

# TECNA<sup>®</sup>

Spot Welding Equipment • Automotive • Column  
Cable Suspended • Balancers



## CONTENTS

### TECNA

Page

Automotive Spot Welding & Accessories	3-8
Industrial Spot Welding	9-22
Suspended Spot Guns	23-24
Industrial Spot Welding Accessories	25-26
Balancers	27
Arms & Electrodes	28-36

## Hand Spot Welders

7900 • 7900/110 • 7902/P • 7913

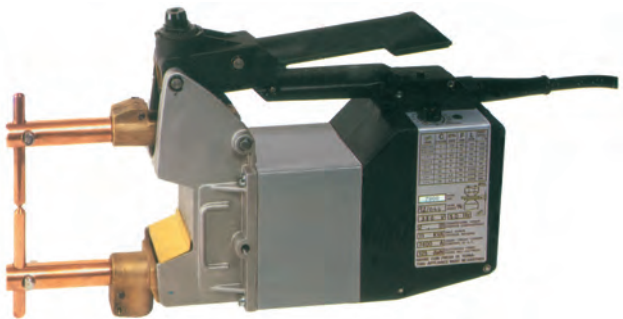
### Hand Operated Spot Gun - 2 kVA

#### Key Features

- Lightweight professional spot gun for car body repair
- Synchronous built-in electronic timer with SCR from 2 to 65 cycles
- Compensation circuit starts the timer only when there is a proper passage of current which enables to perform on oxidised sheets, on surfaces with paint residues or on black sheets
- All transformer are coated with F class insulation material that does not dry out and become brittle
- Tests are made using 4000V
- Force adjustment with scale in daN
- Additional arm couplings to provide larger opening between arms
- Supplied complete with 125mm arms
- Large choice of arms and electrodes

#### 7900/110 Version

\* 110V Version of the Hand Operated Spot Gun - 2 kVA



Order Code: 7900

### Hand Operated Spot Gun - 2.5 kVA

#### Key Features

- Versatile portable spot welder for auto body repair shops and maintenance shops
- Synchronous built-in electronic timer with SCR from 2 to 65 cycles
- Compensation circuit starts the timer only when there is a proper passage of current which enables to perform on oxidised sheets, on surfaces with paint residues or on black sheets
- Current control with phase shift adjustment to carry out difficult welds, on very thin thickness, on rods with reduced diameter, on stainless steel sheet and similar
- All transformers are coated with F class insulation material
- Test are made using 4000V
- Force adjustment with scale in daN
- Additional arm couplings to provide larger opening between arms
- Supplied complete with 125mm arms
- Large choice of arms and electrodes
- Pulsation weld time control
- Cos fi control

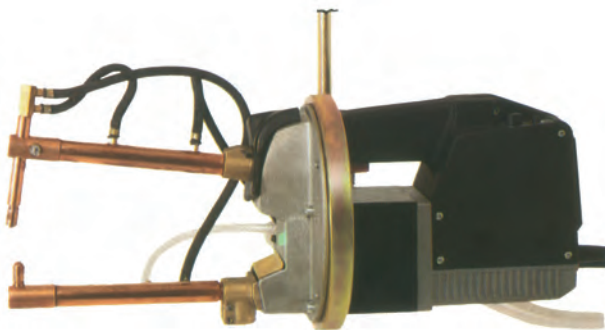


Order Code: 7902/P

## Pneumatic Gyroscopic Water Cooled Spot Gun - 6 kVA

### Key Features

- Fully water cooled portable spot gun
- For high operating rate works in car body repair and light production works in industry
- Synchronous built-in electronic timer with SCR from 2 to 65 cycles
- Compensation circuit starts the timer only when there is a proper passage of current which enables to perform on oxidised sheets, on surfaces with paint residues or on black sheets
- Current control with phase shift adjustment to carry out difficult welds, on very thin thickness, on rods with reduced diameter, on stainless steel sheet and similar
- Balanced construction for easy operation
- Thread base for fixing on a bench
- A built-in differential pressure switch operates the timer when the electrode force is correct
- Additional arm couplings to provide larger opening between arms
- All transformer are coated with F class insulation material. Insulation test performed at 4000V
- To be used with arms items:  
7512 - 7513 - 7514 - 7515 (on request)



### Order Code:

		7900	7902	7913
Synchronous timer with SCR		•	•	•
Time adjustment	cycles	2-65	2-65	2-65
Current adjustment 40-100%		-	•	•
Cooling		Air	Air	Water
Supply voltage 50Hz *	V	230	230	400
Nominal power at 50%	kVA	2	2.5	6
Maximum welding power	kVA	13	16	18
Short circuit current	kA	7.2	8.2	8.2
No load secondary voltage	V	2.3	2.5	2.7
Insulation class		F	F	F
Cables section for L<15 m	mm <sup>2</sup>	2.5	2.5	2.5
Delayed fuses	A	16	16	16
Standard arms throat depth L	mm	125	125	-
Max. electrode force w/short arms	daN	120	120	120
Arms gap	mm	96	94	94
Max. electrodes stroke	mm	55	55	40
Water cooling	l/min	-	-	2.5
Water max. pressure	bar	-	-	2.5
Aerial noise produced	dB(A)	< 70	< 70	<70
Level of vibrations	m/s <sup>2</sup>	< 2.5	< 2.5	< 2.5

### Measure conditions

Welding time	cycles	14	14	6
Welding current	kA	5	5	6.1
Working rating in welds/min		2	2	15
Mains cable length	m	3.8	3.8	3.8
Net weight with arms 125mm	Kg	10.5	11	-
Net weight with arms 150mm	Kg	-	-	16
Net weight with arms 500mm	Kg	13	13.5	19

\* Different voltages & frequencies on request

Order Code: 7913



## Multi Function Spotters

7600 • 3460N • 3464 • 3461

### Star Autospotter

#### Key Features

- Mainly used in car body repair
- Resistance welding of nails and washers for sheets straightening
- Cuts the cost on body repairs, you do not need to remove interiors trims and fitments, double skin areas are easily repaired
- Resistance welding of screws and rivets
- Sheets localised heating
- Available in 2 versions: 7600 - without timer  
7660 - with timer
- Both come complete with: Handle (item 20002)  
Electrodes 7602-7603-7604



Order Code: 7600

### Multi Function Portable Spotter

#### Key Features

- Extremely versatile, it is the ideal equipment for repairs in car body shops
- Single-spot weld rivets, screws, self-threading rivets, washers and pins
- It is possible to perform shrinking
- Quick straightening of panels can be carried out due to the 3 point star on the percussion extractor
- Improved versatility to allow the use of different accessories for sheet straightening
- Mains cable 4m

#### Optional

Trolley 3461

(Item 3460N with optional 3461 trolley)



Order Code: 3460N

## Universal Welding Station - 8 kVA

### Key Features

- Hand-operated gun, double program
- Simultaneous connection of two tools with automatic recall of the relevant welding program, enabling to save time, avoid errors so to have a simple and safe working process
- Resistance spot welding of sheets
- Sheet straightening with spotter (nails and washers)
- Localised sheets heating (carbon electrode)
- Screws and rivets welding
- Inox sheet-metal spoting
- Synchronous SCR welding control unit, welding time adjustment in cycles and pulses, welding current adjustment and compensation function
- The welding stations with epoxy-coated transformers are supplied equipped with:
  - 3489 - Adjustable height trolley with tray and arms holder
  - 3473 - Extra-flexible cables L= 1800mm, 150mm²
  - 5001 - Pair of straight arms L= 107mm



Order Code: 3484

Order Code:	7600	7660
Timer	-	•
Mains voltage/frequency	230V 50/60Hz	230V 50/60Hz
Nominal power at 50%	kVA 0.8	0.8
Maximum welding power	kVA 5.2	5.2
Short circuit current	kA 2.5	2.5
No load secondary voltage	V 2.6	2.6
Fuses	A 16	16
Force to apply to the tool	daN 15 - 25	15 - 25
Net weight without cord	Kg 5	5
Aerial noise produced	dB(A) < 70	< 70
Vibrations level	m/s² < 2.5	< 2.5

Order Code:	3460N	3484
Number of programs	1	2
Mains voltage/frequency*	230V 50Hz	400V 50Hz
Phases nr.	1	3
Nominal power at 50%	kVA 5	8
Maximum welding power	kVA 20	35
Short circuit secondary current	kA 4.5	6.4
Secondary current at 100%	kA 0.63	0.8
No load secondary voltage	V 5.6	7
Delayed fuses	A 16	25
Mains cables section L=15m	mm² 2.5 x 3	6 x 3
Thermal class	F	F
Protection degree	IP21	IP21
Net weight	Kg 28	70
Gross weight	Kg 32	85
Package dimensions	cm 30 x 34 x 68	48 x 69 x 82

\* Different voltages & frequencies on request

## Cable Spot Welding Stations

ZX3450/415 • ZX3650EVOC • ZX3650EVOCX • ZX3655E2C

### Mantis Pneumatic Water Cooled

#### Key Features

- Resistance spot welding of sheets
- Sheet straightening with spotter (nails or washers)
- Localised sheets heating (carbon electrode)
- Screws and rivets welding
- Inox sheet-metal spotting
- Synchronous digital welding control unit TE95 with double program, welding time adjustment in cycles and pulses, welding current adjustment and compensation function
- Allow simultaneous connection of two tools with automatic recall of the relevant memorized welding program, enabling to save time, avoid errors so to have a simple and safe working process
- The welding station with epoxy-coated transformers are supplied equipped with:
  - 3873 Extra-flexible welding cables L= 2000mm, 150mm<sup>2</sup> (water cooled cables on request)
  - 3489 - Adjustable height trolley with tray and arms holder
  - Pair of standard arms L=107mm



Order Code: ZX3450/415

### COBRA EVO

#### Key Features

- DC current welding station featuring inverter technology
- USB port for upgrading and storage of welding data which can then be used on a PC
- Automatic proportional valve for managing the force at the electrodes
- New ergonomically designed trolley equipped with protected wheels providing greater stability
- Water cooled

#### ZX3650EVOC ZX3655E2C

Input voltage 3 phase	V	400	400
Nominal power at 50% duty cycle	kVA	25	25
Fuse (delayed action)	A	35	50
Compressed air	Bar	8	8
Maximum secondary current	kA	9	13
No load secondary voltage	V	14	17
Weld time	S	0.01 - 2	0.01 - 2
Protection insulation class		IP21	IP21
Weight	Kg	150	150



#### ZX3450/415

Number of programs		2
Mains voltage/frequency*		400V 50Hz
Phases nr.		3
Nominal power at 50%	kVA	10
Maximum welding power	kVA	50
Short circuit secondary current	kA	8
Secondary current at 100%	kA	0.8
No load secondary voltage	V	8
Delayed fuses	A	25
Mains cables section L=15m	mm <sup>2</sup>	6 x 6
Thermal class		F
Protection degree		IP21
Net weight	Kg	105
Gross weight	Kg	120
Package dimensions with trolley	cm	59 x 68 x 92

\* Different voltages & frequencies on request

Order Code: ZX3650EVOC

Order Code: ZX3655E2C

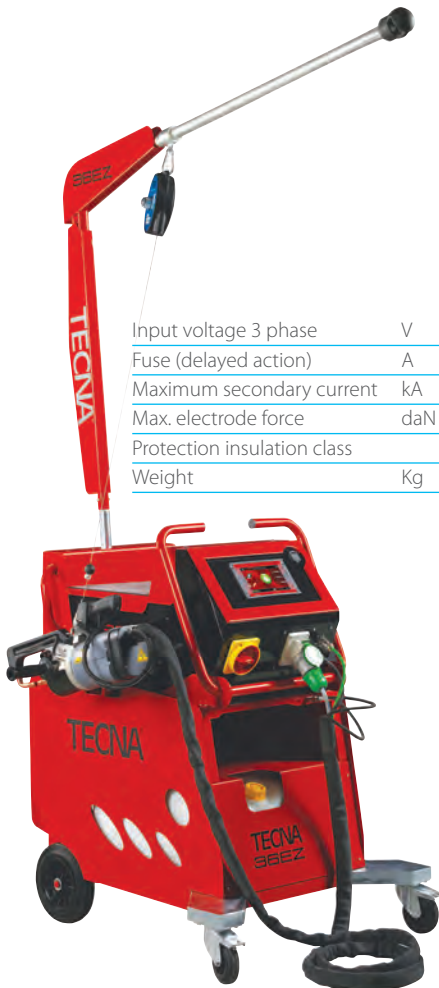
## Cable Spot Welding Stations

ZX3655E2CX • ZX36EZ • ZX36EZ-7 • ZX3664P • ZX3664P7

### RED BULL 36 EZ

#### Key Features

- Smart mode for easy setting
- Water cooling system
- Supporting arm includes a balancer
- Stable, compact and ergonomic system
- Touch screen welding control unit
- Full control for expert parameter setting
- USB interface available to easily export all data relevant to the performed welded spots
- Also available with high pressure 700 daN gun



Order Code: ZX36EZ

Order Code: ZX36EZ-7

#### ZX36EZ ZX36EZ-7

Input voltage 3 phase	V	400	400
Fuse (delayed action)	A	25 - 32	25 - 32
Maximum secondary current	kA	14	14
Max. electrode force	daN	450	700
Protection insulation class		IP21	IP21
Weight	Kg	140	140

### RHINO

#### Key Features

- Easy basic operator adjustment
- Expert for full operator parameter input
- Smart computer adjusted parameters with minimal operator input
- Smart plus full computer adjusted parameters



#### ZX3664P ZX3664P7

Input voltage 3 phase	V	400	400
Frequency	Hz	50/60	50/60
Nominal power at 50%	kVA	19	19
Maximum welding power	kVA	60	60
Maximum secondary current	kA	14	14
Thermal current 100%	kA	1.8	1.8
No load secondary voltage	V	8.7	8.7
Max. electrode force	daN	450	700
Recognition sensor		S	S
Protection insulation class		IP21	IP21
Weight	Kg	130	130

Order Code: ZX3664P

Order Code: ZX3664P7

## Pedestal Spot Welders • 16-25 kVA

4640 • 4641 • 4642 • 4643 • 4644

The new stationary ergonomic frame designed by TECNA helps to facilitate the operator's work

The control unit has been positioned on the front of the machine to allow the operator to view the welding data even during the working cycle



### Key Features

- Arms adjustable in length allowing a better working flexibility
- Chrome-copper electrode holders for long life and heavy duty service, designed for straight and angled fitting
- Adjustable electrode stroke
- Epoxy resin coated transformer
- Water cooled transformer, arms and electrodes
- Microprocessor control unit TECNA TE101
- Adjustable electrode force; a microswitch starts the welding cycle when the desired pre-set value is reached. The foot pedal is adjustable in length

Order Code		4640	4641	4642	4643	4644
Nominal power @ 50%	kVA	16	20	20	25	25
Maximum welding power	kVA	35	48	39	68	55
No load secondary voltage	V	3.4	4	4	4.6	4.6
Maximum short circuit current	kA	12.5	14.5	12	18	14.5
Maximum welding current on light alloys	kA	-	-	-	16.3	-
Maximum welding current on steel	kA	10	11.6	9.6	14.4	11.6
Thermal current 100%	A	3300	3500	3500	3800	3800
Supply voltage 50Hz *	V	400	400	400	400	400
Cables section L=10m	mm²	6	10	10	16	16
Cables section L=30m	mm²	10	10	10	16	16
Delayed fuses	A	32	40	40	50	50
Min. throat depth	mm	230	230	380	230	380
Max. electrode force (@ 6 bar)	daN	240	240	150	240	150
Electrode stroke	mm	8 - 44	8 - 44	10 - 60	8 - 44	10 - 60
Max. electrodes throat depth	mm	550	550	700	550	700
Max. electrode force (@ 6 bar)	daN	95	95	80	95	80
Electrode stroke	mm	15 - 85	15 - 85	15 - 105	15 - 85	15 - 105
Short circuit current with L max.	kA	8.4	10	8.8	13	10.5
Arms diameter	mm	36	40	40	40	40
Electrode holders diameter	mm	19	22	22	22	22
Standard electrodes cone diameter	mm	12.7	14.8	14.8	14.8	14.8
Water cooling	l/min	2.5	3	3	3.7	3.7
Aerial noise produced	dB(A)	<70	<70	<70	<70	<70
<b>Measure conditions</b>						
Working stroke	mm	20	20	20	20	20
Welding time	cycles	21	17	26	14	20
Welding current	kA	9.4	11	9	13.5	11
Working rating in welds/min		10	10	10	10	10
Net weight (approximately)	Kg	135	143	146	145	148

\* Different voltages & frequencies on request



## Pneumatic Spot Welders • 16-25 kVA

4645 • 4646 • 4647 • 4648 • 4649

**The new stationary ergonomic frame designed by TECNA helps to facilitate the operator's work**

**The pneumatic commands and the compressed air pressure gauge have been placed at the top for easier reading and adjustment**



### Key Features

- Arms adjustable in length allowing a better working flexibility
- Chrome-copper electrode holders for long life and heavy duty service, designed for straight and angled fitting
- Adjustable electrode stroke
- Epoxy resin coated transformer
- Water cooled transformer, arms and electrodes
- Microprocessor control unit TECNA TE101
- The air operated lubrication free cylinder eliminates oil mist
- Electrode force adjustment with air filter reducer with gauge
- Semi-automatic drainage system
- Electrode speed control valves, shock absorber for cylinder's end of stroke and air discharge silencers
- Two-stage electric foot pedal, that besides its normal use in automatic and single spot mode, allows the operator to bring the pieces together and to weld them only when correctly positioned
- Pre-arrangement for the connection of a second electric two-stage foot pedal (item 70284)
- The addition of the second foot pedal allows the operator to recall two different adjustments of time current. This function is helpful when different kinds of welding are to be performed on the same place





Order Code		4645	4646	4647	4648	4649
Nominal power @ 50%	kVA	16	20	20	25	25
Maximum welding power	kVA	35	48	39	68	55
No load secondary voltage	V	3.4	4	4	4.6	4.6
Maximum short circuit current	kA	12.5	14.5	12	18	14.5
Maximum welding current on aluminium alloys	kA	-	-	-	16.3	-
Maximum welding current on steel	kA	10	11.6	9.6	14.4	11.6
Thermal current 100%	A	3300	3500	3500	3800	3800
Supply voltage 50Hz *	V	400	400	400	400	400
Cables section L=10m	mm²	6	10	10	16	16
Cables section L=30m	mm²	10	10	10	16	16
Delayed fuses	A	32	40	40	50	50
Min. throat depth	mm	230	230	380	230	380
Max. electrode force (@ 6 bar)	daN	240	240	165	240	165
Electrode stroke	mm	8 - 44	8 - 44	10 - 60	8 - 44	10 - 60
Max. electrodes throat depth	mm	550	550	700	550	700
Max. electrode force (@ 6 bar)	daN	115	115	90	115	90
Electrode stroke	mm	15 - 85	15 - 85	15 - 105	15 - 85	15 - 105
Short circuit current with L max.	kA	8.4	10	8.8	13	10.5
Arms diameter	mm	36	40	40	40	40
Electrode holders diameter	mm	19	22	22	22	22
Standard electrodes cone diameter	mm	12.7	14.8	14.8	14.8	14.8
Compressed air supply	bar	6.5	6.5	6.5	6.5	6.5
Air for 1000 spots (6 bar)	Nm³	4.3	4.3	4.3	4.3	4.3
Water cooling	l/min	2.5	3	3	3.7	3.7
Aerial noise produced	dB(A)	<70	<70	<70	<70	<70
<b>Measure conditions</b>						
Working stroke	mm	20	20	20	20	20
Welding time	cycles	21	17	26	14	20
Welding current	kA	9.4	11	9	13.5	11
Working rating in welds/min		10	10	10	10	10
Net weight (approximately)	Kg	133	141	144	143	146

\* Different voltages & frequencies on request

## Pneumatic Spot Welders • 35-50 kVA

4660 • 4661 • 4662 • 4663

The pneumatic commands and the compressed air pressure gauge have been placed at the top for easier reading and adjustment

The control unit has been positioned on the front of the machine to allow the operator to view the welding data even during the working cycle



### Key Features

- Chrome-copper electrode holders for long life and heavy duty service, designed for straight and angled fitting
- Water cooled epoxy resin coated transformer
- Water cooled arms, electrodes and electrode holders
- Microprocessor control unit TECNA TE101
- USB port for data storage (only with TE550)
- The air operated lubrication free cylinder eliminates oil mist
- Protected filter assembly with gauge
- Two stage electric foot control for clamping the welding pieces in the correct position prior to welding
- Pre-connected for additional electric foot pedal for the direct recalling of welding program No.2. This function is helpful when different kinds of welding are to be performed on the same piece
- Arms: gap 280mm, adjustable depth 320mm (Option 4638)
- Adjustable electrodes stroke for max. working rate



Order Code		4660	4661	4662	4663
Nominal power @ 50%	kVA	35	35	50	50
Maximum welding power	kVA	75	62	104	82
Maximum short circuit current	kA	17.5	14	21	16.5
Thermal current 100%	A	4500	4500	5700	5700
No load secondary voltage	V	5.4 (4)	5.4 (4)	6.1	6.1
Supply voltage 50Hz *	V	400	400	400	400
Cables section L=30m	mm²	16	16	35	35
Delayed fuses	A	63	63	100	100
Insulation class		F	F	F	F
Min. throat depth	mm	280	480	280	480
Max. electrode force (@ 6 bar)	daN	425	260	425	260
Electrode stroke	mm	5 - 50	5 - 75	5 - 50	5 - 75
Max. throat depth	mm	600	800	600	800
Max. electrode force (@ 6 bar)	daN	210	160	210	160
Electrode stroke	mm	5 - 95	5 - 120	5 - 95	5 - 120
Max. short circuit current with max. throat depth	kA	12.9	10.9	14.3	12.2
Gap min. (option 4638)	mm	195	195	195	195
Gap max. (option 4638)	mm	500	500	500	500
Max. short circuit current max. gap (option 4638)	kA	11	11	12.6	12.6
Arms diameter	mm	50	50	50	50
Electrode holders diameter	mm	25	25	25	25
Standard electrodes cone diameter	mm	14.8	14.8	14.8	14.8
Compressed air supply	bar	6.5	6.5	6.5	6.5
Air for 1000 spots (6 bar)	Nm³	6.2 - 4.8	6.2 - 4.5	6.2 - 4.8	6.2 - 4.5
Water cooling	l/min	4	4	4	4
Aerial noise produced	dB(A)	<70	<70	<70	<70
<b>Measure conditions</b>					
Working stroke	mm	20	20	20	20
Welding time	cycles	14	21	15	24
Welding current	kA	13.1	10.5	16	12.4
Working rating in welds/min		15	15	15	15
Net weight (approximately)	Kg	218	223	228	233

\* Different voltages & frequencies on request

## Linear Action Pneumatic Spot Welders • 35-50 kVA

4665 • 4666 • 4667 • 4668

**The new stationary ergonomic frame designed by TECNA helps to facilitate the operator's work**

**The pneumatic commands and the compressed air pressure gauge have been placed at the top for easier reading and adjustment**



### Key Features

- Chrome-copper electrode holders for long life and heavy duty service, designed for straight and angled fitting
- Water cooled epoxy resin coated transformer
- Water cooled arms, electrodes and electrode holders
- Microprocessor control unit TECNA TE101
- USB port for data storage (only with TE550)
- The air operated lubrication free cylinder eliminates oil mist
- Protected filter assembly with gauge
- Two stage electric foot control for clamping the welding pieces in the correct position prior to welding
- Pre-connected for additional electric foot pedal for the direct recalling of welding program No.2. This function is helpful when different kinds of welding are to be performed on the same piece
- Arms: gap 280mm, adjustable depth 320mm (Option 4638)
- Adjustable electrodes stroke for max. working rate



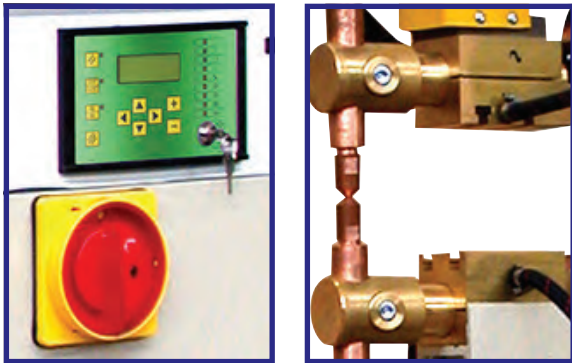
Order Code		4665	4666	4667	4668
Nominal power @ 50%	kVA	35	50	35	50
Maximum welding power	kVA	67	84	64	84
Short circuit current	kA	15.5	17	14.5	17
Thermal current 100%	A	4500	5700	4500	5700
No load secondary voltage	V	5.4 (4)	6.1	5.4 (4)	6.1
Supply voltage 50Hz *	V	400	400	400	400
Cables section L=30m	mm <sup>2</sup>	16	35	16	35
Delayed fuses	A	63	100	63	100
Insulation class		F	F	F	F
Min. throat depth	mm	400	400	500	500
Max. electrode force (@ 6 bar)	daN	470	470	300	300
Electrode stroke	mm	5 - 80	5 - 80	5 - 80	5 - 80
Gap min. (option 4638)	mm	-	-	170	170
Gap max. (option 4638)	daN	-	-	500	500
Max. short circuit current with max. gap (option 4638)	mm	-	-	10	12.1
Arms diameter	mm	50	50	50	50
Electrode holders diameter	mm	25	25	25	25
Standard electrodes cone diameter	mm	14.8	14.8	14.8	14.8
Compressed air supply	bar	6.5	6.5	6.5	6.5
Air for 1000 spots (6 bar)	Nm <sup>3</sup>	5.4 - 1.7	5.4 - 1.7	5.4 - 1.7	5.4 - 1.7
Water cooling	l/min	4	4	4	4
Aerial noise produced	dB(A)	<70	<70	<70	<70
<b>Measure conditions</b>					
Working stroke	mm	20	20	20	20
Welding time	cycles	17	23	20	24
Welding current	kA	11.6	12.7	10.9	12.4
Working rating in welds/min		15	15	15	15
Net weight (approximately)	Kg	220	225	220	225

\* Different voltages & frequencies on request

## Spot & Projection Welders • 35-80 kVA

8001N - 8009N

### Industrial Line



#### Key Features

- Double stroke cylinder with key control
- Built-in compressed air filter unit
- Compressed air disconnecting device
- Water cooled transformer, plates, electrode holders and electrodes
- Transformer with epoxy resin coated windings
- TE550 constant current control unit
- Cylinder with chrome plated stem for heavy duty works and long life; adjustable anti-rotation device
- Lubrication free pneumatic components to eliminate oil mist and to protect the environment
- Electrodes speed control valves, shock absorber for end stroke and air discharge silencers assuring the minimum noise
- Two stage electric foot control for clamping the welding pieces in the correct position prior to welding
- Pre-setting for additional double stage electric foot connection for the direct recalling of welding program No. 2
- Synchronous SCR contactor insulated from cooling water circuit with protection thermostat
- Standard on all models: Two hand safety control with timer for optimum safety protection. Removable key selector. The two hand control push buttons are standard on projection models only (they are available on request on spot welder models)
- Emergency push button to stop the machine immediately

Order Code		8001N	8002N	8003N	8004N	8005N	8005N +8031	8006N	8007N	8007N +8032	8009N
Spot / projection welder		• / -	• / -	• / -	• / -	• / •	• / •	• / -	• / •	• / •	• / •
Nominal power @ 50%	kVA	35	35	60	60	60	60	80	80	80	35
Maximum welding power	kVA	80	60	125	92	200	150	115	300	230	88
Short circuit current	kA	18	13.5	22	16	35	26	17	45	34	20
Maximum welding current on aluminium	kA	16.3	12.2	20	14.5	31.8	23.6	15.4	41	31	18
Maximum welding current on steel	kA	14.4	10.8	17.6	12.8	28	20.8	13.6	36	27	16
Thermal current 100%	A	4500	4500	5900	5900	5900	5900	6800	6800	6800	4500
No load secondary voltage	V	-	-	7.1	7.1	7.1	7.1	8.3	8.3	8.3	-
... ..		5.4	5.4	6.3	6.3	6.3	6.3	7.5	7.5	7.5	5.4
... ..		4	4	5.6	5.6	5.6	5.6	6.7	6.7	6.7	4
... ..		-	-	5.0	5.0	5.0	5.0	6.1	6.1	6.1	-
Supply voltage 50Hz *	V	400	400	400	400	400	400	400	400	400	400
Cables section L=30m	mm²	25	25	35	35	50	50	70	70	70	25
Delayed fuses	A	63	63	125	125	125	125	150	150	150	63
Minimum gap	mm	170	170	190	190	140	140	190	165	165	170
Maximum gap	mm	420	420	440	440	400	400	440	400	400	420
Depth L	mm	420	800	420	800	400	500	800	400	550	500
Depth D	mm	-	-	-	-	280	380	-	280	420	380
Max. electrode force (@ 6 bar) standard	daN	470	300	470	300	470	470	470	736	736	470
Maximum stroke	mm	80	80	80	80	80	80	80	100	100	80
Double stroke - standard	mm	60	60	60	60	60	60	60	60	60	60
Air consumption for 1000 spots (6 bar)	bar	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Standard version - stroke 20mm	Nm³	2.6	1.7	2.6	1.7	2.6	2.6	2.6	4.6	4.6	2.6
Standard version - max. stroke	Nm³	8.7	5.4	8.7	5.4	8.7	8.7	8.7	15.4	15.4	8.7
Air supply hose	mm	12	12	12	12	12	12	12	12	12	12
Water cooling	l/min	4.6	4.6	4.6	4.6	4.6	4.6	5	5	5	4.6
Aerial noise produced	dB(A)	<70	68	71	71	<70	<70	76	74	70	<70
<b>Measure conditions</b>		<b>H=1.6 m L=0.5 m</b>									
Working stroke	mm	20	20	20	20	50	50	20	50	50	50
Welding time	cycles	13	21	15	27	15	26	32	14	20	32
Welding current	kA	13.5	10.5	16.5	12	26	19.5	13	32	25.5	15
Working rating in welds/min		15	15	15	15	6	6	15	6	6	6
Net weight (approximately)	Kg	290	330	325	370	325	340	435	430	440	315

\* Different voltages & frequencies on request



## Spot & Projection Welders • 3 Phase 100 kVA 6101N - 6103N

### Industrial Line



## Key Features

- Direct current 3 phase welder. In comparison with a traditional welder, it offers the following advantages:
  - High mains power factor
  - Reduced load on plant primary electrical service
  - Balanced load distribution on the three phases
  - Reduced effect of magnetic materials between arms on the welding current
  - Reduced installation costs
- Six phase silicon rectifier with device for checking the correct diodes clamping force
- Protection of the diodes against overload, over voltages and over temperatures
- Complex pneumatic cycle with low force squeeze
- Cylinder with chrome plated stem for heavy duty works and long life; adjustable anti-rotation device
- Adjustable double stroke with key control
- Lubrication free pneumatic components to eliminate oil mist and to protect the environment
- Head descent without pressure for set up and service
- Built-in compressed air filter unit and tank
- Compressed air disconnecting device
- Electrodes speed control valves, shock absorber for end of stroke and air discharge silencers assuring the minimum noise
- Two stage electric foot control for clamping the welding pieces in the correct position prior to welding
- Pre-setting for additional double stage electric foot connection for the direct recalling of welding program No. 2 (not on units equipped with option 6132)
- Water cooled transformers, plates, electrode holders and electrodes; transformers with epoxy resin coated windings
- Flow switch makes the welder stop if the cooling water does not circulate
- TE553 microprocessor control unit featuring:
  - Phase shift welding current adjustment and synchronous SCR contractors insulated from cooling water circuit with protection thermostat
- Standard on all models: Two hand safety control with timer for optimum safety protection. Removable key selector. The two hand control push-buttons are standard on projection models only (they are available on request on spot welder models)
- Emergency push button to stop the machine immediately
- Automatic circuit breaker for protection valve to stop the flow of the water cooling when the machine is off

## Order Code

		6101N	6102N	6103N
Spot / projection welder		• / •	• / •	• / -
Nominal power @ 50%	kVA	100	100	100
Maximum welding power	kVA	415	415	380
Short circuit current	kA	60	60	55
Max. welding current on aluminium	kA	55	55	50
Max. welding current on steel	kA	48	48	44
Thermal current 100%	A	11000	11000	11000
No load secondary voltage	V	6.3	6.3	6.3
...	...	5.5	5.5	5.5
Supply voltage 50Hz *	V	400	400	400
Cables section L=30m	mm <sup>2</sup>	50	50	50
Delayed fuses	A	100	100	100
Minimum gap	mm	175	175	175
Maximum gap	mm	475	475	475
Depth L	mm	385	535	800
Depth D	mm	260	410	-
Max. electrode force (@ 6 bar) std.	daN	736	736	736
Max. electrode force (@ 6 bar) (option 6135)	daN	1242	1242	1242
Maximum stroke	mm	100	100	100
Double stroke - standard	mm	0 - 80	0 - 80	0 - 80
Air consumption for 1000 spots (6 bar)	bar	6.5	6.5	6.5
Standard version - stroke 20mm	Nm <sup>3</sup>	2.9	2.9	2.9
Standard version - max. stroke	Nm <sup>3</sup>	9.2	9.2	9.2
With option 6135 - stroke 20mm	Nm <sup>3</sup>	6	6	-
With option 6135 - max. stroke	Nm <sup>3</sup>	15.5	15.5	-
Air supply hose	mm	16	16	16
Water cooling	l/min	12	12	12
Aerial noise produced	dB(A)	73	73	76

## Measure conditions

Working stroke	mm	50	50	20
Welding time	cycles	14	14	8
Welding current	kA	45	45	41
Working rating in welds/min		6	6	15
Net weight (approximately)	Kg	650	660	710

\*Different voltages and frequencies on request  
Specifications subject to change without notice

## Bench Spot Welders • 16-25 kVA

2101 • 2103

### Industrial Line



## Key Features

- Built-in compressed air filter unit and tank
- Lubrication free pneumatic components to eliminate oil mist and to protect the environment
- Chrome plated cylinder and stem for heavy duty works and long life; adjustable anti-rotation device
- Water cooled transformers, plates, electrode holders and electrodes; transformers with epoxy resin coated windings
- Items 2101 and 2103: TE550 constant current microprocessor control unit features:
  - Phase shift welding current adjustment
  - Synchronous SCR contactor insulated from cooling water circuit with protection thermostat
- Items 2102: TE101 microprocessor control unit features:
  - Phase shift welding current adjustment
  - Synchronous SCR contactor insulated from cooling water circuit with protection thermostat
- Two stage electric foot control for clamping the welding pieces in the correct position prior to welding
- Pre-setting for two hand safety control with timer for optimum safety protection. Removable key selector (only on items 2102 and 2103)

Order Code		2101	2102	2103
Control unit		TE550	TE101	TE550
Nominal power @ 50%	kVA	16	20	25
Maximum welding power	kVA	47	62	84
Short circuit current	kA	16.5	19	22
Maximum welding current on aluminium	kA	15	17.4	20
Maximum welding current on steel	kA	13.2	15.2	17.6
Thermal current 100%	A	3300	3500	3800
No load secondary voltage	V	1.7	-	-
		3.4	4	4.6
Supply voltage 50Hz *	V	400	400	400
Cables section L=30m	mm <sup>2</sup>	10	16	16
Delayed fuses	A	32	40	50
Arms gap	mm	118	118	118
Depth L	mm	160	160	160
Max. electrode force (@ 6 bar)	daN	187	187	187
Maximum stroke	mm	50	50	50
Air consumption for 1000 spots (6 bar)	bar	6.5	6.5	6.5
Stroke 20mm	Nm <sup>3</sup>	1.5	1.5	1.5
Max. stroke	Nm <sup>3</sup>	2.2	2.2	2.2
Air supply hose	mm	8	8	8
Water cooling	l/min	2.3	2.7	3
Aerial noise produced	dB(A)	68	69	71
<b>Measure conditions</b>				
Working stroke	mm	20	20	20
Welding time	cycles	11	7	6
Welding current	kA	13	14	16.5
Working rating in welds/min		15	15	15
Net weight (approximately)	Kg	76	81	86

\*Different voltages and frequencies on request  
Specifications subject to change without notice

## Suspended Spot Welding Guns • 16-38 kVA

3321 • 3328

### Key Features

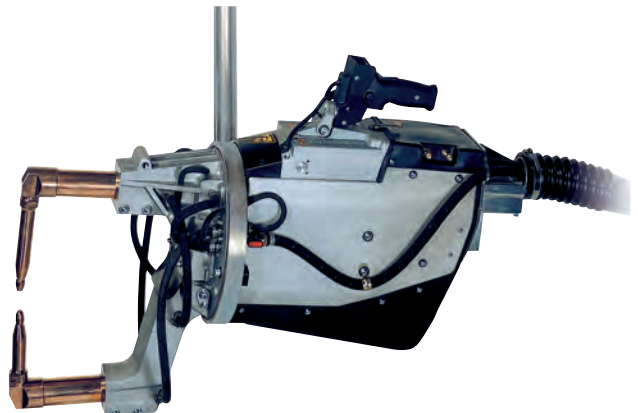
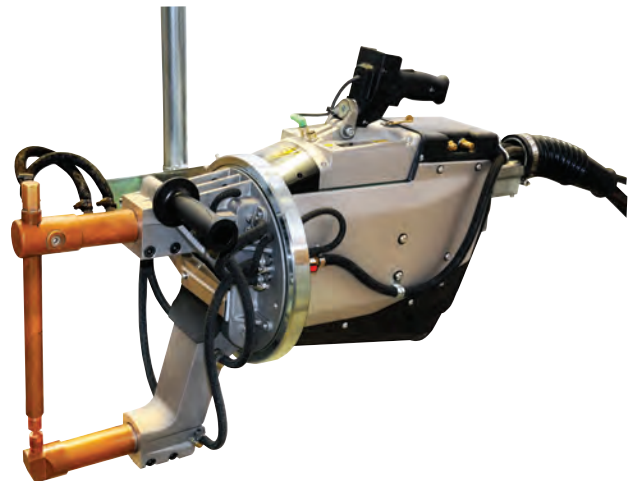
- Pneumatic operated suspended gun, with integrated TE330, TE450, TE470 or TE480 microprocessor welding control unit
- High productivity achieved with rational design, reduced dimensions, high welding capacity
- High electric efficiency
- Reduced installation costs
- Totally enclosed, rubber protected for easy and safe operation
- Gyro suspension on sealed bearings together with a spring balancer guarantees accurate manoeuvrability at any degree
- Rotation locking device
- Large selection of arms, enabling the welder to work in a wide range of applications
- Chrome-copper electrode holders for heavy duty and long life, designed for both straight and angled assembling
- Adjustable electrodes distance, adjustable short working stroke for heavy duty
- Temporary extra stroke to reach the areas to be welded
- Long working stroke to weld reinforcement ribs, jobs in areas difficult to be reached
- Water cooled transformer with epoxy resin coated windings
- Water cooled arms, electrode holders and electrodes
- Synchronous SCR contactor insulated from cooling water circuit with protection thermostat
- Oil free chromium plated cylinder and shaft for heavy duty operation and long life

### The Standard Unit Includes:

- Suspended spot gun with the chosen built-in control unit (TE470 or TE480)
- Earth leakage and circuit breaker switch
- Air filter-regulator unit with gauge
- Supply cables and hoses 6.5m length
- Voltage and frequency to be always specified

### Optional Extras

- Arms and electrodes: according to tables (Arms not shown)
- Different lengths of supply cables and hoses
- Balanced equipped with rotary and insulated hook (option RI)
- The balancer may be equipped with option 'B' which allows locking of position from a floor control handle, for capacity see the technical data table.
- On demand, the welding machine is equipped with the sectioning device of cables and supply hoses. It allows a quick replacement of the machine on the production lines





Order Code		3321	3322	3323	3324	3327	3328
Gun type		L	L	C	L	L	L
Nominal power @ 50%	kVA	16	23	23	23	38	38
Maximum welding power	kVA	37	65	63	52	110	92
Short circuit current	kA	16	21	21	16.5	27	22.5
Thermal current 100%	A	4000	4250	4250	4250	5400	5400
No load secondary voltage	V	2.8	3.8	3.8	3.8	5	5
Supply voltage 50Hz *	V	400	400	400	400	400	400
Cables section L=30m	mm²	10	16	16	16	25	25
Delayed fuses	A	32	40	40	40	80	80
Arm spacing	mm	165	165	120	225	155	280
Min. arms length	mm	190	190	-	250	250	250
Max. electrode force (@ 6 bar)	daN	286	338	300	268	695	695
Working stroke	mm	6 - 25	5 - 20	5 - 20	6 - 25	10 - 26	10 - 26
Maximum stroke	mm	30 - 48	28 - 40	35 - 50	35 - 50	45 - 60	45 - 60
Max. arms length	mm	650	800	-	650	1030	820
Max. electrode force (@ 6 bar)	daN	95	93	-	113	156	196
Working stroke	mm	18 - 72	18 - 73	-	15 - 60	40 - 100	30 - 75
Maximum stroke	mm	90 - 140	102 - 146	-	84 - 120	165 - 225	130 - 175
Compressed air supply	bar	6.5	6.5	6.5	6.5	6.5	6.5
Air consumption for 1000 spots at 5 bar	Nm³	4	4	4	4	7.5	7.5
Hose inside diameter	mm	10	10	10	10	10	10
Water cooling	l/min	7	7	8	7	8	8

## Max mild steel sheet thickness

With shorter arms	mm	3 + 3	4 + 4	4 + 4	3.5 + 3.5	5 + 5	5 + 5
With 508mm arms	mm	1.8 + 1.8	3 + 3	-	3 + 3	3.5 + 3.5	3.5 + 3.5
With longest arms	mm	1.2 + 1.2	2 + 2	-	2 + 2	2 + 2	2.5 + 2.5
Cross wire maximum diameter	mm	10 + 10	14 + 14	14 + 14	12 + 12	16 + 16	16 + 16

## Spots per minute

1+1 class A		66	80	80	80	100	100
1.5+1.5 class A		-	32	32	32	44	44
2+2 class A		14	16	16	16	20	20
2.5+2.5 class A		-	-	-	-	14	14
3.2+3.2 class B		-	-	-	-	8	8
Net weight including cables, hoses, gyro suspension and shorter arms	Kg	46	52	53	55	76	78
Packaging: cardboard box	mm	300 x 850 x 550		330 x 1120 x 630		760 x 1050 x 500	
Gross weight with long arm	Kg	57	63	57	57.5	119	117

## Spring Balancer

Short arms: capacity	Kg	45 - 55	55 - 65	55 - 65	55 - 65	75 - 90	75 - 90
Long arms: capacity	Kg	55 - 65	65 - 75	-	65 - 75	95 - 105	95 - 105



## Industrial Spot Welding Accessories

70226 • 70065 • 70009 • 70066



### 70226

Electrode Holder 215 x 19mm

### 70065

Electrode Holder 180 x 22mm

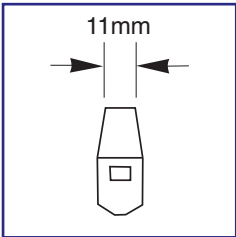
### 70009

Electrode Holder 295 x 19mm

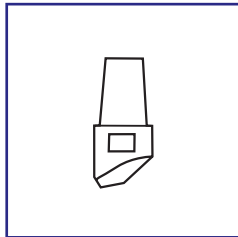
### 70066

Electrode Holder 2295 x 22mm

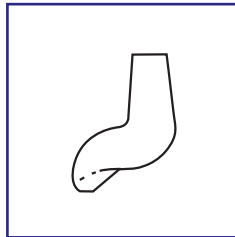
## Pair of Electrodes up to 20 kVA



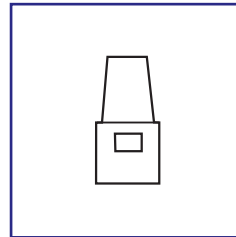
**3720TE** Standard



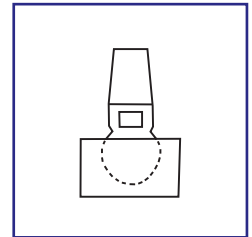
**3722** Offset



**3723** Cranked

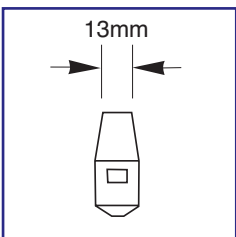


**3724** Single, Flat

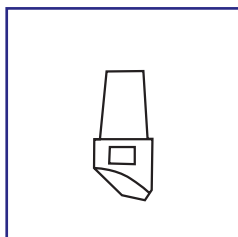


**3725** Single, Swivel

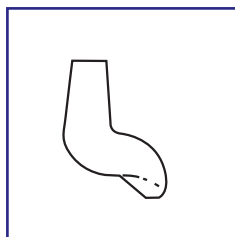
## Pair of Electrodes up to 25 kVA



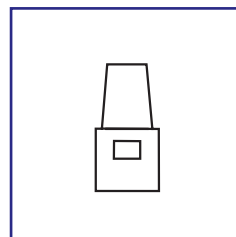
**3430** Standard



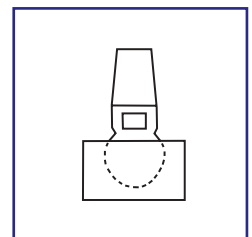
**3431** Offset



**3433** Cranked



**3434** Single, Flat



**3435** Single, Swivel

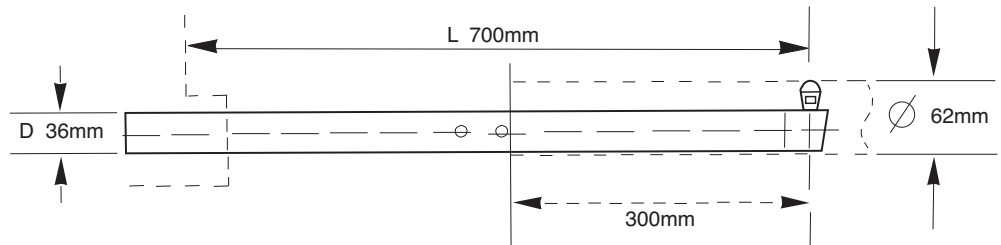


## Industrial Spot Welding Accessories

4506 • 4509 • 3441 • 4569

### Reduced Size Arm

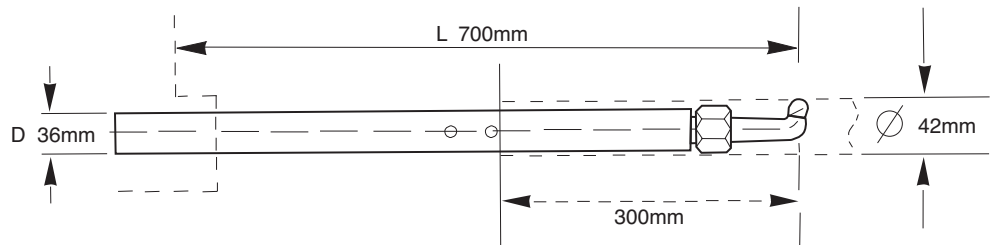
- L= 380 - 700 mm
- D= 36mm Ø62 mm



**Order Code: 4506**

### Reduced Size Arm with Frontal Electrode

- L= 380 - 700mm
- D= 36mm Ø42mm



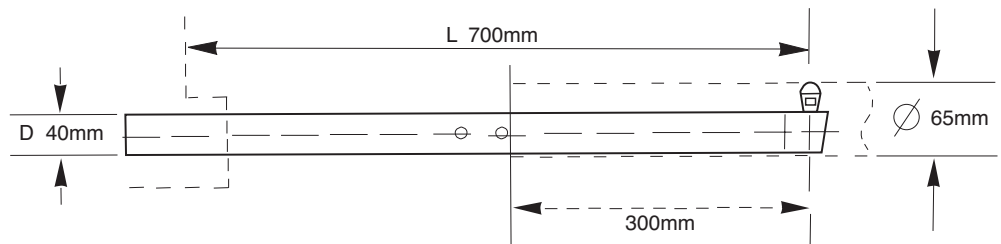
**Order Code: 4509**

### Suitable for the Following Machines:

4640 • 4645

### Reduced Size Arm

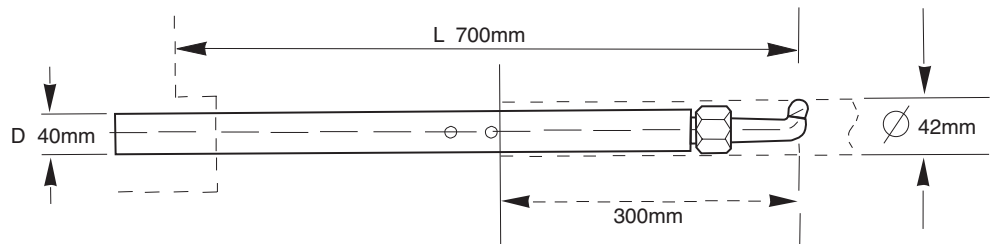
- L= 380 - 700 mm
- D= 40mm Ø65 mm



**Order Code: 3441**

### Reduced Size Arm with Frontal Electrode

- L= 380 - 700mm
- D= 40mm Ø42mm



**Order Code: 4569**

### Suitable for the Following Machines:

4641 • 4642 • 4643 • 4644 • 4646 • 4647 • 4648 • 4649

## Balancers

### TECNA balancers offer versatility for a whole range of applications

It may be used for bench assembly line works and it may be suitably applied to small tools, industrial suspended welders and multiple screwdrivers etc.

The balancers are produced in conformity with the DIN 15112 directive thanks to their high structural technology and their compliance with the laws in force they are BG certified by the relevant German institute for their safe use in the working environment.

The new ATEX balancers are an expansion of our range that is certified and suitable for installation in potentially explosive areas.



1600mm wire

- 9311** 0.4 - 1 Kg
- 9312** 1 - 2 Kg
- 9313** 2 - 3 Kg



2000mm wire

- 9320** 1 - 2.5 Kg
- 9321** 2 - 4 Kg
- 9322** 4 - 6 Kg
- 9323** 6 - 8 Kg



2500mm wire

- 9336** 2 - 4 Kg
- 9337** 4 - 6 Kg
- 9338** 6 - 8 Kg
- 9339** 8 - 10 Kg
- 9340** 10 - 14 Kg



2500mm wire

- 9346** 2 - 4 Kg
- 9347** 4 - 6 Kg
- 9348** 8 - 10 Kg
- 9349** 10 - 14 Kg



2000mm wire

- 9354** 4 - 7 Kg
- 9355** 7 - 10 Kg
- 9356** 10 - 14 Kg
- 9357** 14 - 18 Kg
- 9358** 14 - 22 Kg
- 9359** 22 - 25 Kg



2000mm wire

- 9361** 10 - 15 Kg
- 9362** 15 - 20 Kg
- 9363** 20 - 25 Kg
- 9364** 25 - 30 Kg
- 9365** 30 - 35 Kg
- 9366** 35 - 45 Kg
- 9367** 45 - 55 Kg
- 9368** 55 - 65 Kg
- 9369** 65 - 75 Kg

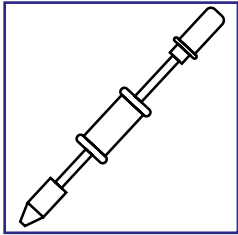


2000mm wire

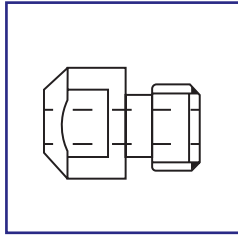
- 9370** 75 - 90 Kg
- 9371** 90 - 105 Kg

## Automotive Spot Welding Accessories

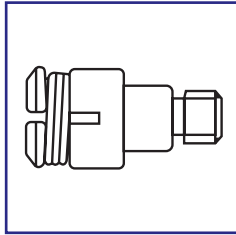
Accessories for Autospotter 7600



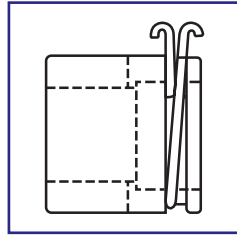
**7601**  
Puller



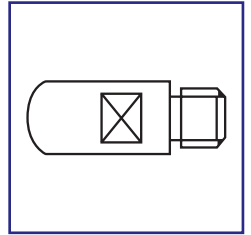
**7602**  
Electrode  
for 7602, 7603, 7604



**7605**  
Electrode for Washers



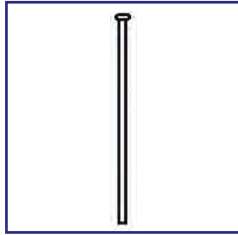
**7606**  
Outer Electrode  
for 7605, 7607



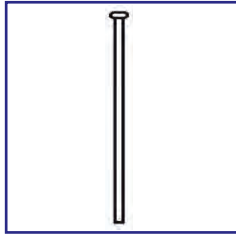
**7607**  
Electrode  
for Heating/Shrinking



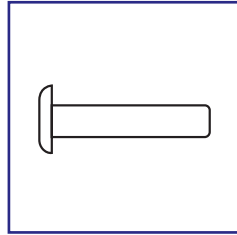
**7608**  
Hooks for Washers



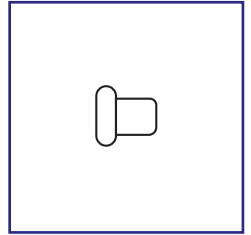
**7610**  
Nails 2mm



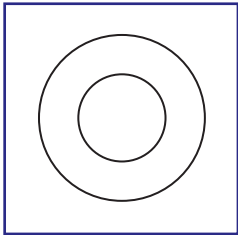
**7611**  
Nails 2.5mm



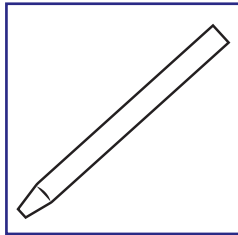
**7612**  
Studs Threaded



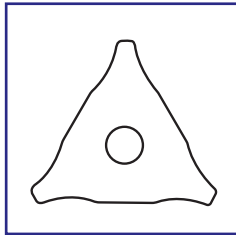
**7613**  
Stud Trim



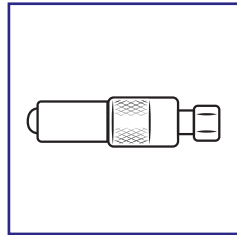
**7614**  
Washers



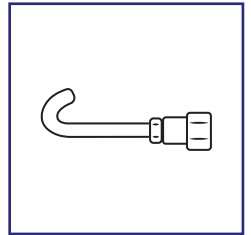
**2279**  
Carbon Electrode



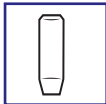
**7676**  
Triangular Puller Washer



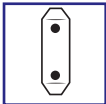
**7641**  
Chuck Assembly for 7640



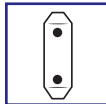
**7642**  
Hooked Washer Puller



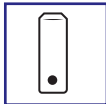
**2280**  
Electrode,  
Trim Stud



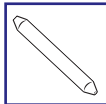
**2282**  
Electrode,  
Rivets



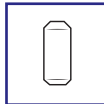
**2283**  
Electrode,  
Nails  
2/2.5mm



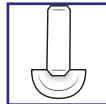
**2284**  
Electrode,  
Washer



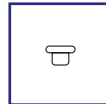
**2285**  
Electrode,  
Single  
Side Spot



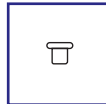
**2286**  
Electrode,  
Heat Shrink



**2287**  
Electrode,  
Patching



**2305**  
Stud Trim  
3.2 x 3mm



**2306**  
Stud Trim  
4.5 x 3mm



**2308**  
Stud Trim  
10 x 5mm



**2320**  
Threaded  
Rivets M4  
10mm



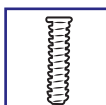
**2321**  
Threaded  
Rivets M4  
15mm



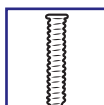
**2322**  
Threaded  
Rivets M4  
18mm



**2323**  
Threaded  
Stud 12 x  
5.5mm



**2324**  
Threaded  
Stud 18 x  
5.5mm



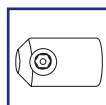
**2325**  
Threaded  
Stud 25 x  
5.5mm



**2328**  
Threaded  
Rivets M6  
12mm



**7640**  
Side Hammer  
Without  
Chuck 3481



**7643**  
Washer  
Puller



## Spot Welding Accessories

Standard Smart Gun & Arms for 3650 & EVO Accessories

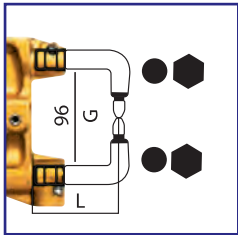
### Smart Gun

Patented pneumatic gun with adjustable stroke and double-function trigger:

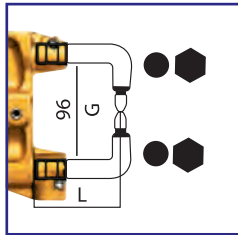
- 1) Only clamping
  - 2) Welding, when the force at electrodes is correct
- Item 8677: 22mm arms

Water cooled pneumatic gun. Electrode force 30 - 240 daN.

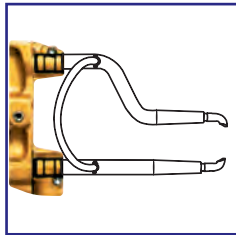
**Order Code: 8677TE**



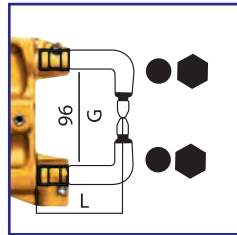
**5127**  
Water Cooled Arms  
152mm, 22mm Ø



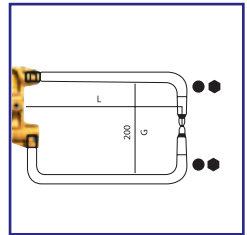
**5128**  
Water Cooled Arms  
232mm, 22mm Ø



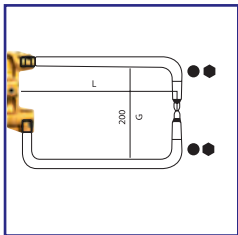
**5187**  
Water Cooled Arms  
250mm, 22mm Ø



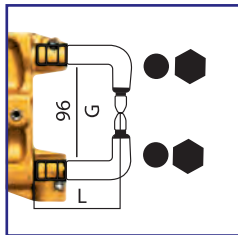
**5129**  
Water Cooled Arms  
332mm, 22mm Ø



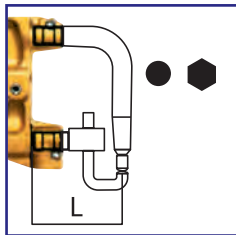
**5137**  
Water Cooled Arms  
350mm, 22mm Ø



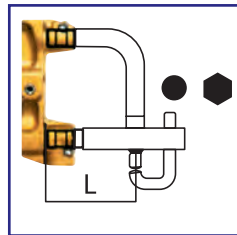
**5138**  
Water Cooled Arms  
450mm, 22mm Ø



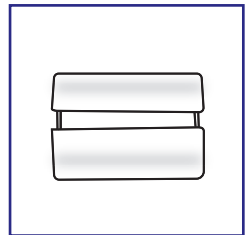
**5130**  
Water Cooled Arms  
483mm, 22mm Ø



**5191**  
Water Cooled Arms  
Special 107mm, 22mm Ø



**5192**  
Water Cooled Arms  
Special 107mm, 22mm Ø



**33405**  
Brushing  
(Allows 20mm arms  
to be used with 3650)

### Fast Gun

Pneumatic C-type gun water cooled:

**Order Code: 8659**

Arm 87mm (A)

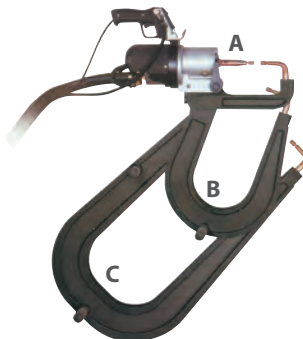
**Order Code: 8685/WS**

Arm 356mm (B)

**Order Code: 8686/WS**

Arm 637mm (C)

**Order Code: 8687/WS**



### High Pressure Fast Gun



**Order Code: 8669TE**

## Spot Welding Accessories

8659 • 8669TE • 8679T & Accessories

### Fast Gun 'C' Type for Rhino

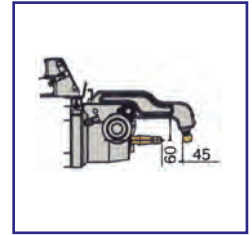


**Order Code: 8679TE**



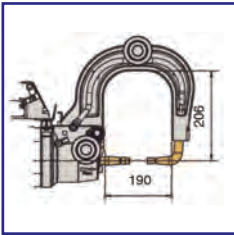
**3455**

Pair of Cables 2.4m  
for 8659 & 8669TE



**8689**

Bent Short Arm  
L = 40mm

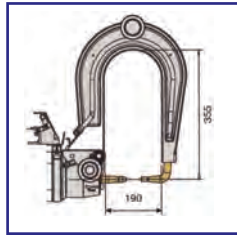


**Short Arm**

Length = 87mm

8685: Air Cooled

8685/WC: Water Cooled

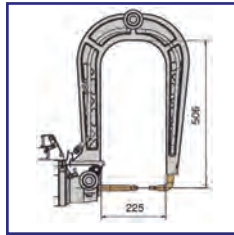


**Medium Arm**

Length = 355mm

8686: Air Cooled

8686/WC: Water Cooled

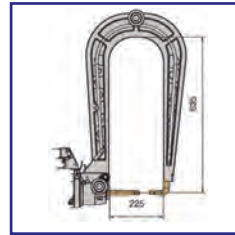


**Medium Long Arm**

Length = 450mm

8688: Air Cooled

8688/WC: Water Cooled

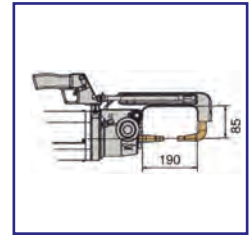


**Long Arm**

Length = 637mm

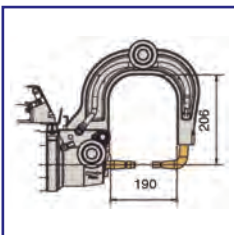
8687: Air Cooled

8687/WC: Water Cooled



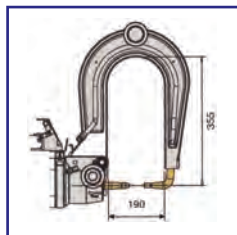
**8685/WS**

Water Cooled Short Arm  
L = 40mm, 16mm Caps



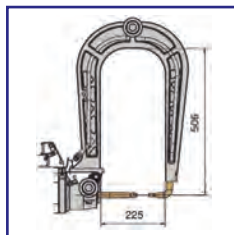
**8684/WS**

Water Cooled Medium  
Short Arm L = 205mm,  
16mm Caps



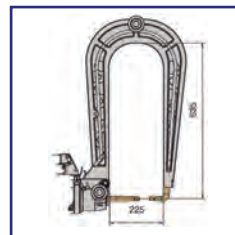
**8686/WS**

Water Cooled Medium  
Arm L = 355mm,  
16mm Caps



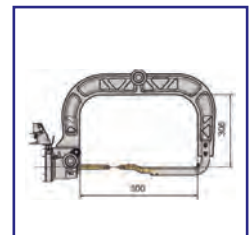
**8688/WS**

Water Cooled Medium  
Long Arm L = 505mm,  
16mm Caps



**8687/WS**

Water Cooled Long  
Arm L = 635mm,  
16mm Caps

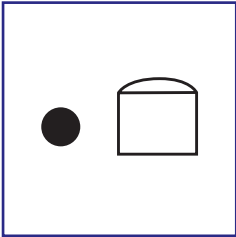


**8690/WS**

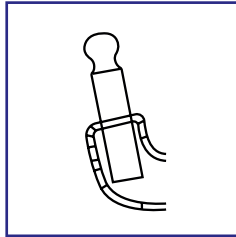
Water Cooled Arm  
L = 305mm,  
16mm Caps

## Spot Welding Accessories

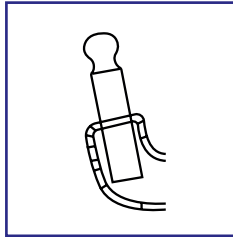
8659 • 8669TE • 8679T & Accessories



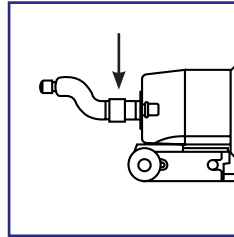
**5208TE**  
Electrode Cap Round



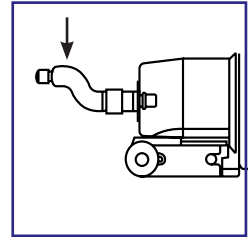
**5220TE**  
Spherical Electrode  
20 x 100mm



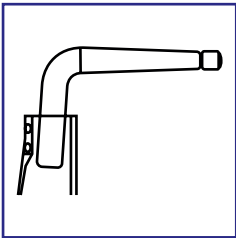
**5220/WC**  
Water Cooled Spherical  
Electrode 20 x 100mm



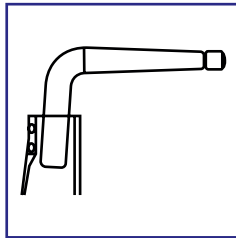
**5221/1**  
Fitting for Bent Elec-  
trode Holder 20 x 53mm



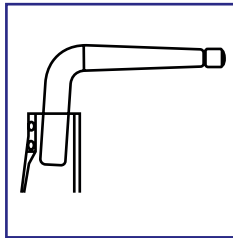
**5221/2**  
Bent Electrode Holder  
20 x 72.5mm



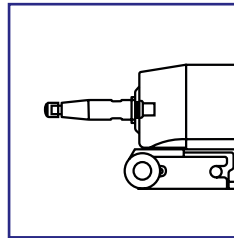
**5222TE**  
Bent Long Electrode  
Holder 22 x 133mm



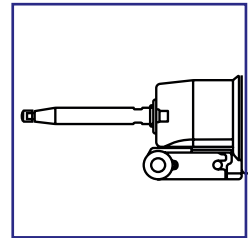
**5222/WC**  
Water Cooled Bent  
Electrode Holder  
22 x 133mm



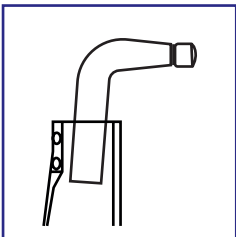
**5223/WC**  
Water Cooled Bent Long  
Electrode Holder  
16mm Caps



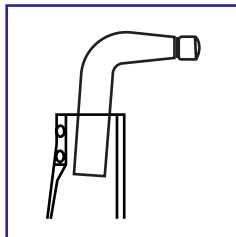
**5224**  
Short Electrode  
Holder 22 x 102mm



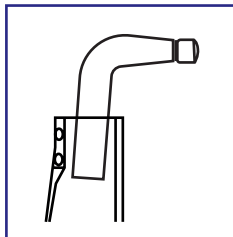
**5225**  
Long Electrode Holder  
20 x 166mm



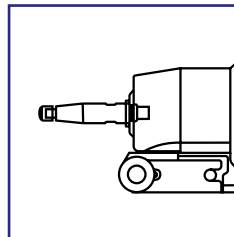
**5226**  
Bent Electrode Holder  
for 8658-86-87-88 Arms



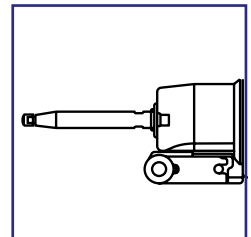
**5226/WC**  
Water Cooled Bent  
Electrode Holder



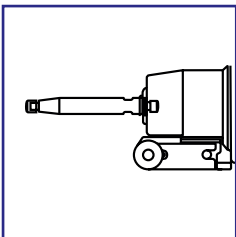
**5227/WC**  
Electrode Holder Bent  
16mm Caps



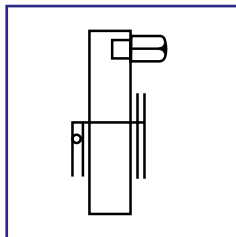
**5228**  
Short Electrode  
Holder 16mm Caps



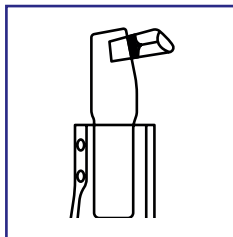
**5229**  
Long Electrode Holder  
170mm, 16mm Caps



**5230TE**  
Special Electrode  
Holder 16mm Caps



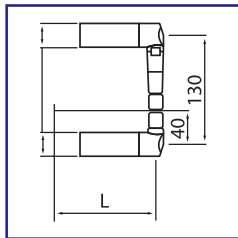
**5238/W**  
Special Water Cooled  
Fixed Electrode c/w 5218TE



**5239/W**  
Special Water Cooled  
Fixed Electrode

## Spot Welding Accessories

### 8678T 'X' Gun Arms



#### Straight

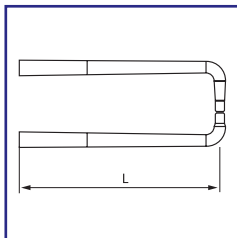
[5260TE](#): Length = 120mm

[5261TE](#): Length = 155mm

[5262TE](#): Length = 255mm

[5263TE](#): Length = 355mm

[5264TE](#): Length = 505mm

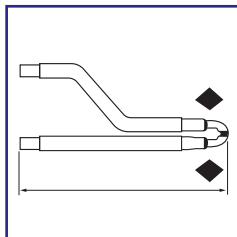


#### Bent

[5268TE](#): Length = 250mm

[5269TE](#): Length = 350mm

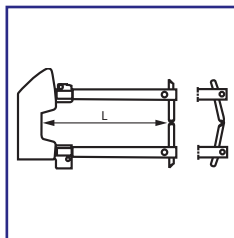
[5270TE](#): Length = 505mm



#### 5271TE

250mm Special Arms

### Heavy Duty Arms with Electrodes 12mm Ø



#### Straight

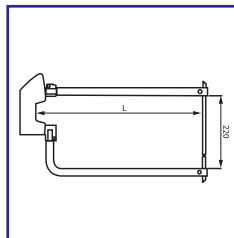
[7401](#): Length = 125mm

[7402](#): Length = 250mm

[7403](#): Length = 350mm

[7404](#): Length = 500mm

[7405](#): Length = 600mm

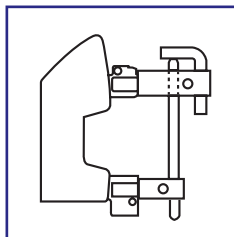


#### Cranked

[7406](#): Length = 350mm

[7407](#): Length = 500mm

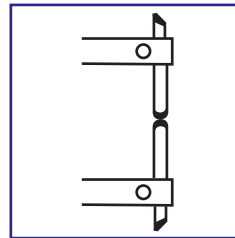
\*220mm Gap



#### 7510

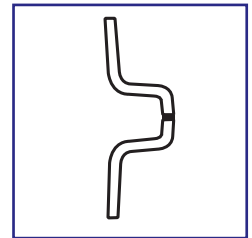
Arms Special

### Standard Electrodes for Heavy Duty Arms 12mm Ø



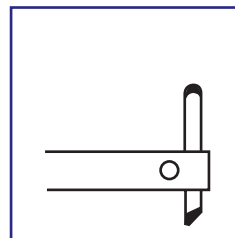
#### 7451

Pair Straight



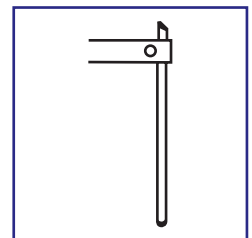
#### 7452

Cranked Electrodes



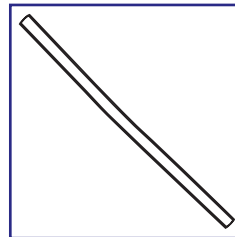
#### 7453

Lower Electrode  
12 x 45mm



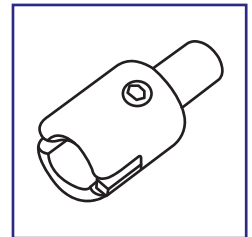
#### 7454

Upper Electrode  
12 x 250mm



#### 7561

Electrode Material  
L= 750mm, 12mm Ø



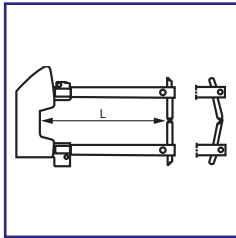
#### 7554

Electrode Sharpener  
12mm



## Spot Welding Accessories

### Standard Arms with Electrodes 10mm Ø



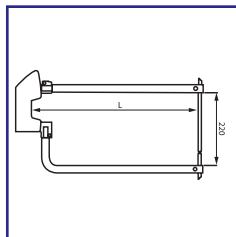
#### Straight

3501: Length = 125mm

3502: Length = 250mm

3503: Length = 350mm

3504: Length = 550mm



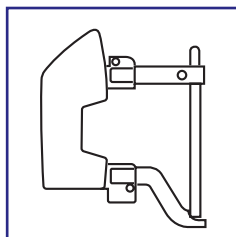
#### Cranked

3506: Length = 250mm

3506S: Length = 250mm

3507: Length = 350mm

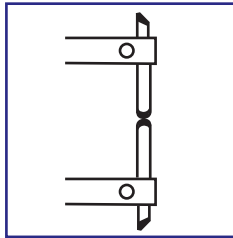
3509: Length = 500mm



#### 7516

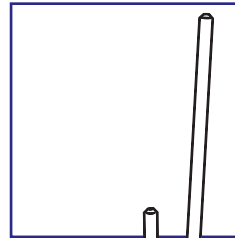
Special Arms

### Electrodes for Standard Arms 10mm Ø



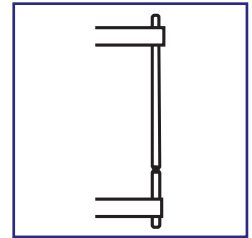
#### 3521

Pair Straight



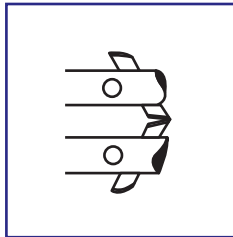
#### 3522

Pair Shaped



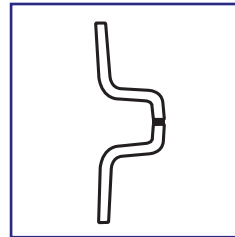
#### 3523

Pair



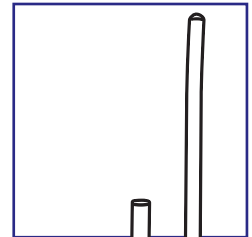
#### 3524

Pair Shaped



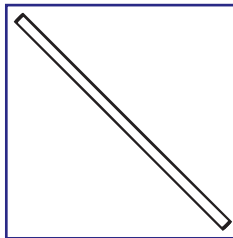
#### 3526

Pair Shaped



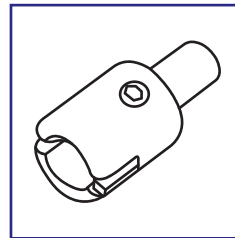
#### 3533

Pair



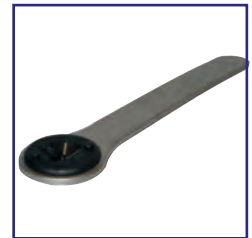
#### 3536

Electrode Material  
750mm



#### 3552

Electrode Sharpener  
10mm

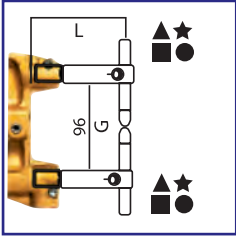


#### 160/1

Electrode Sharpener  
16mm Ratchet Type

## Spot Welding Accessories

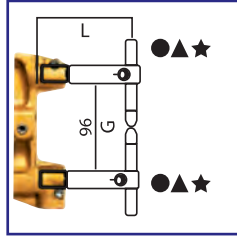
### 18mm Diameter for 3484, 7900, 7902/P Scorpion



#### Straight

5001: Length = 107mm

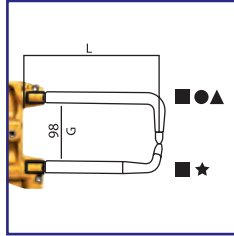
5003: Length = 235mm



#### Straight

5004: Length = 332mm

5005: Length = 483mm

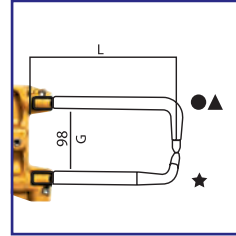


#### Bent

5021: Length = 107mm

5022: Length = 152mm

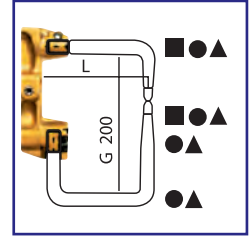
5022: Length = 235mm



#### Bent

5024TE: Length = 332mm

5025TE: Length = 483mm



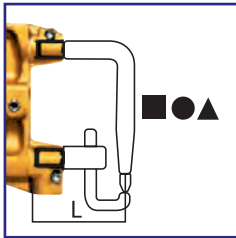
5032: Arms 152 x 200mm

5033: Arms 235 x 200mm

5034: Arms 332 x 200mm

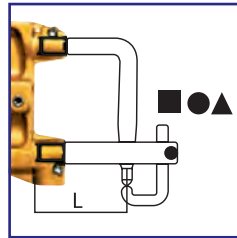
5035: Arms 483 x 200mm

### Special Air Cooled Arms - 18mm Ø



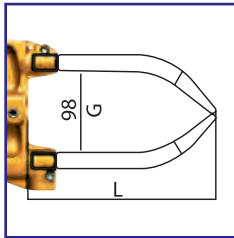
#### 5081

Arms with Cap & Bent  
Electrode - Item 7335



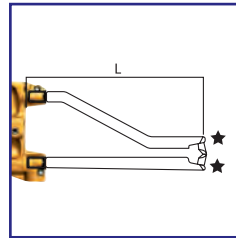
#### 5082

Arms with Cap & Bent  
Electrode - Item 7335



#### 5084

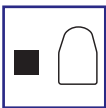
Special Arms



#### 5085

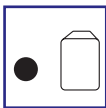
Arms with Caps, Reduced  
Dimensions L=350mm

### 18mm Diameter Cap Electrodes for 3484, 7900, 7902/P Scorpion



#### 5201TE

Round  
Tip Cap



#### 5202

Conic  
Tip Cap



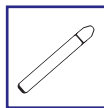
#### 5203TE

Excentric  
Tip Cap



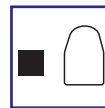
#### 5204TE

Excentric  
Tip Cap 12°



#### 7351

Electrode  
Cap Round  
16 mm



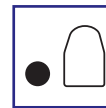
#### 5231

Electrode  
Cap Round  
16 mm



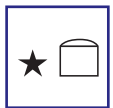
#### 5232

Electrode  
Cap  
Truncated  
Cone 16 mm



#### 5233

Electrode  
Cap Round  
16 mm

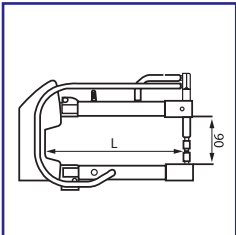


#### 5234

Electrode  
Cap Round  
16 mm

## Spot Welding Accessories

### Water Cooled Arms & Electrodes for Hand Spot Gun 7913



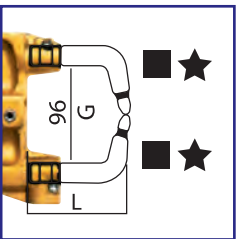
7512: Length = 150mm

7513: Length = 250mm

7514: Length = 350mm

7515: Length = 500mm

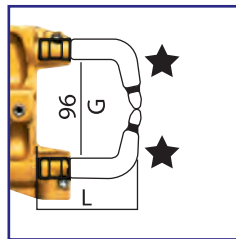
### Water Cooled Heavy Duty Arms with Electrodes 20mm Diameter for 8095SG, 3450 (8672 Gun)



#### Bent

5121: Length = 107mm

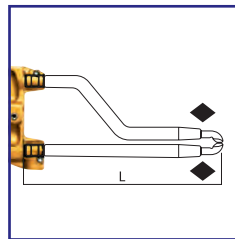
5122: Length = 152mm



#### Bent

5124: Length = 332mm

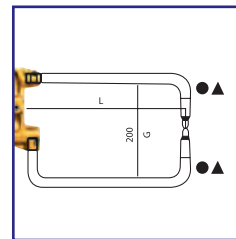
5125: Length = 483mm



#### Arms of Reduced Dimensions

5186: Length = 250mm

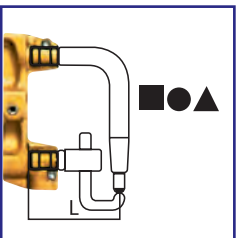
5185: Length = 350mm



#### Arms

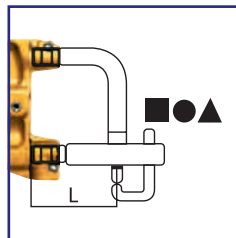
5134: L = 350mm H = 200mm

5136: L = 550mm H = 200mm



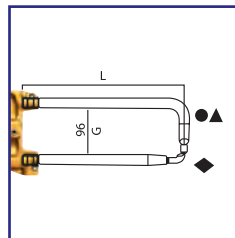
#### 5181

Arms with Electrodes & Bent Electrodes (7335)



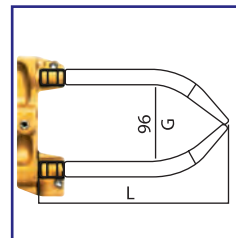
#### 5182

Arms with Electrodes & Bent Electrodes (7335)



#### 5183

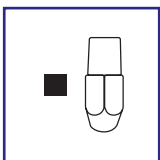
Special Arms



#### 5184

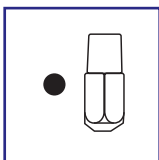
Arms of Redcuded Dimensions L = 350mm

### Water Cooled Electrodes



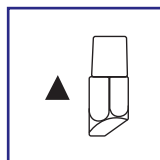
#### 5210TE

Round Tip  
Set of 12 pcs



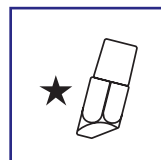
#### 5211TE

Conic Tip  
Set of 12 pcs



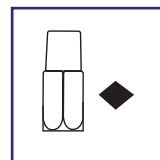
#### 5212TE

Excentric Tip  
Set of 12 pcs



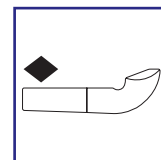
#### 5213TE

Excentric Tip 12°  
Set of 12 pcs



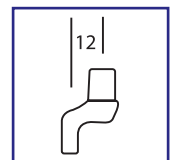
#### 5214TE

Flat Electrode  
Set of 12 pcs



#### 5215TE

Reduced  
Dimension

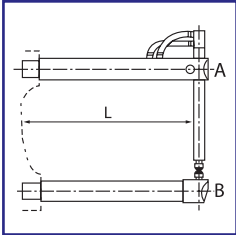


#### 5216TE

Special  
Electrode

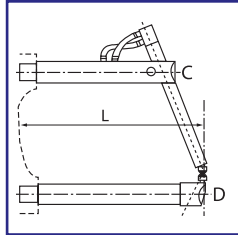
## Spot Welding Accessories

### Suspended Gun Arms & Electrodes



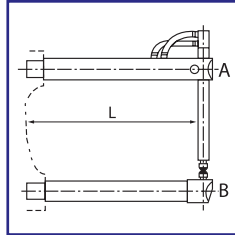
**Upper Arm  
Straight (A)**

4850: Length = 190mm  
4854: Length = 250mm  
4858: Length = 350mm  
4862: Length = 508mm  
4866: Length = 650mm



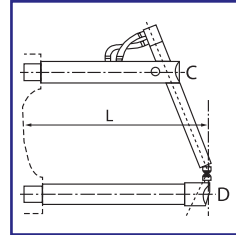
**Upper Arm  
Angled (C)**

4851: Length = 190mm  
4855: Length = 250mm  
4859: Length = 350mm  
4863: Length = 508mm  
4867: Length = 650mm



**Lower Arm  
Straight (B)**

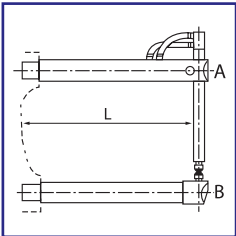
4852: Length = 190mm  
4856: Length = 250mm  
4860: Length = 350mm  
4864: Length = 508mm  
4868: Length = 650mm



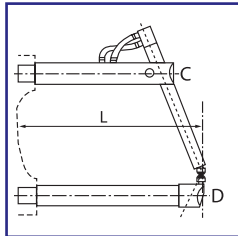
**Lower Arm  
Angled (D)**

4853: Length = 190mm  
4857: Length = 250mm  
4861: Length = 350mm  
4865: Length = 508mm  
4869: Length = 650mm

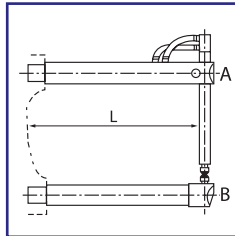
### Suspended Gun Arms & Electrodes



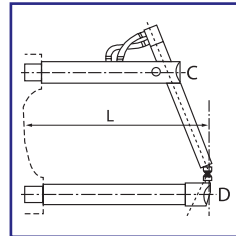
**4870 (A)**  
Upper Arm Straight  
800mm



**4871 (C)**  
Upper Arm Angled  
800mm

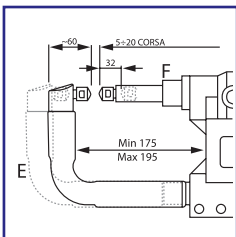


**4872 (B)**  
Lower Arm Straight  
800mm

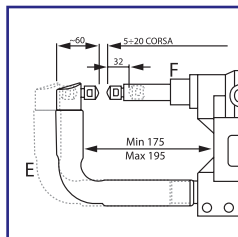


**4873 (D)**  
Lower Arm Angled  
800mm

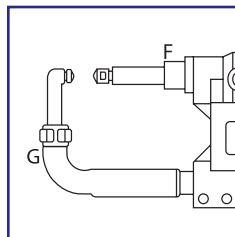
### Arms for Suspended Spot Gun 3323



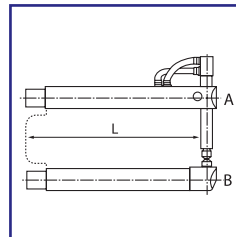
**4882 (F)**  
Upper Arm



**4883 (E)**  
Lower Arm

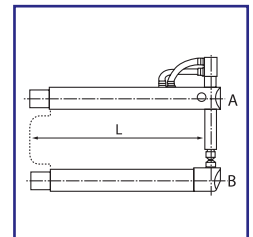


**4884 (G)**  
Lower Arm  
with Reduced Ø



**Upper Arm (A)**

4750: Length = 255mm  
4756/T: Length = 408mm



**Lower Arm (B)**

4752: Length = 255mm  
4758: Length = 408mm

### Straight Arms for Suspended Spot Gun 3327