



# Extractor Heater

SAVE TIME AND MONEY BY HEATING YOUR EXTRACTOR

## GENERAL CONSIDERATIONS

Wrap-It-Heat Model EXT 2,4,6/12 is a thirty foot, 1/16", PVC Clad, flexible heater designed to be used to heat the interior of a two frame, four frame or six/twelve frame extractor to increase efficiency.

EXT 2,4,6/12 is specifically designed to increase honey flow, decrease your filter time and decrease damage to your combs during the extraction process. It saves from 25% to 50% extraction time. More Honey! Less Effort! In Less Time!

EXT 2,4,6/12 is designed to operate at 120 volts AC. The power rating is 210 watts at 120 volts AC. For your safety, EXT 2,4,6/12 is manufactured with an electrically grounded type construction and is intended to be plugged into a three pin, grounded type outlet.

## INSTALLATION INSTRUCTIONS

Uncoil the heater being sure to remove all twisting and kinking. Inspect both ends of the heater noting the metal tabs. These metal tabs must come in contact with the metal extractor or in case of a plastic extractor, a metal section of the extractor. For your safety, attach a grounding wire (not included with your EXT 2,4,6/12) to a metal section of your plastic extractor, but removed from the to-be-heated area.

Attach one end of each bungee cord to both ends of your heater. Affix the bungee cord, at the power cord end of the heater, to the extractor stand or to itself.

Carefully spiral wrap your heater around your extractor drum making sure that you keep the heater flat (without twisting or kinking) and in close contact with your extractor surface. **Do not allow the heater to wrap upon itself; heater failure will result.** Space the spiral wrap so that the other end (non-power cord end) of the heater reaches the top section of your extractor. Anchor the top bungee cord to itself or to a secure point upon your extractor.

When you have installed the heater, check to determine if the heater is in close contact with the extractor surface upon its entire length. Reposition the bungee cords, if necessary, to ensure that the heater fits tightly to the extractor surface.

After you install your EXT 2,4,6/12 you may desire to increase the efficiency of the heating process by installing an insulation blanket around the heated section of your extractor. A completely enclosed insulation blanket is required in this application to keep any fibers from contaminating your honey. The heater will reach a temperature of 120°F in open air. The surface temperature of the heater is less, when in contact with your extractor.

**EXT 2,4,6/12 is not to be used to heat any flammable or combustible materials!**

## OPERATING INSTRUCTIONS

Plug your EXT 2,4,6/12 heater into an electrically grounded outlet. As the heater becomes warm, check to determine if the heater is in complete contact with your extractor surface. Some stretching of the heater will occur upon heating; reposition the bungee cords as needed.

Make sure that the lid of your extractor is in the closed position. Allow one hour for the interior of your extractor to reach 90°F to 100°F. Be sure to check the temperature within the extractor at least every ten to fifteen minutes. Some extractor interiors will heat faster than others. When the extractor interior has reached at least 90°F, place the frames into the extractor. Please, install the frames as quickly as possible so as not to lose the heat within the extractor to the surrounding area. Some experimenting is required to determine how long to heat your particular extractor, prior to and during, the extraction process. Ensure that the interior of the extractor does not heat to 115°F or higher. Damage to your honey combs may result.

EXT 2,4,6/12 was tested with a four frame and six/twelve frame type extractor. The interior did not exceed 100°F. Be sure to unplug your heater when you are through extracting.

By using EXT 2,4,6/12 you will find that you save time, increase the efficiency of the filter process (filtering soon after extracting) and end up with drier, less damaged, combs and thus more honey.

EXT 2,4,6/12 can be installed around your honey holding tank to increase the flow of honey from the tank when filling jars, honey bears, etc. EXT 2,4,6/12 can also be used to heat your cappings container. The honey will flow from the cappings faster than by not using the heater, thus further increasing the amount of honey extracted per comb.

# WARNING

## READ THIS WARNING BEFORE USING EXT 2,4,6/12 FOR METAL & PLASTIC CONTAINERS!

**THE FOLLOWING PRECAUTIONS MUST BE OBSERVED TO AVOID POSSIBLE INJURY OR PROPERTY DAMAGE!!**

EXT 2,4,6/12 MUST NOT BE USED IN AN AREA WHERE FLAMMABLE VAPORS MAY, ANY TIME, BE PRESENT. FAILURE TO OBSERVE THIS CAUTION CAN RESULT IN FIRE OR EXPLOSION.

### **MONITOR THE TEMPERATURE WHILE HEATING YOUR EXTRACTOR!**

DO NOT ALLOW THE TEMPERATURE WITHIN YOUR EXTRACTOR TO EXCEED 115°F. DAMAGE TO THE HONEY COMBS MAY RESULT AT TEMPERATURES ABOVE 115°F.

THE EXT 2,4,6/12 HEATER SURFACE WILL REACH 120°F DURING OPERATION. DO NOT USE THE EXT 2,4,6/12 HEATER ON OR NEAR WHERE COMBUSTIBLE SUBSTANCES CAN BE IGNITED WITH A 120°F TEMPERATURE, RESULTING IN A FIRE.

### **WHILE HEATING NEVER ALLOW EXT 2,4,6/12 TO CROSS OVER OR TOUCH ITSELF!**

THE CONTAINER HEATED WITH EXT 2,4,6/12 MUST BE ELECTRICALLY GROUNDED TO AVOID THE POSSIBILITY OF ELECTRICAL SHOCK TO THE OPERATOR.

THE EXT 2,4,6/12 HEATER IS FOR **INDOOR USE ONLY**.

DO NOT LEAVE THE EXT 2,4,6/12 HEATER UNATTENDED WHILE IT IS IN OPERATION.

THE USER MUST DETERMINE THE SUITABILITY OF THE EXT 2,4,6/12 HEATER FOR THE INTENDED HEATING APPLICATION.

**DO NOT** USE DRAIN SPOUTS OR VALVES ON DRUMS OR PAILS THAT CAN FAIL AT 120°F TEMPERATURES, CAUSING LEAKS, LOSS OF MATERIAL AND/OR POSSIBLE PERSONAL INJURY TO THE OPERATOR.

### **KEEP ALL SHARP & POINTED OBJECTS AWAY FROM EXT 2,4,6/12!**

**NEVER** USE AN EXT 2,4,6/12 HEATER INSIDE OR ADJACENT TO **HEAVY AIRBORNE DUST LOCATIONS** SUCH AS GRAIN ELEVATORS, GRAIN SILOS, HAY STORAGE AREAS, ETC....

KNOW HOW HEAT WILL EFFECT YOUR MATERIAL BEFORE USING EXT 2,4,5/12. IF YOU ARE NOT SURE HOW TO HEAT YOUR MATERIAL, DO NOT USE THE EXT 2,4,6/12 HEATER UNTIL YOU ARE INFORMED AS TO HOW THE APPLICATION OF HEAT WILL AFFECT YOUR MATERIAL – CONTACT YOUR MATERIAL SUPPLIER.

# EXPO ENGINEERED PRODUCT WARRANTY

YOUR EXPO ENGINEERED PRODUCT IS GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR **ONE YEAR** FROM THE DATE OF ORIGINAL PURCHASE. THIS GUARANTEE **DOES NOT** COVER FAILURE DUE TO WATER SOAKING, SPILLAGE, ABUSE, ALTERATION TO PRODUCT OR MISAPPLICATION.

IN CASE OF FAILURE, CONTACT EXPO ENGINEERED INCORPORATED. DETERMINATION OF THE SUITABILITY OF THE GOODS DESCRIBED ON THE FACE, HEREOF, FOR THE USE CONTEMPLATED BY BUYER OR BUYER'S CUSTOMERS FOR SUCH GOODS IS THE SOLE RESPONSIBILITY OF BUYER OR BUYER'S CUSTOMERS, WHICHEVER THE CASE MAY BE. EXPO ENGINEERED SHALL HAVE NO RESPONSIBILITY IN CONNECTION, THEREWITH.

BUYER ASSUMES ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO PROPERTY OF BUYER OR OTHER, ARISING OUT OF THE USE OR POSSESSION OF THE GOODS FURNISHED, HEREUNDER.

EXPO ENGINEERED INCORPORATED WARRANTS ONLY THAT THE GOODS SUPPLIED, HEREUNDER, SHALL MEET THE DESCRIPTION OR SPECIFICATIONS STATED, HEREIN. BUYER'S EXCLUSIVE REMEDY AND EXPO ENGINEERED'S SOLE LIABILITY, HEREUNDER, SHALL BE LIMITED TO REFUND OF THE PURCHASE PRICE OF, OR REPLACEMENT OF, ALL GOODS SHOWN TO BE OTHERWISE THAN AS WARRANTED.

EXPO ENGINEERED INCORPORATED SHALL IN NO CASE BE LIABLE OTHERWISE, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, PROVIDED THAT NOTHING CONTAINED, HEREIN, SHALL LIMIT BUYER'S RIGHT TO RECOVER CONSEQUENTIAL DAMAGES FOR INJURY TO HIS PERSON WHEN THE GOODS PURCHASED ARE CONSUMER GOODS.

REFUND OR REPLACEMENT IS CONDITIONAL UPON GIVING EXPO ENGINEERED INCORPORATED NOTICE WITHIN **ONE YEAR** FROM DATE OF SHIPMENT BY EXPO ENGINEERED INCORPORATED THAT SAID GOODS ARE OTHERWISE THAN AS WARRANTED. FAILURE BY BUYER TO GIVE SAID NOTICE WITHIN SAID **ONE YEAR** PERIOD SHALL CONSTITUTE WAIVER BY BUYER OF ALL CLAIMS, HEREUNDER, WITH RESPECT TO SAID GOODS.

IF REQUESTED BY EXPO ENGINEERED INCORPORATED, BUYER SHALL PROMPTLY RETURN TO EXPO ENGINEERED'S PLANT ALL UNCONSUMED GOODS ALLEGED BY BUYER TO BE OTHERWISE THAN AS WARRANTED AND EXPO ENGINEERED INCORPORATED WILL PAY FREIGHT THEREON.

**THE WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR UNWRITTEN EXPRESS OR IMPLIED WARRANTIES AND EXPO ENGINEERED HEREBY EXPRESSLY DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY AGAINST INFRINGEMENT OF MERCHANTABILITY OR FITNESS FOR PURPOSE OF THE GOODS SUPPLIED, HEREUNDER, ALL SAID GOODS BEING SUPPLIED "AS IS".**

IN THE UNLIKELY EVENT THAT A PROBLEM SHOULD ARISE THROUGH THE USE OF YOUR EXPO ENGINEERED HEAT PRODUCT, PLEASE CONTACT THE CUSTOMER SERVICE DEPARTMENT AT EXPO ENGINEERED INCORPORATED BY DIALING 708-780-7155 OR FAX 708-780-7125.

PLEASE REFER TO THE **WARNINGS** AND THE **OPERATING INSTRUCTIONS** ACCOMPANYING THIS WARRANTY BEFORE OPERATING YOUR NEW EXPO ENGINEERED PRODUCT.