

## Fusion 4TVH

Welding machine

Data interface with display and diagnostics 01

Heated and adjustable welding bead restrictors 02

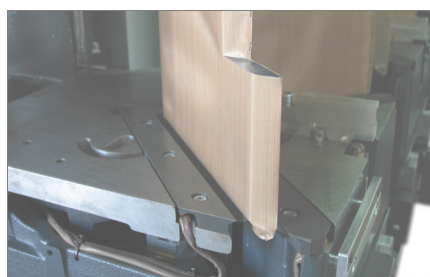


Automatic in-line 4-head welding machine for right angle corners and also corners in the range 30° to 180°, T, H and cross welding. FUSION 4 TVH comes in 3 working lengths (3440, 4440 and 5440 mm) and offers the possibility of welding up to 3 frames simultaneously with 1 or more heads. FUSION 4 TVH is provided with heated welding bead restrictors adjustable in the configuration phase, in a range from 0.5 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. FUSION 4 TVH can be fitted with counterblocks (optional) and can handle all types of standard profiles (including acrylic and coated) as well as large profiles (solid profiles). The machine, provided with a quick change system, 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 time can be set via the LCD display.

Setting of depth of fusion 03

Rotation of welding heads 04

Ergonomic design and safety 05



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## 01

### Data interface with display 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 maximum and minimum preset softening times are compared with the actual time of the softening phase in order to ensure improved hold of the weld; the operator is duly informed of any difference.

The heating plates are provided with digital temperature controllers; if the measured temperature differs from the preset temperature, an alarm warns the operator immediately.

## 02

### 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.

## 03

### 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.

## 04

### Rotation of welding heads

This machine can execute L, V, T, H and cross welding once the relevant settings have been made. To execute H welding, the 1st, 2nd, 3rd and 4th heads can be turned manually 90° so that they face the side. The central heads can be excluded so that longer parts that require the full length of the machine can be welded.

## 05

### Ergonomic design and safety

This machine has been designed for user-friendly and totally safe operation. Profile positioning is quick and easy thanks to the adjustable profile support arms.

The vices are lowered under fully safe conditions and at low pressure, controlled by a pressure switch.

#### MACHINE CHARACTERISTICS

Max welding size (long / medium / short version) (mm)	3.440 / 4.440 / 5.440
Min. welding size (length x height) (mm)	300 x 270
Plate size (length x width x thickness) (mm)	250 x 300 x 13
Max. profile width at 90° (mm)	130
Max. profile height (mm)	160
Min. profile height (mm)	40
Automatic distancing at end of the welding	•
Welding bead (presettable during the configuration phase) (mm)	0,5 ÷ 2
Heated welding bead restrictors	•
Welding temperature control (°C)	0 ÷ 260
Welding bead temperature control (°C)	0 ÷ 50
Welding time setting	•
Cooling time setting	•
Overall dim. (width x long / medium / short version length x height)	1.000 x 5.920 / 4.920 / 3.920 x 2.100
Installed power (kW)	10
Weight (long / medium / short version) (kg)	1.800 / 1.890 / 1.970