

When Styrofoam is pushed through the hot wire, it is, in static terms, balancing upon the wire. It is therefore important, to guide the styrofoam properly. Stabilising work with the hands should support the work piece against wire on two levels: Pressure, when cutting, should therefore be directed diagonally against the working surface and guide bar as well as through the wire. The foot switch should only be turned on, when the material touches the wire.

The wire bends a little during cutting so that the wire's lengthways tension does not increase too much. When cutting bends, cut slowly, as only then will the wire follow all changes in direction smoothly. When cutting 'round the corner', wait until the wire has tightened straight. Then, before going on, switch off, or continue cutting in the new direction without delay.

A good cut means: a smooth surface without grooves or annoying Styrofoam threads. You achieve this by smooth, continuous pressure and a rather low level of heat on cutting wire.

The blower (fan)

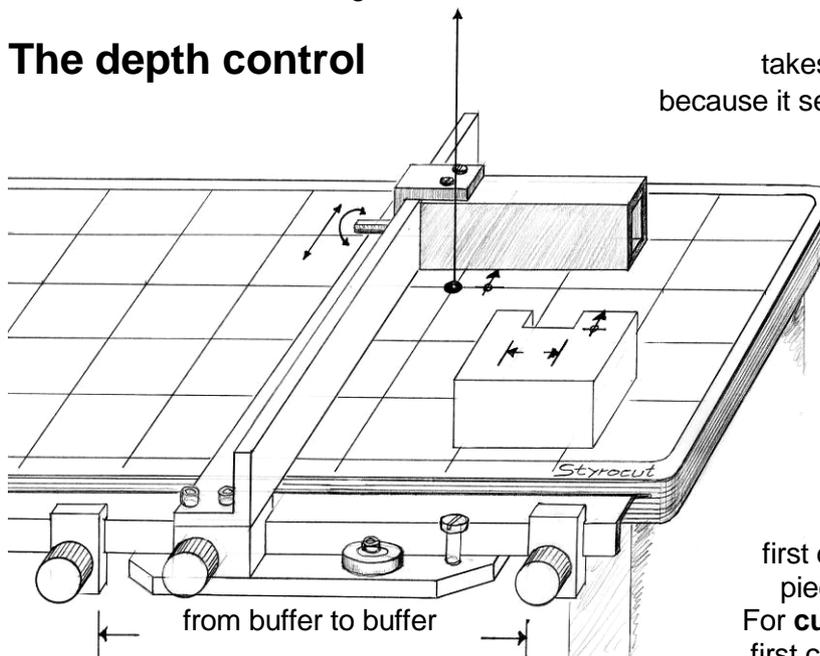
The fan is usually turned on (connector socket on back side). This means: the fan is working as soon, as the cutting wire is heated. In first place, it prevents Styrofoam from unnecessarily evaporating on the cutting wire. Secondly, the fan prevents the upper cutting-edges from extending. This will be important especially when peaces shall be fixed together and always, when you are changing cutting directions.

How to carry out different cuts

Styrofoam can either be cut lengthways on the fixed guide bar (2.00) or, loosening the fixing screw of guide bar, and guiding the piece to be cut together with the guide bar crosswise through the wire.

With all possible wire-angles set, the guide bar can be driven up to zero-point of cutting wire. The right buffer (2.5) may be mostly used to stop the guide bar and prevent it from knocking against cutting wire. Both buffers may be used to set a particular path in advance or, to find a particular setting again after doing different cuts without having to re-measure or to re-test.

The depth control



takes over the buffer's role, when pushing forward, because it sets the exact depth of cut behind cutting wire. For, while cutting wire bends while cutting and stretches while stopping, the point of changing in the direction of cut can not be correctly be set in advance. With the guide bar fixed, piece of Styrofoam can be pushed sideways along depth square or driven sideways at depth square together with moving guide bar.

Cutting angles

you do best bend the cutting wire like in the first drawing up to an angle of about 45° and push piece of Styrofoam against it along the guide bar. For **cutting roofs** you simply turn the part over after first cut and push through again (if the ridge is to be centred and eaves are on same level).

With roofs that are steeper than 45°, roof angle is not to be set to the perpendicular, but to working surface. That means the house-width piece of Styrofoam is to be pushed upside-down through the hot cutting wire. When cutting the second half of roof, leave the already detached roof wedge in place, so that the largest possible surface remains when guiding the piece along the guide bar.

Very small segments of stick-shaped pieces may be best cut off by putting it next to a right-angled piece of waste Styrofoam (or to a piece, cut to any desired angle) and pushing both towards the wire. Thus the cutting wire may be guided through the shape and you do easier remove the cut piece of Styrofoam.