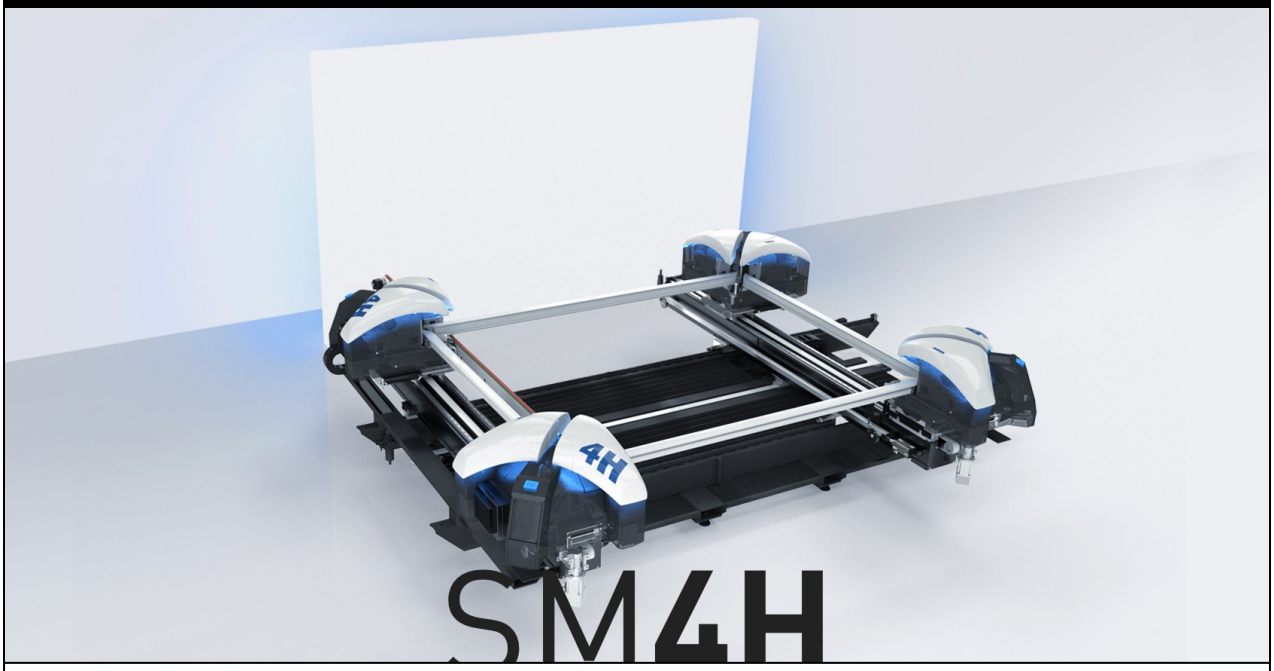
(someco)

a voilàp company

SM 4H

CNC WELDING MACHINES

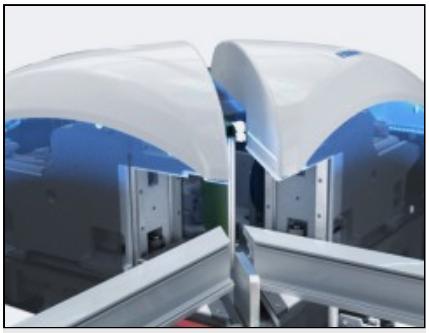


SM 4H is an horizontal NC welding machine for welding of PVC profiles. Produced in two sizes, it allows manufacturing frames through the simultaneous welding of the four 90° angles. In the standard version, it controls the size of the weld bead whose thickness can be predefined based on the finishing specifications required by the subsequent cleaning process. A patented electronic adjustment system is available upon request, which allows managing the welding bead size in a range from a minimum of 0.2 mm up to a maximum of 2 mm. It is also compatible with the patented Seamless counterblocks, that allow to obtain weldings with no bead on the surfaces of doors and windows frames by the application of a simple profile preparation phase. This welding mode reduces and significantly facilitates the following work cycle, with important advantages on productivity and quality of the result. The machine is preset with manual loading and automatic unloading. Conceived to meet ergonomics and safety principles in the best way, the light indicators and the welding head movements allow the operator to interact with the machine in a simple and intuitive manner. Both during profile loading and in the following heating and welding steps, the lights provided on the heads clearly indicate the profile to be positioned and, when necessary, the pair of heads gets close to the operator to allow the correct and easy piece positioning. All the cycle variables (times, speeds, etc.) are programmable and can be set automatically in the machine.

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The right to make technical alterations is reserved.



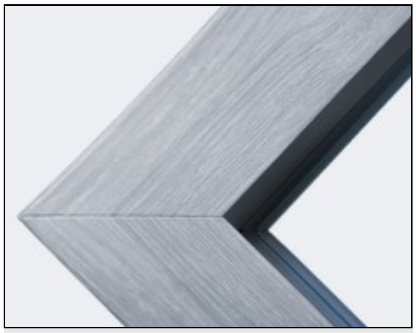
Digital adjustment system

The joint of the PVC frame is made by means of controlled axes that regulate the synchronous handling of the individual profiles. In the standard configuration, this solution guarantees precision, quality and repeatability of the welds, ensuring perfect execution of the bead size set (0.2 / 2.0 mm). With dedicated optional, it is possible to set the bead size within a range of 0,2 to 2,0 mm.



Ergonomics and easy programming

Special care has been given to the ergonomic aspects of the machine: the innovative look stems from integrating protection and accessibility purposes with an optimised human-machine interface. The light signals given by built-in LEDs in the guards of the welding units indicate at all times the status of the machine and any situations that require special attention by the operator, such as high temperature stages or movements in the movable units.



Seamless finish with Seamless technology counterblocks

SM 4H, together with the Seamless technology counterblocks, enables making the perfect weld with seamless finish. Precision is assured as PVC segments are handled by controlled axes. This system enables significantly simplifying and reducing the subsequent machining cycle with major benefits on productivity and result quality.



Field bus connection system

Selecting the interconnection between the central unit and the welding heads is based on the use of a field BUS. Such solution allows remote control and monitoring directly on the operating units. Thus it is possible to implement wiring which is structured, simple and readily accessible. The efficient communication network ensures the complete integration between the various mechanical, pneumatic and electronic components of the machine.

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SM 4H / CNC WELDING MACHINES

WORK AREA

Maximum dimensions of the frame with automatic unload (Y-X mm)	3.500 x 2.700 / 2.500 x 2.700
Minimum dimensions of the frame with automatic unload (Y-X mm)	400 x 350
Minimum dimensions of the frame with longitudinal frame loading device and door sill assembling (Y-X mm)	400 x 430
Maximum profile height (mm)	200
Minimum profile height (mm)	35
Maximum width of the profile (mm) - Frame	150 (*)
Maximum width of the profile (mm) - Door	150 (*)

(*) The published dimensions are indicative of the maximum capacity of the machine. On each profile code the technical office is available to analyze its specific performances.

SEAMLESS WORKING AREA

Maximum dimensions of the frame with automatic unload - seamless mode (Y-X mm)	3.430 x 2.630
Minimum dimensions of the frame with automatic unload - seamless mode (Y-X mm) - Z Frame	450 x 370 (*)
Minimum dimensions of the frame with automatic unload - seamless mode (Y-X mm) - L Frame	420 x 300 (*)
Minimum dimensions of the frame with automatic unload - seamless mode (Y-X mm) - Door	450 x 330 (*)
Minimum dimensions of the frame with longitudinal frame loading device and door sill assembling - seamless mode (Y-X mm) - Z Frame	450 x 460 (*)
Minimum dimensions of the frame with longitudinal frame loading device and door sill assembling - seamless mode (Y-X mm) - L Frame	420 x 410 (*)
Minimum dimensions of the frame with longitudinal frame loading device and door sill assembling - seamless mode (Y-X mm) - Door	450 x 440 (*)
Minimum profile height (mm)	35
Maximum profile height (mm)	110
Maximum width of the profile (mm) - Frame	115 (*)
Maximum width of the profile (mm) - Door	130 (*)

(*) The published dimensions are indicative of the maximum capacity of the machine. On each profile code the technical office is available to analyze its specific performances.

POSITIONING SPEED

X AXIS (m/min)	50
Y AXIS (m/min)	40

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MODES OF OPERATION

Compatible with Seamless counterblocks	●
Plate temperature control (°C)	200 ÷ 300
Bead temperature control: up to 70°C	○
Welding bead standard dimensions (mm)	2
Frame unloading unit from welding machine	●

SAFETY DEVICES AND PROTECTIONS

Perimetric welding machine guard on three sides	●
Photoelectric barrier system to protect access to work zone	●
Heads guard and indicator lamps	●

COMMAND AND CONTROL UNIT

Ventilated electrical cabinet	●
Pneumatic panel	●
CNC-PC with Intel® processor	●
15” LCD-TFT graphic colour	●
RJ45 network card	●

Included ● Available ○

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