

# EWL-P1 WIRE LAYING



The **EWL-P1** is an horizontal format, 3-axis, single spindle, SIEMENS 802D CNC controlled electrofusion wire laying machine. Designed primarily for the wire laying of **pads/heating elements** as used in electrofusion saddle type fittings. In addition, it is capable of wire laying small to medium electrofusion fittings or pipe sections. The machine can produce pad sizes up to approximately 250mm x 250mm, and fittings in the range 20 to 160mm internal diameter.



## SPECIFICATIONS

### typical capacities : pads

pad size*	pad outlet hole diameter	outlet size (branch saddle)	outlet size (tapping tee)
50 x 50mm	20mm	25mm	-
90 x 90mm	27mm	32mm	25mm, 32mm
136 x 136mm	42mm	63mm	63mm

\* Larger pad sizes can be produced to suit individual customer requirements, either automatic or manual clamping (subject to size). The table above gives suggested design parameters for electrofusion pads suitable for typical saddle applications (guideline only).

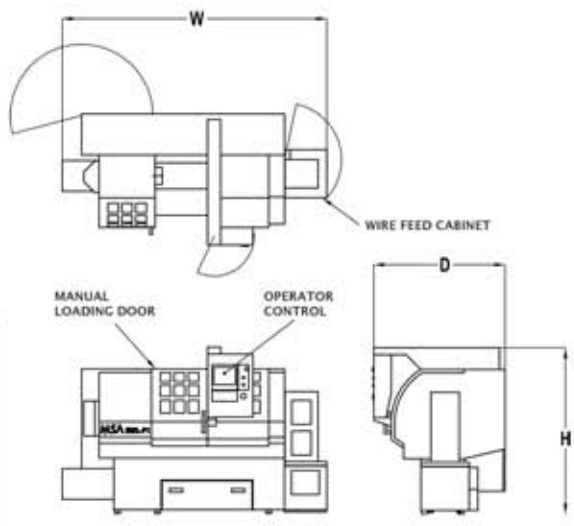
### typical capacities : fittings

sockets/couplers	20 to 160mm I/D
elbows	20 to 110mm I/D
tees (equal)	20 to 110mm I/D
reducers	20 to 160mm I/D

\* Capacities above are dependent on fitting design.

### technical data

spindle speed	0 to 1000 rpm
cross slide travel (X-axis)	220mm
horizontal slide travel (Z-axis)	750mm
maximum fixture swing	410mm
maximum power consumption	12kW
continuous spindle motor power	4kW



weight	2300Kg
width (W)	3024mm
depth (D)	1500mm
height (H)	1899mm

## PROCESS : PAD PRODUCTION

A smooth moulded/fabricated 'flexible pad' is required. Using special tooling, a groove is cut and the plastic material is pushed to one side. In the same action wire is laid in to the groove, and the displaced plastic material is pushed back over the surface of the wire. The wire is laid from the first terminal at double the required pitch. At the center point the tooling stops, rotates 180 degrees, then returns to the second terminal (in between the first spiral).

The pad would then be completed with the addition of terminal pins before being inserted into the saddle mould.

PROCESS & EQUIPMENT PROTECTED BY PATENTS: EP1042108 | E215874 | P19813732-8 | Z,312,374 | ZL08812630-3 | 215568 | 136,935 | 2000-526336 | 10-0616469 | 220759 | P341526 | E521736573 | 04/2320 | US 6,530,159 B1 | US 6,751,840 B2 | US 7,069,637 B2 | PCT/GB2008/050487 | 08290385 | 57411



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