



# BLACKHAWK

## CATALOGUE

WELDING & INDUCTION SYSTEMS

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# SPOT WELDERS

The Blackhawk line of medium frequency resistance spot welders are micro-processor controlled and feature direct current (MFDC) inverter technology. A step above traditional spot welders, the Power Gun technology allows for higher welding currents with low absorption rates. Longer, lighter cables give better holding, wider range of action, and a minimum magnetic fields around the cables. Particularly suitable for autobody and repair shops, these welders give excellent results on high strength steel (HSS) and galvanised sheet metal.

Thanks to automatic recognition of the materials and thickness, the innovative Smart Autoset technology, eliminates set-up times and guarantees optimal spot welding, even when the types of steel to be processed are unknown. WAVE technology facilitates interaction with the machine and tracks all operating parameters for their processing and reporting. The programs and reports generated can be transferred to a USB flash drive for printing or viewing on a PC.

# WEL14000A

15 000 A, 3 phase medium frequency, inverter technology, microprocessor-controlled resistance spot welder.

Speed up your welding process with the WEL14000A.

The Smart Autoseal technology automatically detects materials and thicknesses - all you need to do is weld!

## COMPLETE PACKAGE WITH:

Load balancer and pole kit, 3 water cooled arms, WEL14024-WEL14003-WEL14006 and 360 ring kit.

## TECHNICAL DATA:

- 3 phase 400V 50/60 Hz, Mains fuse 32 A
- 3 phase 200/240V 50/60 Hz, Mains fuse 63 A
- Max spot-welding current 15000 A
- Max electrodes power 580 daN
- Max weld. thickness on sheets 3 + 3 + 3 mm
- Dimensions 800x520x1150 mm
- Weight 100 kg



## SMART TECHNOLOGY

The innovative Smart Autoseal technology automatically recognizes materials and thickness which eliminates set-up times and guarantees optimal spot welding, even when the types of steel to be processed are unknown. Suitable for body shop applications and gives excellent results on high strength steel (HSS)/boron and galvanized sheet metal.

## EASY TO USE

The multifunction digital panel can be used to select the automatic Smart Autoseal mode as well as the EASY, PRO, MULTI semi-automatic mode and the manual mode. Automatic pressure monitoring ensures excellent adjustment of the force applied to the gun electrodes.

## TOTAL CONTROL

Technicians may customize the parameters to create and save their own spot-welding program. The machine allows for manual set-up of up to three materials and up to three different thicknesses. The programs and reports generated can be transferred to a USB pen drive.

## WIDE RANGE

The Power Gun Technology allows high spot-welding currents with low absorption rates, the use of longer (5m) and lighter cables for a better holding and a wider range of action and minimum magnetic fields around the cables.

## INCLUDED

**WEL14001A**  
Load balancer and pole kit



**WEL14004**  
360 Ring kit



## OPTIONAL

**WEL14009**  
Caps maintenance kit aqua



**WEL14005**  
Coolant for cooling systems



**WEL14014**  
Studder kit



**ARMS & ELECTRODES**  
(see page 6)



**WEL14027**  
Wi-Fi Connectivity kit



# WEL15000

12 000 A, 3 phase medium frequency, inverter technology, microprocessor-controlled resistance spot welder.

WEL15000 is suitable for body shop applications and giving excellent results on (HSS)/boron and galvanized metal sheets.

## COMPLETE PACKAGE WITH:

Load balancer and pole kit, 4 water cooled arms, WEL14024-WEL14003-WEL14006-WEL14007, 360 ring kit, Coolant and Caps maintenance kit.

## TECHNICAL DATA:

- 2 phase 400V 50/60 Hz, Mains fuse 32 A
- Max spot-welding current 7000 A
- Max electrodes power 400 daN
- Max weld. thickness on sheets 3 + 3 mm
- Dimensions 790x450x900 mm
- Weight 81 kg



## SMART AUTOSET

Automatic recognition of the materials and thickness by Smart technology, eliminates set-up times and guarantees optimal spot welding even if the types of steel to be processed are not known.

## MULTIFUNCTION DIGITAL PANEL

Can be used to select the automatic Smart Autoset mode as well as the EASY, PRO, MULTI semi-automatic mode and the manual mode. The programs and reports generated can be transferred to a USB pen drive.

## POWER CLAMP TECHNOLOGY

Allows high spot-welding currents with low absorption rates, the use of longer (5m) and lighter cables for a better holding and a wider range of action and minimum magnetic fields around the cables.

## AUTOMATIC

Pressure monitoring ensures excellent adjustment of the force applied to the clamp electrodes plus automatic recognition of the arm and inserted tool.

## INCLUDED

**WEL14001A**  
Load balancer and pole kit



**WEL14009**  
Caps maintenance kit aqua



**WEL14004**  
360 Ring kit



**WEL14005**  
Coolant for cooling systems



## OPTIONAL

**WEL14014**  
Studder kit



**WEL14027**  
WI-FI Connectivity kit



# WEL17000

7 000 A, 2 phase 400V X-Gun resistance spot welder

WEL17000 is a microprocessor controlled, spot-welding machine with a pneumatic water-cooled X-Gun for use in light car body repair and industrial field.

## COMPLETE PACKAGE WITH:

Water cooled pneumatic X-gun with electrodes and water-cooling unit.

## TECHNICAL DATA:

- 2 phase 400V 50/60 Hz, Mains fuse 32 A
- Max spot-welding current 7000 A
- Max electrodes power 400 daN
- Max weld. thickness on sheets 3 + 3 mm
- Dimensions 790x450x900 mm
- Weight 95 kg



## CONSISTENT QUALITY WELDS

The digital, LCD, multifunction control panel allows the automatic regulation of spot-welding parameters according to the chosen tool and sheet thickness.

## WIDE RANGE WORKSTATION

Is a work station that allows multiple types of welding such as continuous and PULSE single spot welding, spot welding of screws, washers, nails and rivets, spot welding/traction of special washers, intermittent welding, metal sheets warming and upsetting.

## OPTIONAL

**WEL17001**  
Pole and balancer kit



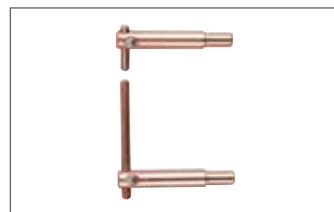
**WEL14005**  
Coolant for cooling systems



**WEL17002**  
Studder kit



**ARMS & ELECTRODES**



# ARMS

## WEL14000 & WEL15000

### ELECTRODES



a. L= 18 mm .....WEL14011  
b. L= 18 mm .....WEL15001  
c. L= 25 mm .....WEL14012

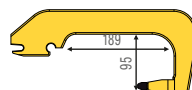
### WATER COOLED ARMS

WEL14024 STD.....L= 95 mm  
WEL14002 .....L= 95 mm  
WEL14003 .....L=300 mm  
WEL14006 .....L=550 mm  
WEL14008 .....L= 430 mm

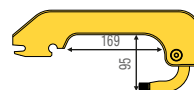
WEL14024: b for WEL15000 - a for WEL14000 - WEL14002: a

WEL14003: a - WEL14006: a WEL14007: c - WEL14008: a

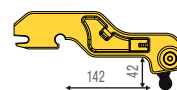
WEL 14024 STANDARD



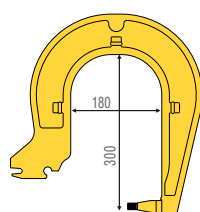
WEL 14002



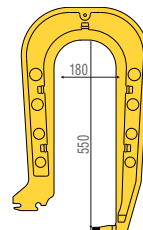
WEL 14007



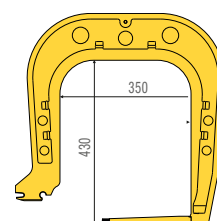
WEL 14003



WEL14006



WEL14008



WEL14009

Caps maintenance kit aqua



WEL14025

Electrode holder kit LONG/SHORT



## ARM PAIRS WITH ELECTRODES

WEL17016

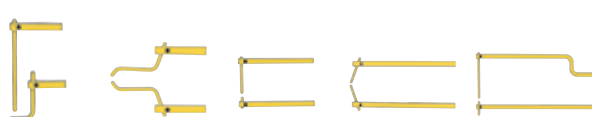


WEL14034

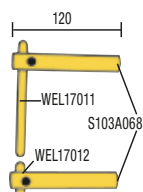


BASIC ARMS KIT  
WEL17014

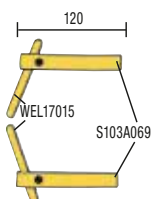
WEL17004 WEL17005 WEL17007 WEL17008 WEL17010



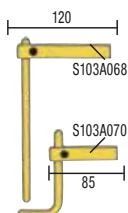
WEL17013  
Straight arm pair



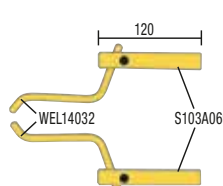
WEL17003  
Bent arm pair



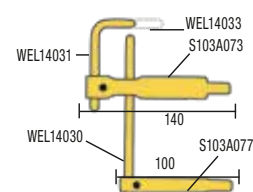
WEL17004  
External profiles



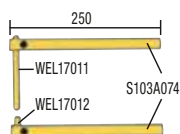
WEL17005  
Clamp electrodes



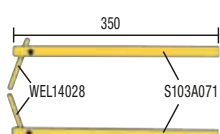
WEL17006  
Internal profiles



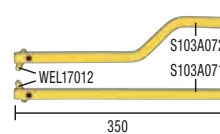
WEL17007  
Straight arm pair



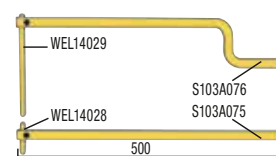
WEL17008  
Bent arm pair



WEL17009  
Shaped arm pair



WEL17010  
Shaped arm pair



WEL17013.....L=120 mm (standard)

WEL17003 .....L=120 mm

WEL17004.....L=120 mm

WEL17005 .....L=120 mm

WEL17006.....L=140 mm

WEL17007.....L=250 mm

WEL17008.....L=350 mm

WEL17009.....L=350 mm

WEL17010.....L=500 mm

# MIG/MAG MACHINES

These microprocessor controlled MIG-MAG/ FLUX/BRAZING/MMA/ TIG DC-Lift inverter multi-process welders are fast and easy to use. WEL 33 is extremely flexible and can be used for a wide variety of applications while the WEL34 gives you more power and versatility with the possibility of use three different torches.

WEL35 have 3 torches and always ready to weld. The WAVE feature enables the technician to work directly on different materials without any need to change either the torch or the wire spool. All three welders feature One Touch LCD Synergy technology which gives quick synergic regulation of the welding parameters

## TECHNOMIG DUAL SYNERGIC



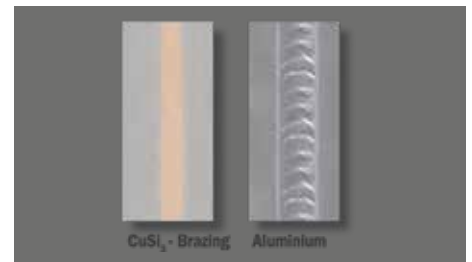
### QUALITY

Smooth and accuracy wire feeding provide quality welds.



### SYNERGIC

Quality welds on steel, stainless steel, aluminium



### MIG-MAG

Excellent in body shops on galvanized panels



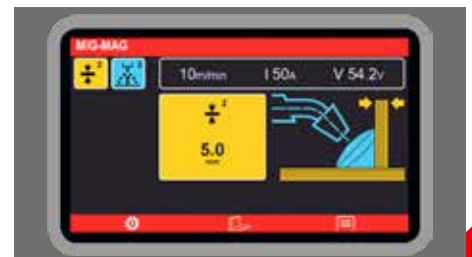
### EASY

Pre-set synergy curves for various gases and materials.



### ERGONOMIC

Easy to use, compact and light



### FINE SET

WEL35, welding seam that can be shaped as required

# WEL35

*Three torches 220 A Single phase 230V compact Mig/Mag machine*

**WEL35 is microprocessor controlled MIG-MAG/FLUX/BRAZING/MMA/TIG DC-Lift inverter multiprocess welding machine.**

It is particularly suitable for use in body shops and allows the immediate use of three different torches. This feature enables the user to work directly on different materials without any need to change either the torch or the wire spool, 3 coil storage: 1 - 5 kg max and 2 - 15 kg max. Each torch can be dedicated to welding specific materials such as steel, high resistance steel (HSS), stainless steel, aluminum and brazing of galvanized metal sheets.

## COMPLETE PACKAGE WITH:

2 MT15 torches, 1 MT25 torch, cable and grounding clamp.

## CONFIGURATION:

- Steel welding wire diameter 0,6 - 1 mm
- Aluminum welding wire diam. 0,8 - 1,2 mm
- Brazing wire diam. 0,8 - 1,2 mm
- Inox welding wire diameter 0,8 - 1 mm
- Flux cored welding wire diam 0,8 - 1,2 mm

## TECHNICAL DATA:

- Single phase 230V 50/60 Hz, Mains fuse 32 A
- Current range 20 - 220 A
- Max current 180 A - 20%, 100 A - 60%
- Max. Power 5 kW
- Dimensions 870x530x1665 mm
- Weight 59 kg



## ALWAYS READY

3 torches always ready for use.

## USER FRIENDLY

Visualization on LCD display of welding parameters: Easy Mode = select the material thickness and weld! Expert Mode = a fine set of welding parameters for specific welding requirements.

## VERSATILE

WAVE OS operating system with pulsed welding programs for specific materials, 25 customizable programs.

## QUALITY

ATC technology, excellent results are easily obtained due to advanced arc control, decreased deformation of material, extremely stable arc even when working with low currents, rapid and accurate tack welding.

## EFFICIENT

Advanced technological solutions for welding operations in pulsed mode on aluminum and galvanized sheet metal. Optimized for the welding of materials which are particularly sensitive to heat input, guarantees excellent results, from both a structural and aesthetic viewpoint, comparable to those achieved by TIG welding.

# WEL34

*Two torches + Spool gun, 220 A Single phase compact Mig/Mag machine*

**WEL34 is particularly suitable for auto body repair shops and allows 3 torches, two standard MIG torches and a spool gun, which enables the technician to work directly on different materials without any need to change the torch or the wire spool.**

The traditional MIG torches are suitable for welding steel, HSS high strength steels, stainless steel and Mig-brazing of galvanized sheets, while the spool gun torch is specific for aluminum welding, even when working far away from the machine.

## COMPLETE PACKAGE WITH:

2 MT15 torches, Spool gun, cable and grounding clamp.

## CONFIGURATION:

- Steel welding wire diameter 0,6 - 1 mm
- Aluminum welding wire diam. 0,8 - 1,0 mm
- Brazing wire diam. 0,8 - 1,0 mm
- Inox welding wire diameter 0,8 - 1 mm
- Flux cored welding wire diam 0,8 - 1,0 mm

## TECHNICAL DATA:

- Single phase voltage 230V 50/60 Hz, Mains fuse 32 A
- Current range 20 - 220 A
- Max current 180 A - 20%, 100 A - 60%
- Max. Power 5 kW
- Dimensions 870x530x1665 mm
- Weight 52 kg



## TRIPLE TORCH VERSATILITY

3 coil storage, 2 - 15 kg for steel + spool gun 1 - 1 kg for aluminum.

## WIDE RANGE

Quick synergic regulation of the welding parameters, thanks to the one touch LCD synergic technology, makes this product easy to use. 17 synergy curves available for various gases and materials.

## USER FRIENDLY

Visualization on LCD graphic display allows better reading of all welding parameters.

## QUALITY

ATC technology achieves with ease excellent welds on thin thicknesses thanks to an advanced control of the arc. The operator can also intervene manually along the arc length: this adjustment means the weld seam can be modified according to the welder's style.

# WEL33

*Single torch 220 A Single phase 230V compact Mig/Mag machine*

**WEL33 is the perfect solution for welding in body shops. Extremely flexible, it can be used to weld a wide range of materials including steel, stainless steel and aluminum or galvanized sheet metal for braze welding.**

Lightweight and very compact, can be moved around easily in all intervention areas, both indoors and outdoors

## COMPLETE PACKAGE WITH:

2 MT15 torches, 1 MT25 torch, cable and grounding clamp.

## CONFIGURATION:

- Steel welding wire diameter 0,6 - 1 mm
- Aluminum welding wire diam. 0,8 - 1,0 mm
- Brazing wire diam. 0,8 - 1,0 mm
- Inox welding wire diameter 0,8 - 1 mm
- Flux cored welding wire diam 0,8 - 1,2 mm

## TECHNICAL DATA:

- Single phase 230V 50/60 Hz, Mains fuse 32 A
- Current range 20 - 220 A
- Max current 180 A - 20%, 100 A - 60%
- Max. Power 5 kW
- Dimensions 795X375X730 mm
- Weight 31 kg



## QUICK

Synergic regulation of the welding parameters, 25 synergy curves available. The operator can also intervene manually along the arc length: this adjustment means the weld seam can be modified according to the welder's style.

## EASY TO USE

The intelligent and automatic control of the arc, moment by moment, maintains high welding performance in all working conditions, with different materials and/or gases. The operator can also intervene manually along the arc length: this adjustment means the weld seam can be modified according to the welder's style.

## POLARITY REVERSAL

for GAS MIG-MAG/BRAZING welding

# MIG-MAG ACCESSORIES



## 1 - WIRE COILS

Stainless steel	S617A002	Ø 0,8	0,5 kg
	S617A003		1 kg

## 2 - WIRE COILS

Aluminium	S617A004	Ø 0,8	0,45 kg
	S617A005	Ø 1	0,45 kg
Al Mg <sub>5</sub>	S617A006	Ø 1 - (1pc)	2 kg
Al Si	S617A007	Ø 1 - (1pc)	2 kg

## 3 - FLUX CORED WIRE

	S450A002	Ø 0,8 - (2pcs)	0,8 kg
	S450A003		3 kg
	S450A004	Ø 0,9 - (2pcs)	0,8 kg
	S450A005		3 kg
	S450A006	Ø 1,2 - (2pcs)	0,8 kg
	S450A007		3 kg

## 4 - FLUX CORED WIRE

Steel	S450A008	Ø 0,6 - (2pcs)	0,8 kg
	S450A009		5 kg
	S450A010	Ø 0,8 - (2pcs)	0,8 kg
	S450A011		5 kg

## 5 - BRAZING WIRE

Cu Si <sub>3</sub>	S450A012	Ø 0,8	0,8 kg
Cu Si <sub>3</sub>	S450A013	Ø 0,8	3 kg
Cu Al <sub>8</sub>	S450A014	Ø 0,8	0,8 kg

## 6 - CONTACT TIP

Steels	S885A543	Ø 0,6 - for WEL35, WEL34, WEL33
	S885A546	Ø 0,8 - for WEL35, WEL34, WEL33
	S885A550	Ø 1 - for WEL35, WEL34, WEL33
Aluminium	S885A545	Ø 0,8 - for WEL35, WEL34, WEL33
	S885A549	Ø 1 - for WEL35, WEL34, WEL33
	S885A547	Ø 1,2 - for WEL35, WEL34, WEL33

## 7 - CONICAL NOZZLE

S885A541	for WEL35, WEL34, WEL33
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## 8 - THIN HEADED NOZZLE

S885A568	for WEL35, WEL34, WEL33
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## 9 - CYLINDER NOZZLE

S885A562	for WEL35, WEL34, WEL33
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## 10 - NOZZLE FOR SPOT-WELDING NAILS

S885A598	for WEL35, WEL34, WEL33
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## 11 - NOZZLE FOR SPOT-WELDING

S885A599	for WEL33/WEL34/WEL35
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S885A600	for WEL35
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## 12 - LINER

Steel/FLUX (3m)	S885A576	Ø 0,6÷0,8 - for WEL35, WEL34, WEL33
	S885A577	Ø 1÷1,2 - for WEL35, WEL34, WEL33
Steel/FLUX (5m)	S885A601	Ø 0,6÷0,8 - for WEL35, WEL33
	S885A602	Ø 1÷1,2 - for WEL35, WEL33
Aluminium (3m)	S646A218	Ø 1÷1,2 - for WEL34
	S885A603	Ø 1÷1,2 - for WEL35

## 13 - SPRING

S110A103	for WEL33/WEL34/WEL35
S110A104	for WEL34

## 14 - GAS DIFFUSOR

S885A570	for WEL34
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## 15 - FEEDING ROLLS

Fe	S281A039	Ø 0,6÷0,8 - for WEL35, WEL33
	S281A046	Ø 1÷1,2 - for WEL35
AL	S281A045	Ø 0,8÷1 - for WEL34
FLUX	S281A047	Ø 1÷1,2 - for WEL34
	S281A048	Ø 1÷1,6 - for WEL35, WEL33

## 16 - HELMET - WEL14026

## 17 - GAS REGULATOR - (a) WEL3301- (b) WEL3306



# DENT PULLING SOLUTIONS

Steel and Aluminum repairs made easy! The WEL16000 is a microprocessor controlled, electronic system for the repair of sheet metal making it a perfect fit for use in autobody repair shops. And if it's an aluminum repair you're working on, then the WEL21000 is the spotter for you. It allows for welding of studs on non-treated or non-oxidized surfaces in steel, stainless steel, galvanized steel, brass and, in particular, aluminium.

# WEL16000

*Dual Gun Spotter, Single phase 230V*

WEL16000 is a microprocessor controlled dual gun spotter for the repair of sheet metal. Perfect fit for use in autobody repair shops. With the LCD digital, multifunction control panel you get automatic regulation of the spot-welding parameters according to the chosen tool. It allows welding of studs on non-treated or non-oxidized surfaces in steel, stainless steel, galvanized steel and aluminum.

## COMPLETE PACKAGE WITH:

Automatic gun, manual gun, work cable with pointing mass, extractor, spindle and pulling stars.

## TECHNICAL DATA:

- Single phase 230V 50/60 Hz, Main fuse 16 A
- Peak Spot welding current: 3800 A
- Weight: 24 kg
- Max. Power: 10,5 kW
- Dimensions: 390x260x225 mm



## VERSATILE

Meet your dent-pulling needs by connecting various working tools to the DINSE socket.

## LCD DISPLAY

Makes it easy to read the parameters and instructions

## EASY TO USE

Parameters adjust automatically to the chosen tool

## OPTIONAL

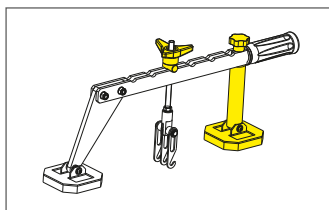
**WEL16003**  
Trolley



**WEL16006**  
Kit multiever



**WEL16007**  
Pulling lever kit



**WEL16004**  
Studder box



**WEL16005**  
Dent pulling box



**WEL16002**  
Duo accessory kit



# WEL21000A

*Aluminum Dent Puller, Single phase 230V*

The WEL21000A is a portable aluminum dent puller that gives rapid welding and pulling thereby reducing repair times. It is suitable for applications in car body shops.

## COMPLETE PACKAGE WITH:

Gun, earth cable with clamp and accessories.

## TECHNICAL DATA:

- Single phase 230V 50/60 Hz, Main fuse 16 A
- Spot time 1 – 3 ms
- Number of welded studs 7 studs/min
- Stud diameters 3 – 4 mm
- Weight 11,7 kg
- Max. Power 10 kW
- Dimensions 450x150x270 mm



## POWERFUL

Handles capacitor discharge welding of studs of 3 - 4mm as well as other accessories, with tip strike.

## VERSATILE

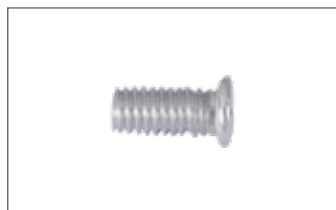
Welding of studs on non-treated or non-oxidized surfaces in steel, stainless steel, galvanized steel, brass and, in particular, aluminum

## FAST

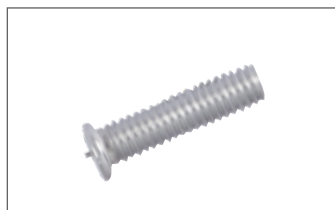
The welding process is so short that it causes no alteration to the opposing surface even if painted, plastic-coated or galvanized.

## OPTIONAL

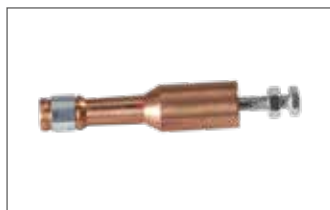
**WEL21001**  
M3 - Al 12 mm (100pcs)



**WEL21002**  
M4 - Al 16 mm (100pcs)



**WEL21003**  
M3 - Stud holding electrode (1pc)



**WEL21004**  
M4 - Stud holding electrode (1pc)



# WEL18000

## Aluminum-Steel Dent Puller Station

WEL18000 is the perfect solution for Aluminum & Steel dent repair. The dent puller station is equipped and designed to fit both WEL21000 Aluminum Dent Puller and WEL16000 Dual Gun Spotter.

WEL18000 dent puller station is a complete mobile workstation equipped with the tools technicians need to properly repair dents in aluminum, steel sheet metal body panels and hoods. It includes multilevel, traction bar, pull system and accessories.

## COMPLETE PACKAGE WITH:

- Puller station
- Kit multilevel
- Traction bar
- Compact puller
- Pull system
- Multihooks 8 pin
- Multihooks 6 pin
- Dent pulling box

## TECHNICAL DATA:

- Dimensions 450x150x270 mm
- Weight 11,7 kg



## STARS



STAR (100pcs)  
BOX: D 10pcs - E 20pcs

## WASHERS

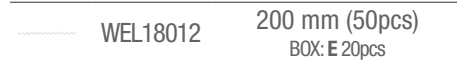


STAR HOLDING ELECTRODE

## WASHERS



Ø 8 mm (100pcs)  
BOX: D 50pcs



WASHER HOLDING ELECTRODE  
BOX: D 1pc



HOOK MANDREL

## WAVY WIRE



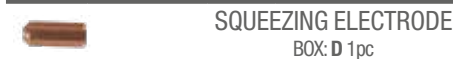
WEL18011 300 mm (50pcs)

WEL18012 200 mm (50pcs)  
BOX: E 20pcs

SPOT WELDING ELECTRODE  
BOX: D 1pc - E 1pc

MAGNETIC POSITIONER

## UPSETTING



SQUEEZING ELECTRODE  
BOX: D 1pc

## RIVETS



Ø3 3,2 mm (100pcs)  
BOX: D 50pcs



Ø3 4,5 mm (100pcs)  
BOX: D 100pcs



Ø3 ELECTRODE  
BOX: D 1pc



M4 15 mm (100pcs)



M4 ELECTRODE



M5-Ø5 18 mm (100pcs)  
BOX: D 50pcs



M5-Ø5 10 mm (100pcs)



M5-Ø5 12 mm (100pcs)  
BOX: D 50pcs

M5-Ø5 25 mm (100pcs)

M5-Ø5 ELECTRODE M5 - M6  
BOX: D 1pc

## HEATING



150 mm CARBON  
BOX: D 5pcs

## HOOK WASHERS



WEL18009 FLAT HOOK WASHERS  
BOX: E 10pcs

## TWISTED HOOK WASHERS



WEL18040 TWISTED HOOK WASHERS BOX: E 10pcs

## ELECTRODE



BOX: E 1pc

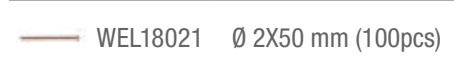


LEVER - 210 mm  
BOX: E 1pc



LEVER - 410 mm

## PATCHING



WEL14020 ELECTRODE

## SPOT-WELDING 1 SIDE



WEL14017 ELECTRODE  
BOX: D 1pc

## POINTING MASS



WEL18024

## NAILS



WEL18021 Ø 2X50 mm (100pcs)



WEL18022 Ø 2,5X50 mm (100pcs)



WEL14021 NAILS HOLDING ELECTRODE



WEL14018 NAILS HOLDER



# CUTTERS

The Technology WEL19000 is the perfect cutting tool for high-strength steels. It gives accurate, clean, microprocessor controlled high-speed cutting. This inverter, compressed air plasma cutting system, features contact striking of pilot arc. FAST - Allows a rapid, distortion-proof cutting of all conductive materials such as steel, stainless steel, galvanised steel, aluminium, copper, brass, etc.

# WEL19000

*Plasma Cutter, Single phase 230V*

The Plasma WEL19000 is the perfect cutting tool for high-strength steels. It gives accurate, clean, microprocessor controlled high-speed cutting. It is an inverter, compressed air plasma cutting system, with contact striking of pilot arc.

Allows a rapid, distortion-proof cutting of all conductive materials such as steel, stainless steel, galvanized steel, aluminum, copper, brass, etc.

## COMPLETE PACKAGE WITH:

- Torch

## TECHNICAL DATA:

- Single phase 230V 50/60 Hz, Main fuse 16 A
- Current range 7 - 40 A
- Max current 35 A - 30%
- Max cutting thickness 12 mm
- Compressed air capacity 100L/min
- Compressed air pressure 4 - 5 bar
- Weight 7,6 kg
- Max. Power : 4 kW
- Dimensions : 540x150x270 mm



## PORTABLE

Light weight and compact making it handy to use anywhere in the workshop.

## SAFE

Features a warning LED-light for: torch under voltage and thermostatic, overvoltage, undervoltage, overcurrent protections.

## CONTROL

The control panel gives clear visualization of air pressure allowing technicians to keep control of the process.

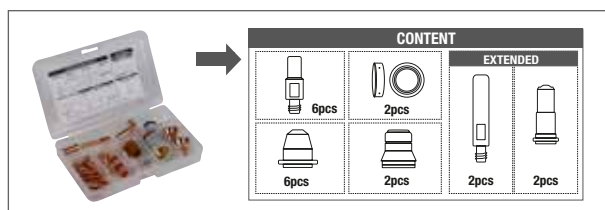
## AUTOMATIC COOLING OF THE TORCH

Makes for fast clean-up after the repair

## OPTIONAL

### WEL19001

Ph torch consumables box



### WEL14026

Helmet



# INDUCTION HEATERS

## FAST - SAFE - PRECISE!

The Blackhawk high performance induction heaters safely meet all your heating needs. Since there is no open flame work can be carried out with no risk of damage to surrounding parts and cables. As opposed to heating with an open flame, the induction process enables the metal to be heated with precision, directly in the heart of the metal, at a localized spot up to 5mm in depth.

Ideal for straightening, bending and loosening of seized-up pieces, these induction heaters produce heat only at the point of contact bringing the metal almost instantaneously to a uniform temperature of 500 to 600°C for safer, more accurate heating.



### IHR04



### IHR11



### IHR15



## TECHNICAL SPECIFICATIONS

### IHR04

Power supply	230 V - 50 Hz
Max. Power	4 kW
Water cooling	5l
Cable network	9 m
Inductor cable	3 m
Dimensions	420x420x740 mm
Weight	65,05 kg

### IHR11

Power supply	400 V - 50 Hz
Max. Power	11 kW
Water cooling	20l
Cable network	9 m
Inductor cable	3 m
Dimensions	500x600x1100 mm
Weight	120 kg

### IHR15

Power supply	400 V - 50 Hz
Max. Power	15 kW
Water cooling	20l
Cable network	9 m
Inductor cable	3 m
Dimensions	500x600x1100 mm
Weight	140 kg



# BLACKHAWK

## BLACKHAWK SAS

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