



SM 1LV

Welding and cleaning machines



Automatic single head welding machine for right angle corners and also corners in the range 30° to 180° with descending heating plate. SM 1LV is provided with heated welding bead restrictors adjustable in the configuration phase, in a range from 0.2 to 2 mm; it also has vertical vices running on linear slideways. Depth of fusion can be set at 2.5 or 3 mm while the support arms feature adjustable height. SM 1LV can be fitted with counterblocks (optional) and can handle all types of standard profiles (including acrylic and coated). It can be provided with a quick change system, to share the same counterblocks with the 4 heads welding machine SM 4H. The machine allows easy cleaning of the teflon film. The work cycle is controlled by a PLC while the heating plate has a digital temperature controller (settable in both °C and °F); the heating and welding time can be set via the LCD display.



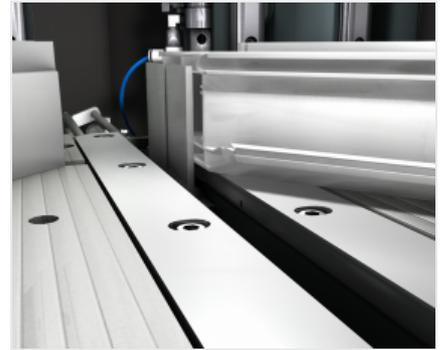
Data interface and diagnostics

A LCD monitor shows the data thus allowing presetting the heating and welding times with display of the remaining time while the cycle is being performed. Errors due to malfunctions or abnormal conditions during the work cycle can also be displayed on the monitor. The preset softening temperature is compared with the actual softening temperature in order to ensure improved hold of the weld and to indicate any differences.



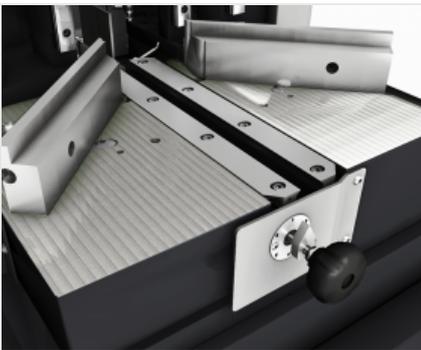
Heated and adjustable welding bead restrictors

The welding bead size is controlled by heated restrictors provided with mechanical adjustment. Such devices allow varying the welding bead thickness within a range between 0.2 and 2 mm. The temperature is controlled by a digital temperature controller and can reach 50°C.



Setting of depth of fusion

The depth of fusion can be set mechanically at 2.5 or 3 mm during the configuration phase so that the welding characteristics can be adapted to the customer's own standards and various types of profile.



Device for welding 4th corner

Positioning of small frames for welding the 4th corner could cause difficulties for the operator as well as abnormal stress on the frame. SM 1LV is provided with a device for limiting the stroke of the intermediate stop. It also makes use of the accurate movement of the vices for inserting the heating plate thus making it easier to handle the profile.

**SM 1LV / WELDING AND CLEANING MACHINES****MACHINE SPECIFICATIONS**

Plate size (length x width x thickness) (mm)	340 x 300 x 13
Welding angle adjustment range	30° ÷ 180°
Maximum profile width - welding at 90° (mm)	140
Maximum profile width - welding at 180° (mm)	230
Maximum profile height (mm)	200
Minimum profile height (mm)	40
Automatic distancing at the end of the welding	●
Counterblocks quick change	○
Welding bead (presettable during the configuration phase) (mm)	0,2 ÷ 2
Heated welding bead restrictors	●
Welding temperature control (°C)	0 ÷ 260
Bead temperature control (°C)	0 ÷ 50
Melting time setting	●
Welding time setting	●
Installed power (kW)	3

Included ● Available ○