



## SM 1LV

Welding and cleaning  
machines



Single-head automatic cycle welding machine for 90° angle corners and corners with variable angles from 30° to 180° with down-stroking heating plate. Equipped with heated bead restrictors that can be set, during the configuration phase, in a range from 0.2 to 2 mm, SM 1LV provides for vertical clamps sliding on linear guides. The melting depth can be set to 2.5 or 3 mm and the support arms are adjustable in height. SM 1LV can be equipped with counterblocks (optional) and can process all types of standard, acrylic and coated profiles as well as large profiles (one-piece). Equipped with a quick changeover function, allows easy cleaning of the Teflon film. The operating cycle is controlled by PLC, the heating plate is controlled by digital temperature controller (it can be set to either °C or F) and the LCD allows setting the heating and welding time.



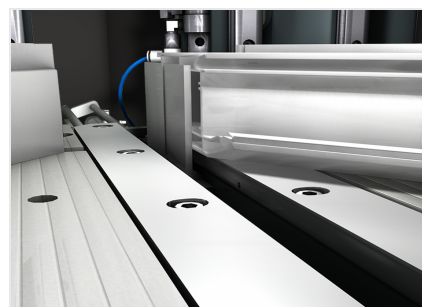
### Data interface and diagnostics

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.



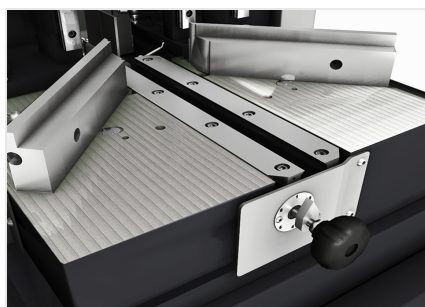
### Heated and adjustable welding bead restrictors

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 (presetttable 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 ○