# CRClarke Technology for Today's Plastics

## **Product Data Sheet**

Elite Hot Wire Strip Heater



Our Elite Hot Wire Strip Heater is one of the most versatile and advanced strip heaters available. It is available in four working lengths from 1220mm to 3050mm, with all machines capable of heating materials from 1mm to 25mm in thickness.

The ability to specify the number of heating beams required, from one to six, ensures that your Elite Strip Heater is configured to meet your exact requirements.

#### **Heater Beams**

The Heater Beam design is the core of the Elite range. Each beam can accommodate up to four wires below and four wires above the material to be heated. Wires are individually tensioned to ensure that they remain at a consistent distance from the material even on longer machines. They are adjustable for spacing and distance from the material on the calibrated wire guides, and wires can be easily isolated if not required.

The Upper Beam is pneumatically operated, with a cycle timer built into the control of the machine.

Work Supports hold the material above the heating wires, these are adjustable in and out to provide further control of the heating characteristics. The Elite heater beams have been carefully designed with no protrusions, so that beams can be brought right together with intermediate work supports removed. This allows a wide heating trough to be created, ideal for heating very thick materials.



#### **Power Packs**

The base frame of the machine houses the low-voltage power packs that operate the heating wires. Each Power Pack will operate up to 16 heating wires. With a maximum of three power packs being able to be fitted to each machine, this means that up to 48 heating wires can be operated.

While the normal setup would be to have up to six heater beams and three Power Packs, with each Power Pack operating two beams, this can be tuned to specific applications upon request.



#### **Slide Rails**

All of the Heater Beams sit on slide rails, allowing them to be moved to the correct position. There are three lengths of slide rail available, 1220, 1850 and 2400mm.



#### **Rear Control**

The machine is normally operated from the front only. However the addition of the optional Rear Table, as shown left, allows the heater beams to be split, with some operated from the front and some from the rear. This means that the machine can be used for two completely different jobs simultaneously, while being able to be brought back to single-user operation very quickly.

#### Beam Positioning System - Standard

The Heater Beams are secured to the slide rails using pneumatic clamps. Panel mounted toggle switches select the beams that you wish to move, and then a handle on the side of the table is turned to perform the movement. Calibration strips of either side of the machine aid the accurate positioning of the beams. The left and right hand clamps of each heater beam are independently controlled, allowing the beam to be adjusted to be exactly parallel with the workstop.

Standard machines are fitted with 3.5in colour touchscreens to set the cycle time. An audible alarm sounds while the heater beams are closing and again when the heating cycle is about to end.

#### Beam Positioning System - Digital

With the Digital positioning system, the Heater Beams are mounted onto precision linear slides, and are clamped in position with pneumatic clamps. At startup, a calibration routine sets the heater beams to a Home position. In use, the required beam positions are entered onto a 5.7in colour touchscreen on the machine table. A stepping motor drive moves the heater beams to position, with position encoders at either end of each beam verifying the actual beam position.

Sets of beam positions can be named and stored, along with cycle times, for ease of recall at any time.

For Digital machines with Rear Tables, the configuration of beams from the front and the rear is also stored with each setting.



### **Specifications**

Product Name	Elite 48	Elite 72	Elite 96	Elite 120
Maximum Working Length (mm)	1220	1850	2440	3050
Maximum Material Thickness (mm) per beam	15	15	15	15
Maximum Material Thickness (mm) (2 beams combined)	25	25	25	25
Minimum Number of Heater Beams	1	1	1	1
Maximum Number of Heater Beams	6	6	6	
Minimum Beam Spacing (mm)	52	52	52	52
Maximum Beam Spacing (mm) (Short Rails)	790			
Maximum Beam Spacing (mm) (Medium Rails)	1390			
Maximum Beam Spacing (mm) (Long Rails)	2070			
Voltage	400V 3 Phase (UK/Europe) 220V 3 Phase (North America)			
Maximum Power Consumption (6 Beams)	11kW	13kW	19kW	24kW
Compressed Air Supply	5-8 Bar. Minimum Receiver Size 50 Litres			

#### Machine Dimensions (mm)





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