm (19.7")
Height	445 mm (17.5")
Length	655 mm (25.8")
Weight	28.2 kg (62 lbs)

### Drum Configuration

Width	365 mm (14.4")
Height	410 mm (16.1")
Length	465 mm (18.3")
Weight	24.2 kg (53 lbs)



**Kymera**<sup>®</sup>  
INTERNATIONAL

**Metallisation**  
thermal spray solutions

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