

# CR500 SPOT WELDER

## Medium Frequency Technology

### Unmatched in power and intelligence!

The CR500 spot welder is designed to be used by quality minded body shops during the collision repair process. It is powerful, robust and compact through cutting edge Inverter Technology. A wide range of accessories and sophisticated software with unique automatic control features guarantee perfect welding results.



**CAR-O-LINER®**  
Excellence in Collision Repair

# The new CR500 for high-performance welding!

## For quality-minded bodyshops

The CR500 Spot Welder has been developed using years of experience and knowledge gathered from car manufacturers around the world, who are using lighter and stronger metals in new vehicle construction.

The CR500 Spot Welder is designed for quality-minded body shops to provide quality spot welds with all new high-strength steels.

## Flexible and compact system

The welding system consists of a welder unit fitted with a multi-function gun and a spot gun as well as a unique control panel that lets you manage the entire welding process. External accessories, such as an Air Puller (optional), can also be used by connecting them to the welder.

## Efficient and rapid welding

The unit has four welding cables to provide quick access to two sided, single sided and other types of welding without switching tools. This promotes efficient and rapid welding.

CR500 is designed to handle:

- Two sided spot welding
- Single sided welding
- Spot hammer welding
- Nuts and bolts welding
- Carbon shrinking
- Contact shrinking
- Moulding clip and rivet welding

The smart support arm follows you wherever you place the spot gun (optional).

Tool panel (optional) for easy access to tools and accessories.

C-Tong

Control panel

Spot gun

4-cable system

## DATA

- Welding amperage on the tips: 10,000 A DC
- Power supply: 230 V or 400 V, 50/60 Hz, 3 phase
- Cable length to electrodes: 2.6 m incl. tong
- Extension yokes for hard-to-reach areas (optional)
- Tool panel for easy access (optional)
- Support arm for the spot gun (optional)



### **Powerful and adjustable spot gun**

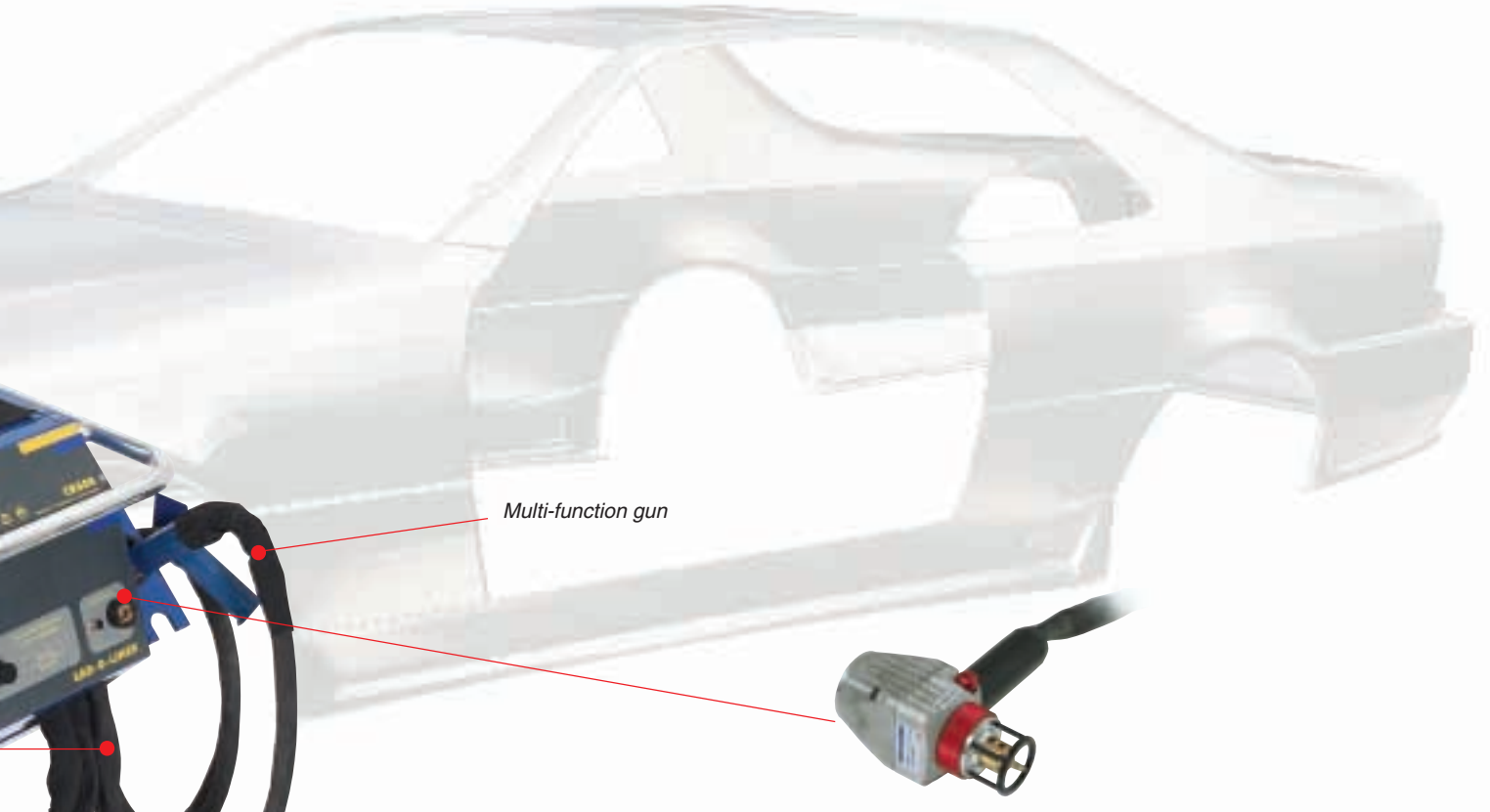
The CR500 spot gun offers extreme welding power for both two sided and single sided welding. It has a built-in pneumatic feature that presses the welding tips together automatically when triggered. The compression is adjustable from the control panel.

### **Versatile Multi-function gun**

The CR500 Multi-function gun is used for a wide variety of applications, such as spot hammer welding, carbon shrinking, single sided welding, moulding clip and rivet welding as well as nut and bolt welding.

### **Smart control panel**

The welding process and current is easily supervised and controlled from a control panel with world-class man/machine communication.



Multi-function gun



*Plug-in slot for Air Puller (optional).*

*With the pneumatic Airpuller you can do all the dent repairs from the outside in a fraction of the time normally needed when using similar tools. The Airpuller stores in a convenient and protective box. An specially designed Power Lift (optional) makes operating the Airpuller even easier.*



# CR500 puts you in control!

## Unlimited possibilities

The CR500 offers 11 different operating modes, each having up to 25 programs. The operating modes and their programs as well as the pneumatic air pressure are easily set on the control panel. CR500 handles more applications, types of materials and sizes than ever before.

## Personal profiles

The built-in memory function of CR500 preserves personal configurations as user profiles to be recalled whenever needed.

## Future proof system

Using the latest in welding hardware and software the CR500 welding system is built to last. Software upgrades can easily be downloaded through the built-in RS232 port. The integrated CAN-bus system allows more future possibilities. The unit is prepared for the power demands of tomorrow.

### Display window

The back lit LCD display with large icons and text is easy to read and learn.

### Select

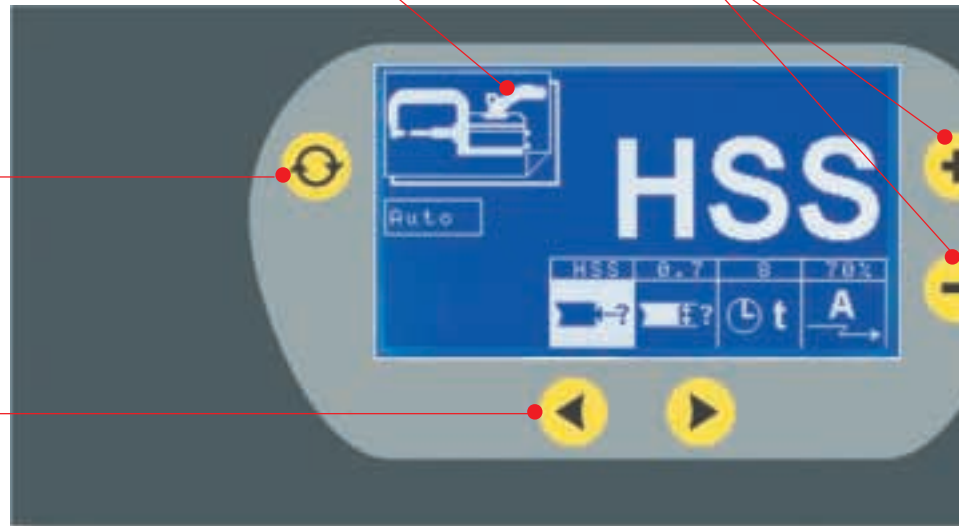
Select program (e.g. welding program), raise/lower values and enter commands.

### Main menu

Choose tool, user profile or service program.

### Sub menu

Choose material, thickness of material, time period, current level etc.



## CR500 is extremely easy to use!

### 1. Turn main switch to "1".

The latest set operating mode and welding program is set by default. Start welding or follow these steps if you want to change the default settings:

### 2. Select tool.

Enter the Main menu to choose Spot gun, Multi-function gun or Air Puller, user profile or service program.

### 3. Choose settings and start welding!

Access the Sub menu and use the Select buttons to set material and thickness to be welded. Start welding and save your user profile for easy access next time you use CR500!

## DATA

- Back lit LCD display
- 11 operating modes
- 40 programs
- Automatic control features:
  - Current control
  - Energy control
- Software can be upgraded through built-in RS232 port

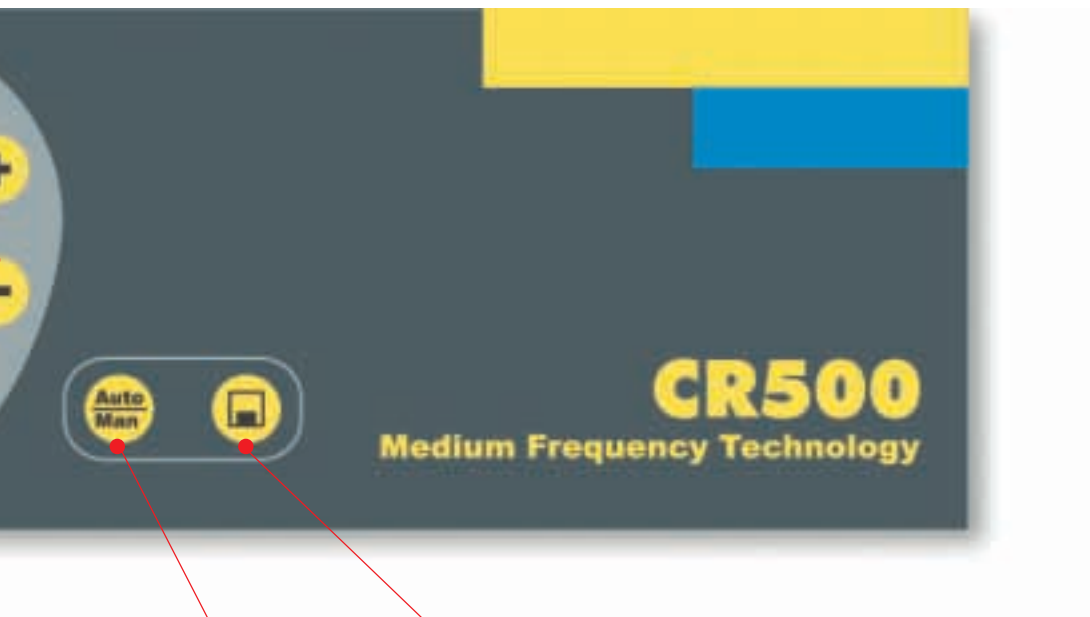
### Preprogrammed for best performance

Use the Auto/Man switch to select manual or automatic mode. Choose automatic mode for pre-set optimized parameters or manual mode to modify settings.

### Unique automatic control features

Easily accessed from the control panel, Current Control compensates for heat loss and variations of the main supply voltage and ensures constant current level.

Energy Control automatically compensates the heat losses by keeping a fixed energy level according to the thickness and the quality of the sheets to be welded. Resulting in less load on the main supply system and still achieve a high quality welding performance.



#### Auto/Man switch

*Toggle between automatic and manual mode.*

#### Save

*Save your user profile.*



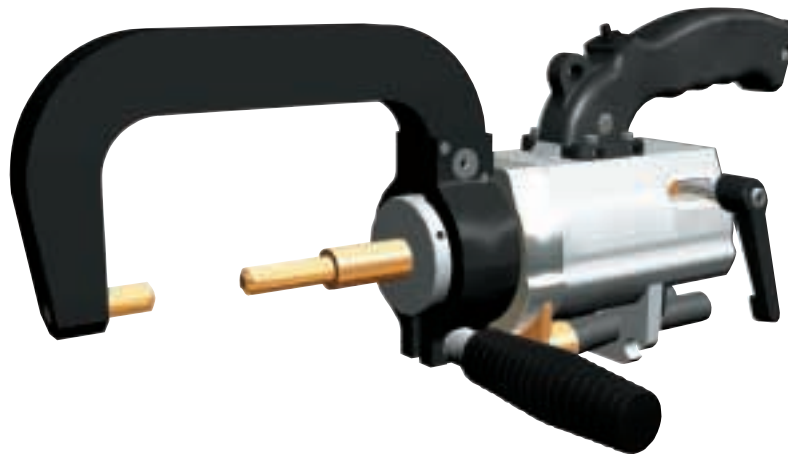
# Smart and easy-to-use C-Tong

## Freely adjustable C-Tong

Car-O-Liner's unique and patented C-Tong has a wide and adjustable 6-8" (150-200 mm) gap to allow access to hard to reach areas. Just loosen the lever and pull the electrode holder to widen the gap.

Switching electrode yokes is just as easy with the CR500!

1. Loosen the handle and pull out the C-yoke.
2. Slide the desired extension yoke into position, tighten the handle and you are done!



*Extension yokes (optional) of different sizes allows access to hard to reach areas. Shown above, the 600 mm yoke.*



*The C-Tong allows access to hard to reach areas.*



*Fender edge yoke (optional).*

# TECHNICAL SPECIFICATIONS

Supply voltage	230 V 50-60 Hz, 3-phase 400 V 50-60 Hz, 3-phase	
Main fuse protection (slow-blow):		
230 V	63 A	
400 V	32 A	
Welding amperage (100%)	10 000 A DC	
Open circuit voltage	27 V	
Inverter frequency	2 000 Hz	
Power transformer	Copper "H" class	
Electrode pressure		
recommended - 5 bar (73 PSI)	190 DaN (419 lb)	
at 7.5 bar (109 PSI)	300 DaN (661 lb)	
No. of operating modes	11	
No. of welding programs	40	
Maximum welding capacity:		
Two sided spot welding (thickness of both sheets)	3.0 + 3.0 mm	0.12 + 0.12 in
Single spot welding (thickness of the inner sheet)	2.0 mm	0.08 in
Multi-function gun:		
Welding cable:		
Length	2.5 m	100 in
Diameter	120 mm <sup>2</sup>	120 mm <sup>2</sup>
Grounding cable:		
Length	2.0 m	80 in
Diameter	120 mm <sup>2</sup>	120 mm <sup>2</sup>
Spot gun:		
Welding cable #1		
Length	2.4 m	94 in
Diameter	240 mm <sup>2</sup>	240 mm <sup>2</sup>
Welding cable #2		
Length	2.4 m	94 in
Diameter	240 mm <sup>2</sup>	240 mm <sup>2</sup>
Cooling:		
Power transformer	Air (Fan)	
Welding cables	Air (Pneumatic air)	
Dimensions:		
Length	847 mm	33 in
Width	747 mm	29 in
Height	900 mm	35 in
Weight	135 kg	266 lbs
Degrees of protection	IP 21	



### **Excellence in Collision Repair**

Car-O-Liner – well-known for quality, ingenuity and design – is a leading supplier of equipment and services for the Collision Repair Industry.

Today more than 30,000 Car-O-Liner collision repair systems are used in more than 60 countries all over the world. The products are sold, serviced and supported by subsidiaries and distributors globally.

Car-O-Liner offers qualified instruction at the World Headquarter Training Center in Kungsör, Sweden, a National Training Center in Wixom, Mi, USA and in Rugby, UK, Bangkok, Thailand, Skien, Norway as well as 50 world-wide distributors with local qualified Training Centers.



## **CAR-O-LINER®**

Box 7  
SE-736 21 Kungsör  
SWEDEN  
Tel. +46 227 412 00  
Fax. +46 227 319 00  
[www.car-o-liner.se](http://www.car-o-liner.se)  
[info@car-o-liner.se](mailto:info@car-o-liner.se)