

## Description:

**Polystyrene is frequently use as formwork to manufacture bespoke concrete products such as manhole bases. The Caswick polystyrene channel cutting machine hot wire cuts straight and curved channels to your specific profile and shape. The machine can also cut shapes such as round tubes using a straight wire. More complicated profiles can be made using a milling spindle.**

## Advantages

- ▶ Channel cutting using pre-formed, rigid, hot wire cutting tools to create your chosen profile. Typically for manhole bases these are a half pipe profile but they can be of any profile you choose.
- ▶ Wires are easily formed on site from coils for your chosen profile and loaded into a tool rack for the machine.
- ▶ The depth of the channel can be to your choice meaning that you can make half pipe or level invert connections.
- ▶ Straight shapes can be cut using a hot wire. These can be any shape and include tapers.
- ▶ More complicated profiles can be cut with a spindle mill mounted on a 6-axis robot with a turntable.
- ▶ The path which the robot cuts to is defined in CAD/CAM software off-line meaning that jobs can be programmed in advance of cutting. It can cut any combination of straight or curved sections in any direction and radius.
- ▶ Multiple cuts can be made to a single work piece for making joints and connections between channel formers.
- ▶ Components can be cut quickly on demand to reduce stocking of moulded components.
- ▶ The machine automatically selects the tool from a tool rack defined by the CAD/CAM designer to allow for easy operation on the shop floor and multiple pieces to be cut in a single operation minimising operator time required.
- ▶ No chippings or dust when using hot wire cutters mean no need for an enclosed work area or extraction and dust separation. Through cutter extraction minimises mess when milling and allows for easy recycling of clean foam.
- ▶ Operates from commercially available EPS blocks in a variety of densities to suit customer requirement.
- ▶ Accepts blocks upto 2440mm x 1220mm x 1220mm in size
- ▶ Offcuts from the process are clean and can be commercially recycled, often locally for profit.
- ▶ Programs can be stored for repeated use.
- ▶ Utilises an ABB 6-axis robot which widely is supported internationally.
- ▶ Machine can be preloaded with programs by Caswick or the CAM package can be purchased to do your own programming.
- ▶ CAM package offers full simulation to allow programming to be done off-line. Programs can be transferred to the machine electronically allowing the programming to be undertaken remote from the machine. One central programmer can create programs for several machines across several sites internationally.

