



WELDING TECHNOLOGIES



Motor Body Repair

Quality Without Compromise

Motor body repair

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As a world leader in welding equipment and welding systems for the automotive industry for more than half a century, ARO is a name which has become synonymous with resistance welding. Clients choose ARO for their proven superiority in state-of-the-art technology, reliability and quality without compromise.

Based in Château-du-Loir near Le Mans in France, ARO has a worldwide presence, with branches and production sites in Europe, Asia and North, Central and South America delivering a complete range of services to international customers.



ARO headquarters, Château du Loir, France.



Robotic car production line.

ARO products can be found in the aerospace industry, railways, white goods industries and in the general manufacturing sectors of heating and ventilation systems, construction and solar energy, all of which require the reliable provision of projection, spot, seam and butt welding. Each time metal components need to be joined for production or repair, ARO provides the welding solution, safely efficiently, ecologically and most of all, reliably.

MBR market

The ARO mobile welding product range was developed with the automotive motor body repair (MBR) market firmly in mind. Since the company's inception, over a quarter of a million spot welders have been supplied by ARO to the automotive industry. Today, ARO continues to innovate, providing solutions for higher production through the provision of the multi-function equipment and lower operating costs demanded by today's automotive repair market.

Part of Langley Holdings Plc, ARO group employs 550 people across the 11 companies in the group.



Ergoweld IT gun

After inventing the first ever transformer gun in history over 60 years ago, the original N type gun, that sold over a quarter of a million units worldwide, ARO redefines its original MBR business with a brand new MFDC transformer gun: the Ergoweld IT automatic.

Safety first

The Ergoweld IT automatic is equipped with a unique circuit breaker, tailor made for this specific welder and making it the safest IT gun on the market. Standard circuit breakers are not efficient enough at the frequencies of over 1000Hz generally used in IT gun converters. As a result the ARO machine runs safely at 6000Hz, which allows the transformer weight to be reduced to less than 3.5kg.

A secondary voltage measure allows the converter to calculate the resistance of the stack and the operation is then completed with a proportional valve that automatically adjusts to achieve optimum air pressure. Automatic mode is available on both X and C guns.

Ergonomics

The Ergoweld IT automatic is one of the most ergonomic on the market that offers:

- Gun weights of less than 11kg with cable
- Removable swivel kit
- Spring balancer
- 5m extra flexible harness
- Accessory panel
- Telescopic suspension beam

High performance

As with the other guns from the Ergoweld range, the new IT gun has a double stroke, is automatic, offers a 550 daN tip force at 5 bars and is entirely water cooled, including the transformer, its diode bridge, secondaries and gun arms. Even the converter is water cooled.

A comprehensive arm selection is available to cover the needs of multiple possible applications.

Available in 2 versions:

Ergoweld IT automatic R – up to 13000A with a 1000A thermal rate.

Ergoweld IT automatic S – up to 15000A with a 2000A thermal rate.



New welding station with integrated transformer gun



Ergoweld: Inverter spot welder range

Single and double gun variants of the latest automatic spotwelding technology

Ergoweld represents a new range of totally redesigned fully automatic spotwelders, now available in 3 models, with single or double gun versions:

- New Ergoweld IT automatic R, integrated transformer gun, 13000A, water cooled
- Ergoweld 14K automatic, 13000A, water cooled
- Ergoweld 12K automatic, 11500A, air cooled
- Two newly-designed guns with:
 - Extra flexible cables
 - Robust and compact design, body entirely nickel plated
 - Tip force up to 550 daN at 5 bars
 - Double stroke on each machine
 - Fast arm exchange system
- Automatic mode on each gun
- USB kit for parameters load & download
- Real single sided gun, air cooled, 3m, allowing 9000A
- Full accessory pack: quick fitting swivel kit, accessory panel and gun holders, set of arms, telescopic beams
- Compliant with Directive 2013/35/EU regarding EMF (details in user manual)



Ergoweld IT automatic R	
Only 1 version available:	
C type IT gun with 5m cable, 2 arms, support beam, spring balancer, swivel kit	ZUT1871322
Technical characteristics	
Mains supply	400V
Fuses	32A
Maximum regulated weld current	13000A
Frequency	6000Hz
Gun weight	11.5kg

Ergoweld 14K automatic	
14K single C gun 3m version	
C gun, single sided gun, 1 support beam	ZUR1871422
Accessory kit	HMI04040
14K double X + C guns 3m version	
X gun, C gun, single sided gun, 2 support beams	ZUR1871432
Accessory kit	HMI04040
Technical characteristics	
Mains supply	400V & 480V
Fuses	32A
Maximum regulated weld current	13000A
Frequency	1000Hz
Cooling	Water cooled

USB kit

The USB kit, included in all versions of the new Ergoweld, is used to load and download recorded parameters from/onto a standard USB stick to be saved or printed.

ARO exclusivity: the USB kit works with any PC equipped with a spreadsheet program – no specific software is necessary.

Ergoweld 12K automatic	
12K single C gun 3m version	
C gun, single sided gun, 1 support beam	ZUR1871222
Accessory kit	HMI04040
12K double X + C guns 3m version	
X gun, C gun, single sided gun, 2 support beams	ZUR1871232
Accessory kit	HMI04040
Technical characteristics	
Mains supply	400V & 480V
Fuses	32A
Maximum regulated weld current	11500A
Frequency	1000Hz
Cooling	Air cooled



Welding guns



Water cooled IT gun 550 daN at 5 bars.



Water cooled X gun 450 daN at 5 bars.



Water cooled C gun 550 daN at 5 bars.



Single sided gun for spot welding from one side and dent pulling.



Air cooled C gun 550 daN at 5 bars.

Ergoweld accessories

Accessory kit HMI04040 includes:

- Consumable box (pull tabs, wavy wire...)
- Zinc spray
- Electrode removing tool
- Slide hammer
- 4 hooks pulling head
- Contact grease
- Carbon rod

Arms and electrodes for Ergoweld guns:

- D25 water cooled arms and caps for X gun – up to 450mm
- Water cooled C gun arms and electrodes – up to 600mm
- Fender edge kit
- Spring balancer

Water and air cooled guns with a comprehensive array of kits and accessories

Swivel kit for X and C gun

The quick-fitting swivel kit allows gun to be rotated 360°, improving gun handling ergonomics even further.

Included in the standards Ergoweld package, this is suitable for use with both X and C guns and can be installed or removed in seconds.



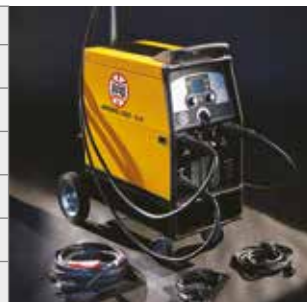
AROMIG: The range of MIG welders

Versatile MIG
solutions with a
wide range
of options and
accessories

AROMIG I200 version 1 and 2

New MIG inverter synergic and pulsed 200A – 230V in 2 versions: single and double wire feeder.
Large LDC display, 60 preset programs + 50 customisable ones.
All parameters adjustable.
The -2 version is delivered with 2 MIG torches and a torch support,
The -1 version is delivered with 1 MIG torch and 1 MMA gun.

I200 - 2 (2 torches)	ZU810025
I200 - 1 (1 torch)	ZU810031
Technical characteristics	
Current range	20 – 200A
Voltage	230V – 16A
Duty factor at 60%	200A



AROMIG I180-1

New inverter MIG synergic 180 A – 230V for all material and brazing.
Very light (10.5Kg)
Compatible with MMA torch Gas / No Gas function
Wire 0.6 to 1mm
Coils 5 kg 200mm
Optional trolley

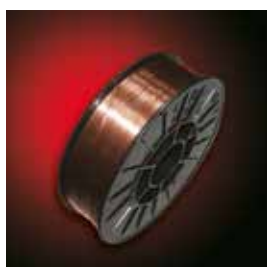
I180 - 1 (1 torch)	ZU810023
Technical characteristics	
Current range	5 – 170A
Voltage	230V – 16A
Duty factor at 60%	110A



Twist Torches.



Gas Gauges.



Welding Wire Coils.

AROMIG C180-1

C180 - 1 (1 torch)	ZU810030
Technical characteristics	
Current range	30 – 170A
Voltage	400V
Duty factor at 60%	118A



AROMIG C400-1

C400 - 1 (1 torch)	ZU810029
Technical characteristics	
Current range	30 – 400A
Voltage	400V
Duty factor at 60%	326A



Plasma cutters – 3 models available

PC30N	ZU810015	230V	Cutting capacity 5mm
PC73	ZU810028	400V	Cutting capacity 25mm
PC123	ZU810032	400V	Cutting capacity 40mm



Consumables.



Welding Helmets.



Dent pullers / riveting / induction

Microspot M4 digital – for steel

New version of the classic M4 with its upgraded digital front panel. Auto mode included. Dent pulling of all steel panels, compatible with air puller and accessories of the ARO range.

Delivered with a 2m gun, earth pad and accessories.

Exists also in a 400V version (p/n° ZU220051).

Complete M4 unit	ZU220050
Trolley for M4	101 011 251
Technical characteristics	
Weight	24Kg
Mains supply	230V
Secondary current	3000A



Starter Kit Alu Shock.



Magnetic Holder.

Microspot M6 – special aluminium

Capacitor discharge dent puller unit for aluminium panels.

Delivered with a 2m gun with integrated earth pad.

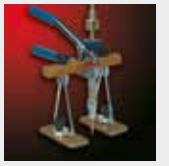
Optional accessories kit available.

Equipped with diameter 5mm electrode.

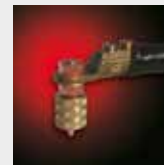
Complete unit	ZU220031
Accessory kit	HMI01003_1
Starter Kit Alu Shock	101 006 211
Technical characteristics	
Mains supply	230V
Welding capacity	66000µf
Weight	18Kg



Minitir pulling system.



Pull System.



Universal Fast Ground.



Dent Pulling Case.

Microspot M6 and optional accessory kit.

Riveting guns

New riveting gun for car body repair, hydro-pneumatic or electric.

Force up to 5 tons.

5 different configurations available.



Induction heaters

New range of induction heaters, used by panel beaters as well as mechanics.

Ideal to remove paint, insulation, injectors.



Accessories

Accessories for steel or aluminium dent pulling:

- Pulling lever with hooks
- Slide hammer
- Electrodes for pull tabs, wavy wire, nails
- Pull tabs, nails, studs, nuts, washers, carbon rods, wavy wire
- Pull system, star system
- Diamond file
- Universal fast ground
- Magnetic holder

Ask for detailed leaflets.



WELDING TECHNOLOGIES

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