

# AUTOMATIC CORNER WELDING SYSTEM

# MODEL CWS 200 - 300



## SPECIFICATIONS

Minimum piece dimension	mm	100 x 100
Maximum piece dimension	mm	1500 x 1500
Maximum corner height	mm	200 - 300
Variable welding speed	mm/s	from 0 to 20



#### **Technical features:**

- Welded steel base, complete with guides to support and displace the torch unit;
- Pneumatic locking system of the piece with copper squaring guide, in order to keep the heat of the piece under a certain level
- Very flexible system, it can work with plasma welding machine or TIG type.

### **PROGRAMMING THE MACHINE**

The parameters that can be set and saved under a same recipe are:

MENU' PA	RAMETERS OF WO	RK
P1 02		P3 P4
DELAY TOURCH MOVIMENT		0.0 Sec
SPEED WELDING	P1 - P4	6.0 mm/sec
POSITION START WELDING	P1	32.0 mm
LENGTH ACCELERATION	P1 - P2	0.0 mm
LENGTH DECELERATION	P3 - P4	0.0 mm
POSITION END WELDING	P4	2.0 mm
DELAY STOP WELDING		0.0 Sec

#### ON THE TOUCH PANEL:

- 1. Torch speed ;
- 2. Acceleration ramp torch speed
- 3. Deceleration ramp torch speed

#### ON THE CONTROL OF WELDING MACHINE:

- 1. Welding current
- 2. Initial ramp of current
- 3. Final ramp of current
- 4. Previous flux of gas
- 5. Posterior flux of gas



### **OPERATION**

The machine is able to weld the corner on bended pieces in mild steel, stainless steel and aluminium.

The operator fix the piece on the table of the machine, taking care that the corner is touching the external squaring guide in copper, after that he push the lock bottom.

The piece is locked from the internal side against the copper guides with the help of pneumatic cylinder.

The operator pushes the start bottom and the machine welds the corner according to the parameters selected on the control of the welding machine.

After the welding operation the worker selects " release " bottom, the piece is unlocked and the machine is ready for e new corner.

Copper groups



The copper groups are composed of 2 different units: 1 outer unit height 200 mm or 300 mm, standard



1 inner piece height according to the following table

## Height inner group copper bar and supporting in steel

Height		
	cooled	not cooled
50 mm		
75 mm		
100 mm		
125 mm		
150 mm		
200 mm		
300 mm		



TIG WELDING MACHINE MODEL LORCH T 250





The drawing shows how the bend must be



The space between one flap and another must be minimal 0.01 mm and centered on the corner. If the fold/bending does not allow it, the maximum overlap should be 50% of the thickness.