

FoamStyler[®] (S) (HotWire StyroFoam cutter)

Tailor StyroFoam to Any Style/Shape

User Manual



CAUTION! Hot Parts!
Electrical Tool.
Read User Manual.
Use Adult Supervision

NOTE: Remove the arc plate, Circle cutter and center bush locked to the base plate with bolts, before usage.

- Thanks for buying our product. Unpack the box carefully. Check the components as per the check list provided.
- You can start using the machine immediately (After attaching supplied NiChrome wire to bolts b1 b2 b3 as shown in Fig3) by connecting adaptor to bow-cutter and using it as a hand-held tool.

For better cutting control, you can lock the bow-cutter to the base-plate, as per instructions given below.

CHECKLIST:

COMPONENT	MATERIAL	QUANTITY
Base Plate	Hylam	1
Arc Plate/Bow Cutter	Hylam	1
Bushes	PP	4
6V 2A Adaptor	DC Adaptor	1
Hot Wire String	Nichrome(30SWG)	2
Spring	-	1
Bolts &Nuts	Mild Steel	As Required
Lock Plate	Hylam	1
634zz bearing		1
Circle cutting attachment		1
Slider	Hylam	1

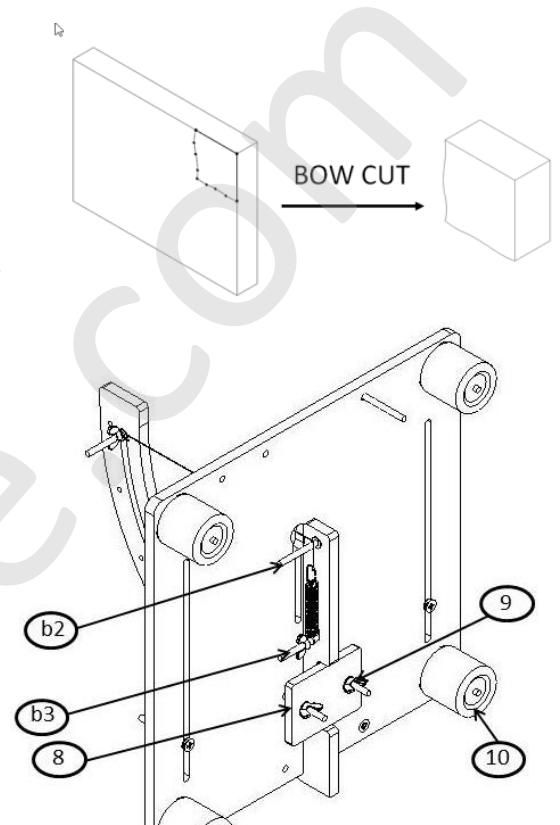
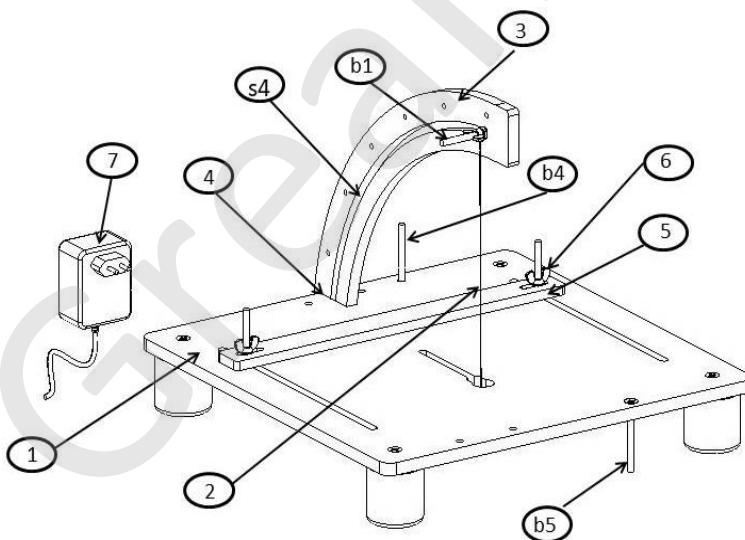


Figure 1



NOMENCLATURE:

1	Base Plate with Graph
2	Hot Wire String
3	Arc Plate/Bow Cutter
4	Slot for Arc Plate
5	Straight Line Guide
6	Wing Nuts to Adjust Straight Line Guide
7	6V 2A DC Adaptor
8	Lock Plate
9	Fasteners to Lock Arc Plate
10	Bush

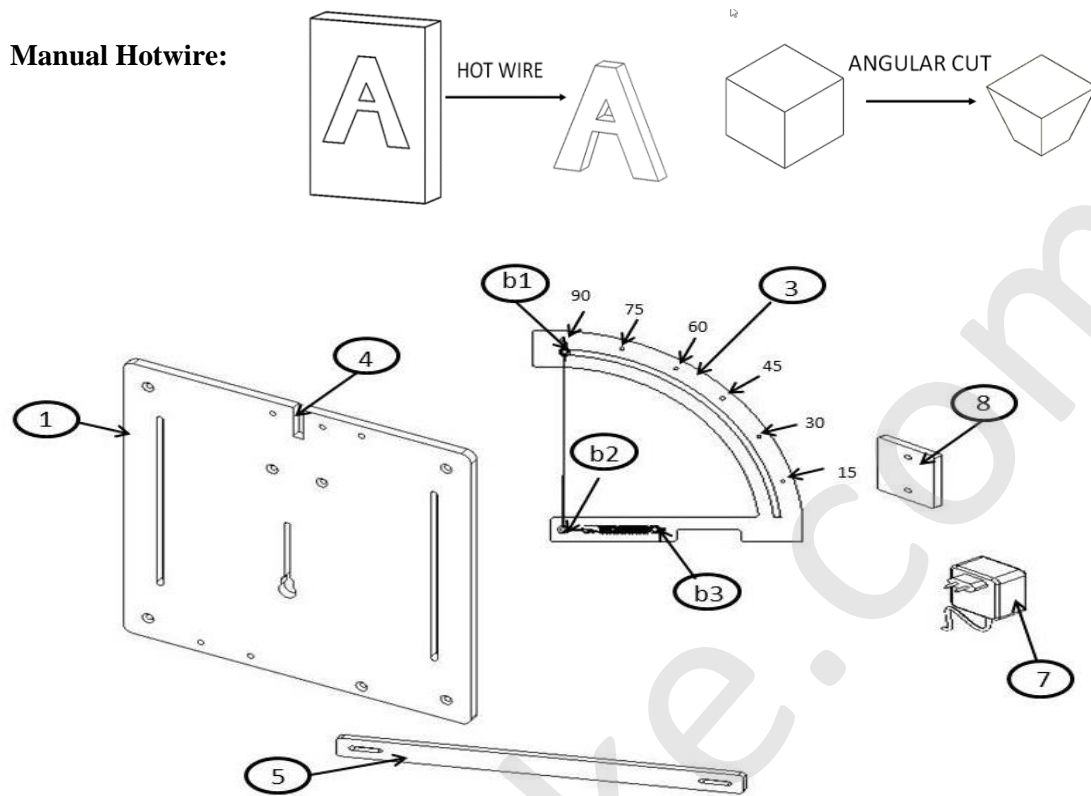


Figure 3

Guidelines for Assembly:

Step 1: Place the base plate on the table.

Step 2: Insert arc plate (3) into the base plate slot (4) as shown in the Figure2.

Step 3: Lock arc plate to the base plate using lock plate with help of wing nuts and bolts as shown in figure 1

Step 4: Connect string on arc plate, on bolts b1, b2 & b3, as shown in Figure3. (Make sure that the spring is at the bottom side).

- Connect the adaptor to the DC1 pin coming from the hotwire machine and plug it to the main power supply. Place the stencils over the Thermocol, trace the letters and cut the Thermocol using our machine. Note: Two DC Connectors (DC1 and DC2) will come from the machine (Figure 4). DC1 will power hotwire mode. DC2 will power slicer mode.
- Adjust the cutting length using the ‘straight line guide’ by loosening the wing nuts and positioning the ‘straight line guide’ at required position and fixing it.
- Cut can start from the edge of the sheet only. To start a cut from the middle, make a hole manually using a screwdriver, pin, etc. Then remove the string from b1, and pass that end of string through the hole in the sheet, and attach it back to b1. Now you can turn ON the heat and start cutting from the middle.
- Wire angle adjustment: Arc plates have holes to indicate various angular positions of the wire (90, 75, 60, 45, 30, 15 deg). Wire can be fixed at any of the angle by fixing bolt b1 at suitable position on arc slot s4 in the Arc plate (3). When adjusting wire angle, u may have to remove the NiCr wire from the bolt b1 or spring from bolt b3, for easy adjustment. Fix the Nicr back after angle adjustment.

Manual Slicer:

Useful for reducing foam thickness, or slicing a thick design into multiple thin designs.

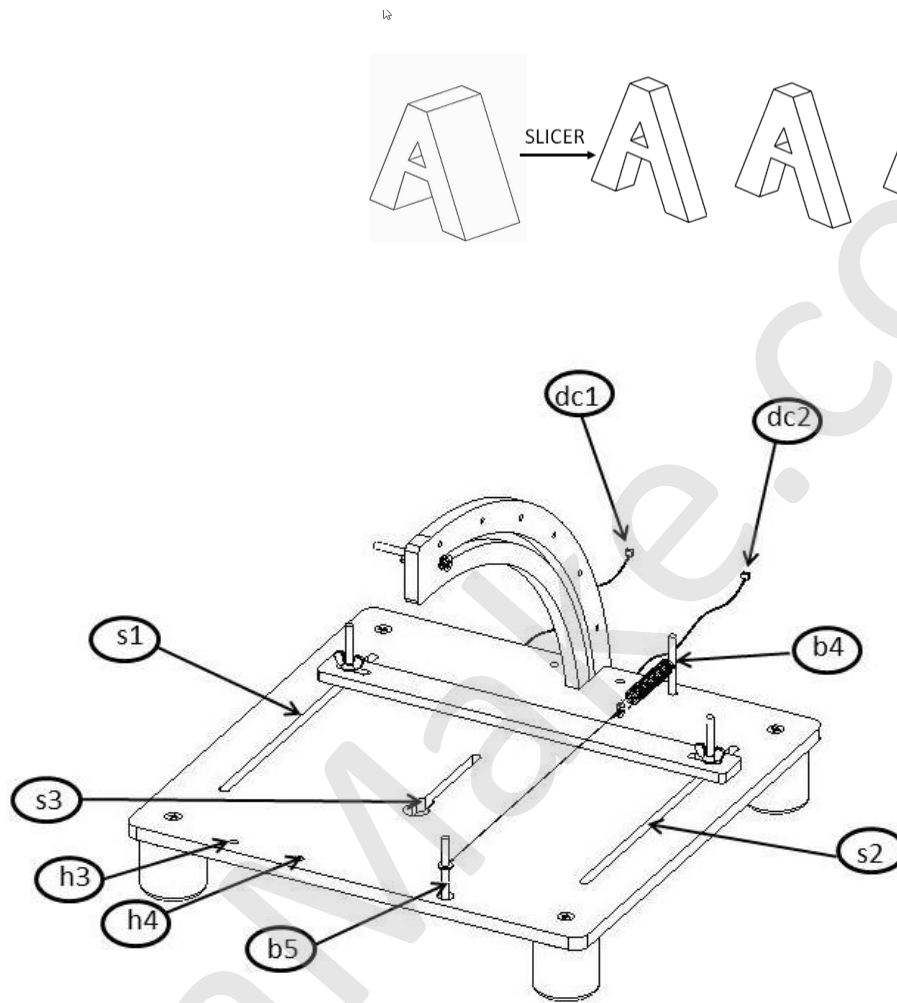


Figure 4

Step 1: Remove the wire and spring from bolts b1 and b3.

Step 2: Bolt b5 will normally be pointing below the base board (refer figure 1). Remove this bolt; flip it upside down such that the bolt is pointing above board (similar to b4). When flipping, ensure the electrical wire from connector DC2 is continued to be attached to b5.

Step 3: Connect the same wire and spring between bolts b4 and b5. (Refer figure4)

Step 4: Connect DC adaptor to connector DC2

Step 5: Power on and start cutting.

Edge cutter:

Useful for adding a chamfer to the foam edges.

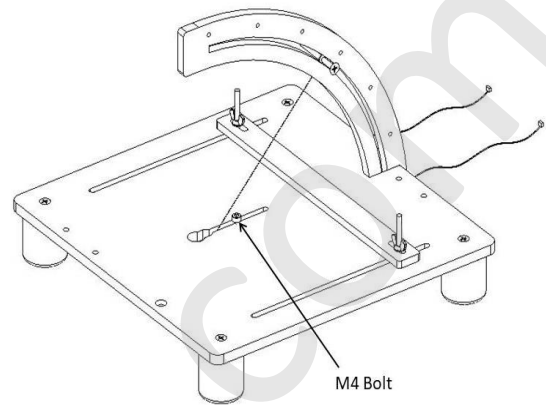
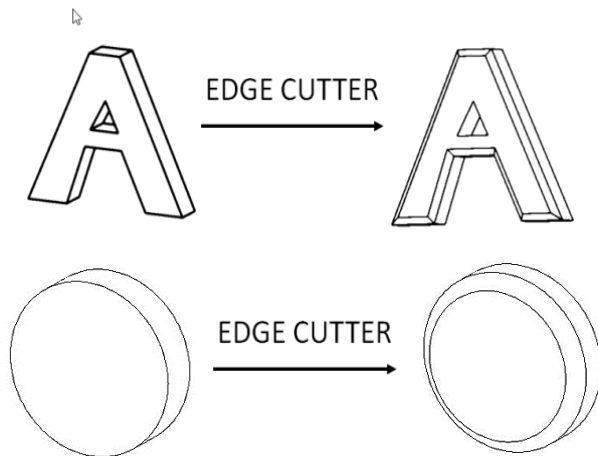


Figure 5

Step 1: Fix a M4 bolt (b6) in slot S3. You have to remove the spring from bolt b3, when locking the edge cutter (EC) bolt, so it is easy to access the nut of the edge cutter bolt. After fixing EC bolt, the spring can be locked back to bolt b3.

Step 2: To get a chamfer distance d_0 , fix the top edge e1 of the bolt at a distance d_0 , using the scale marked on the board. (Note: origin of scale marking is valid only for 45° wire angle. For other angles, set d_1 using a ruler).

Step 3: Push the foam piece touching the edge e1 of bolt b6 and slide the foam along its edge to get the desired edge cut.

Note: An optional bearing supplied can be used for even smoother edge cutting operation. But the bearing increases the effective pin diameter, which makes it difficult to edge cut at sharp corners, like at the cleavage of a heart shape. But bearing can be used for chamfering simple convex edges like circles, rectangles etc.

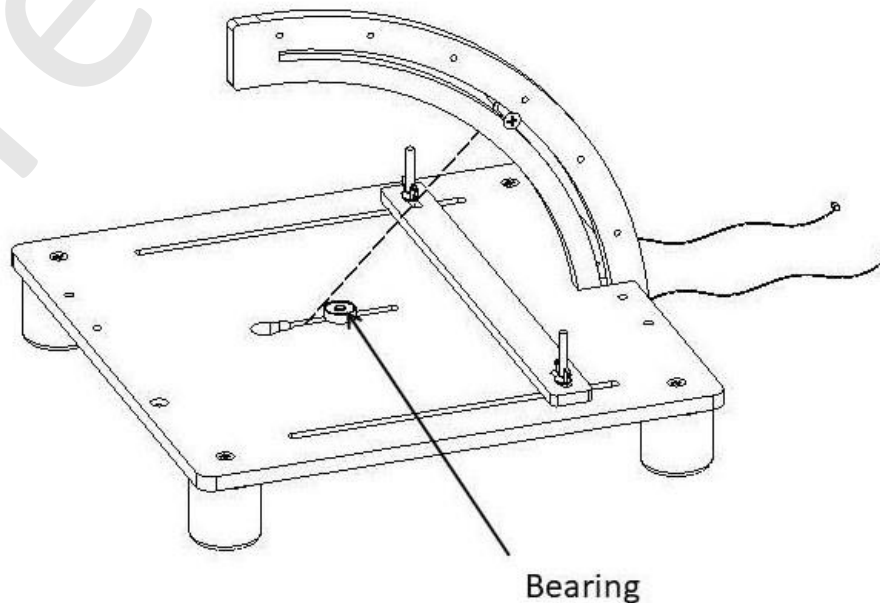


Figure 6. Edge cutter with bearing

Circle and cone cutter:

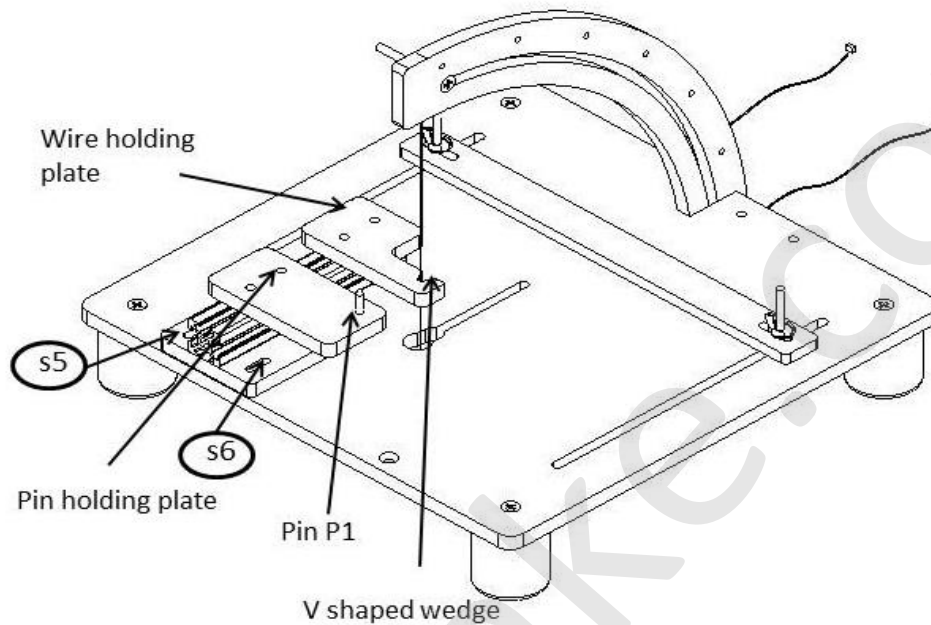
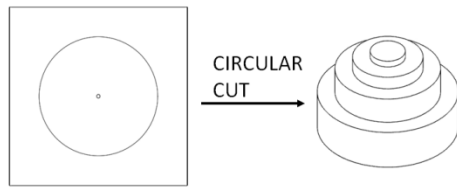


Figure 7

Step 1: Take the attachment given and fix it on the holes provided. (By locking slots s5, s6 on holes h3, h4 on the base board). Locking is optional, can be held hand tight w/o locking also.

Step 2: There will be a pin on the Hylam plate. Place the centre of the foam block on that pin.

Step 3: Place the wire on the V-shaped wedge of the wire holding plate. Using the pin rotate the work piece and you will get the desired circle.

Step 4: For different radius you can change the distance between the two plates.

Step 5: For cutting cone you can shift the bolt b1 on the arc plate to fix the hotwire at desired cone angle and can rotate about the pin and cut.

Safety Instructions:

- Wire will be hot when powered (Around 300 Degrees Celsius).
- EPS fumes can be injurious to health. Use nose mask to avoid inhaling it.
- Power off machine when not in use.

Tips:

- Remove C-frame when not in use, to keep items back in the packing box.
- The slider has a tape on one side. This is useful to use the slider as a straight edge to keep on the foam and cut straight lines.

Dream → Design → Do, Get GREative!