Maintenance

Constant use of the 035-I Industrial Hot Knife may result in polystyrene material build up on blades and the brass holders. This excess polystyrene interferes with the proper electrical and impairs the performance of the blades. The brass blade holders and blades can be thoroughly cleaned with a wire brush.

Hot Wire Foam Factory Tools

Congratulations! You have entered a new realm of creativity. We hope you enjoy many hours with your new Hot Wire Foam Factory Tools. Call us toll free at 866-735-9255 if you have any questions about the use of our tools.

IMPORTANT SAFEGUARDS

When using Electric Tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, or death including the following:

1) Read all instructions.
2) Use Hot Wire tools only for their intended use. Use only with polystyrene foams. Use on other materials could cause fire or electric shock.
3) Use only in well ventilated areas. Open nearby windows or doors, or use an exhaust fan. If you see or smell smoke coming from the foam, turn the heat control knob down to the proper melting temperature.
4) Wear eye protection at all times the Hot Wire tools are plugged in.
5) Do not allow cord to touch hot surfaces. Never carry tool by cord or yank it to disconnect from outlet. Do not allow cords to touch the cutting wires or knife- this may short them and produce fire or electric shock.
6) Close adult supervision is necessary for any tool being used by or near children. Unplug tool before leaving it unattended.
7) When not in use, tools should be stored in dry place, out of reach of children.
8) Don't expose electrical tools to rain. Don't use electrical tools in damp or wet locations. Prevent body contact with grounded surfaces. For example: pipes, or radiators.
9) Do not operate Hot Wire tools in the presence of explosive and/or flammable fumes or materials.
10) Burns can occur from touching the hot cutting wire when it is at normal operating temperature. The Hot Knife stays very hot for several minutes after the tool is turned off. To reduce risk of burns never touch metal parts of the Hot Knife. Never set tools down while they are turned on, as they can cause a fire and short out.
11) Disconnect power cord when changing blades. Follow the instructions for proper replacement of fuses and cutting wires.
12) Blades are the only user serviceable parts. Only use special factory provided blades. Replacing with the wrong kind of wire will ruin your unit, and could cause a fire. For any other repair or adjustment return your unit to the factory. Inspect your unit periodically for worn or broken parts.

Made In China

Hot Wire Foam Factory

Industrial Hot Knife

035-I

Instructions and Safety Precautions

Read all instructions carefully before operation.
Carefully read all safety and cautionary notes so as to avoid injury.
Follow instructions to avoid damaging tool.
Keep these instructions and cautions.

Specifications

- INPUT: 230V/120V (depending on model)
- OUTPUT: 150W
- WEIGHT: 21oz/600g
- LENGTH: 10.2"/260mm
- WIDTH: 2"/50mm
- TEMPERATURE: 600℉+

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Introduction

The 035-I Industrial Hot Knife is a professional-grade hot cutting tool for foamed plastics. The Hot Knife heats up in seconds and gives the operator temperature control.

Recommended Use

Expanded Polystyrene (EPS), Extruded Polystyrene (XEPS), Polyethylene, Cross-Linked Polyethylene, Polypropylenes, and many other foamed plastics and materials can be easily cut with the 035-I Industrial Hot Knife. Always check with the foam manufacturer to see if there are any health or safety hazards when cutting their foam with heat.

Blade Installation

Caution: Always unplug the cord of the Hot Knife before installing or removing the blades. Allow sufficient cooling time for blades, blade holders and metal thumb wheels before handing.

Caution: The Hot Knife blades have a sharpened razor edge, for the cleanest cut always cut in the direction on the sharpened edge.

STRAIGHT BLADE:

1. Loosen the screws on the blade holders with the supplied wrench.
2. Slide the blade under the square pressure plate until snug
3. Securely tighten the screws to assure the proper electrical connection. Do not overtighten.
4. Once the blade is firmly in place, plug the Hot Knife into a standard wall outlet.
5. The temperature control knob has 16 click settings that correspond to the graduated ridges on the surface. The smaller the ridge the lower the power setting.

Caution:

Excessive power output and heat generation may cause the blade holders to overheat resulting in damage to the unit. Use only the power output for proper cutting. The blade does not need to be red hot to move through foamed plastics.

Operation

Put your temperature control knob at midrange setting, place the blade against the edge of the foam and depress trigger. Optimum cutting should be virtually smoke free. For the best results, practice on scrap pieces of foam.

When cutting foam it is best to keep the temperature and speed consistent. If smoke develops during the cut, or you are cutting too slow, or the blade is too hot which could result in an oversized, uneven cut, this can be remedied by lowering the temperature and intermittently releasing the trigger during your cut. As the cutting resistance increases, depress the trigger again. The 035-I Industrial Hot Knife will reach the set temperature within seconds. You can accomplish your cut with minimal smoke using this process. Cutting in this manner will also prolong the life of the knife.

Releasing the trigger approximately one or two inches prior to the completion of the cut will help keep the blade clean and free from buildup.

The selected cutting blade should not be longer than 3/4" past the thickness of your foam board. The foam cools the blade as it cuts. The exposed portion can overheat and cause your blade to warp.

Caution:

1. Consult foam manufacturer's MSDS sheet for flash points and toxicity of the material to be cut.
2. Always operate the 035-I Industrial Hot Knife in well ventilated space
3. Never burn off excess residue on the hot knife blade. The blades will overheat, warping the blade and potentially overheating the Hot Knife.
4. Only operate Hot Knife when it is in contact with the foam.
5. Keep hot blades away from skin, clothing and other flammable materials.
6. Allow blades to cool before handling. A hot blade may cause injury or burns to exposed surfaces.

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When using Electric Tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, or death including the following:

1) Read all Industrial Knife and Optional Accessories instructions.
2) Use Hot Wire tools only for their intended use. Use only with polystyrene foam. Check with the manufacturer of the foam you plan to cut to make sure there are no health or safety hazards when cutting their foam with hot wire tools.
3) Use only in well ventilated areas. Open nearby windows or doors, or use an exhaust fan. If you see or smell smoke coming from the foam, turn the heat control knob down to the proper melting temperature.
4) Wear eye protection at all times the Hot Wire tools are plugged in.
5) Do not allow cord to touch hot surfaces. Never carry tool by cord or yank it to disconnect from outlet. Do not allow cords to touch the cutting wires or knife- this may short them and produce fire or electric shock.
6) Close adult supervision is necessary for any tool being used by or near children. Unplug Industrial Knife from wall before leaving it unattended.
7) When not in use, tools and accessories should be stored in a dry place, out of reach of children.
8) Don't expose electrical tools to rain. Don't use electrical tools in damp or wet locations. Prevent body contact with grounded surfaces. For example: pipes, or radiators.
9) Do not operate Hot Wire tools in the presence of explosive and/or flammable fumes or materials.
10) Burns can occur from touching the hot cutting wire when it is at normal operating temperature. The blades stay very hot for several minutes after the tool is turned off. To reduce risk of burns never touch metal parts. Never set tools down while they are turned on, as they can cause a fire and short out.
11) Disconnect power cord when changing or reshaping Blades. Follow the instructions for proper replacement of cutting wires.
12) Blades and Accessories are the only user serviceable parts. Only use special factory provided Blades and Accessories. Replacing with the Blade with the wrong kind of material will ruin your unit, and could cause a fire. For any other repair or adjustment return your unit to the factory. Inspect your unit periodically for worn or broken parts.

LIMITED WARRANTY

This product is warranted for use within the fifty states of the USA as follows:
For 90 days from the original date of purchase, HWFF INC. will, at its option repair or replace a defective unit free of charge, if the unit is defective due to an original manufacturer's defect.

This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, accident, misuse, abuse or neglect. Except as herein expressly set forth, HWFF INC. shall not, under any circumstances be responsible for any direct, indirect, incidental or consequential damage resulting from the use of the equipment. The consumers' sole remedy shall be such repair or replacement as is expressly provided above.

SHOULD YOUR UNIT REQUIRE SERVICE, please call us at 866.735.9255 for a return authorization number and further instructions

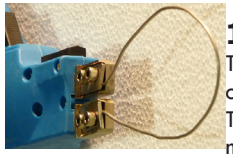
Industrial Knife
Optional Accessories
Blades

6" Knife Blade

The thick ultra rigid 6" Blade is the standard blade that comes with the Industrial Knife. When cutting at high heat settings try to keep the entire blade embedded in the foam to prevent the end from warping.

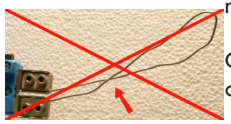
4" Knife Blade

The thick ultra rigid 4" Blade gets even hotter than the 6" Blade and is used on materials requiring very high cutting temperatures. When cutting at high heat settings try to keep the entire blade embedded in the foam to prevent it from warping.



12" Shapeable Round Blade

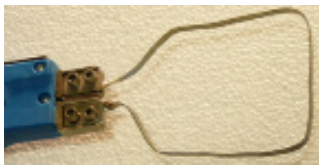
This long hand shapeable blade is the best blade for creative cutting and scooping out large chunks of foam. To mount, insert the ends so they bottom out in the blade mounting slots, and firmly tighten the bolts. Can also be mounted on the Sled.

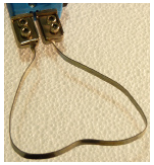


CAUTION: Never let the wire cross itself, as this will cause overheating and create a short circuit.

12" Shapeable Flat Blade

For making long smooth grooves. We offer two versions. One with twisted ends for mounting directly on the Knife. The other with straight ends that mounts on the Sled Guide.





Sled

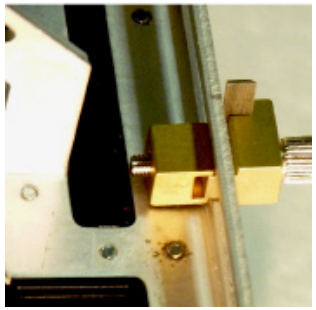
Used to control the depth of grooves and to make uniform moldings.

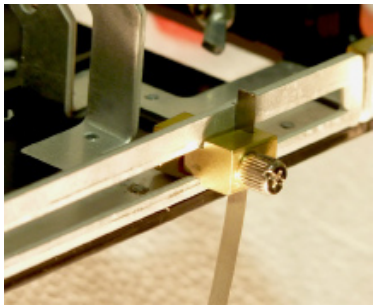
Sled Blade Mounting

The 12" Grooving Blade is hardened and is not easily reshaped. It is best to have a separate blade for each shape that you require. Form it before putting it into the Sled. Insert the ends of the 12" Grooving Blade into the brass blade holders on the Sled. One of the holders slides horizontily for achieving a wide or narrow cut. Slide the Blade up in the holders until the correct depth is attained. Tighten in place with the bolts.

The 12" Shapeable Round and Flat blades can be used in place of the Grooving Blade when absolute rigidity is not required.

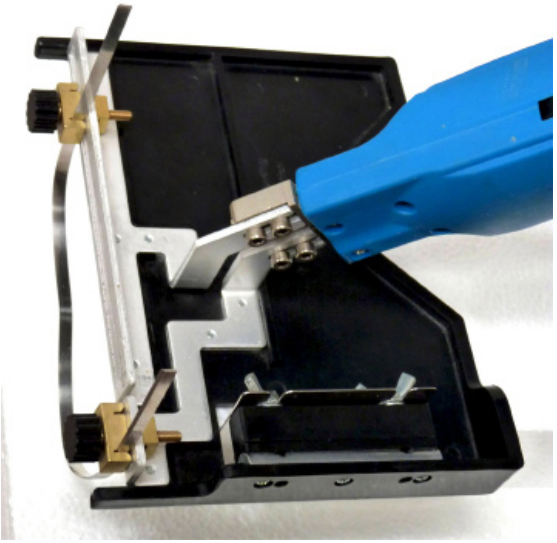
CAUTION: Turn the temperature controler down to the middle temperature when shortening the blade to less than 6 inches.





Power Up

After the Blade is firmly mounted on the Sled attach the Sled to the Hot Knife power handle in the same way that the rigid 6" Knife Blade was attached.

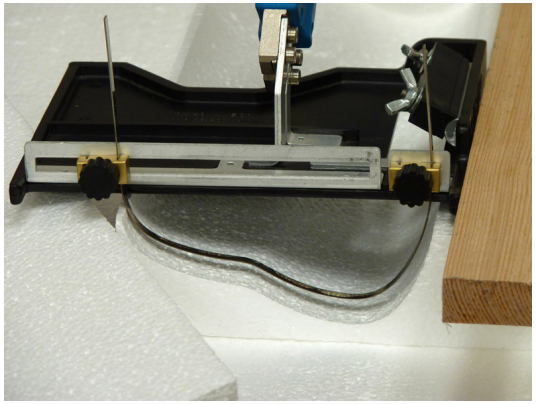


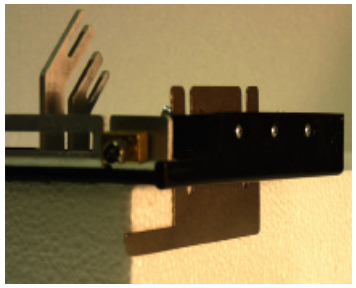
12" Semi-Rigid Grooving Blade

Made exclusively for use with the Sled Guide.

Guiding The Sled

We have found that using a straight edge attached to the foam works much better than the included Stabilizer Plate for making straight cuts, demonstrated in the first image below. We also have no idea why they made the angle of the Stabilizer Plate adjustable. For what little it's worth, the Stabilizer Plate is shown in the lower right picture.





Various Cuts

Here are a few basic Blade configurations. By saving your shaped Grooving Blade very complex shapes can be cut over and over again.