

## **ABOUT THE LEM SMOKER**

An on/off thermocouple device controls the heating element in the LEM smoker. So during the initial heating phase the element will become very hot, and even though the thermocouple switch has shut-off, the temperature will continue to rise, maybe as much as 60-80° higher than the switch is set for. For this reason, we recommend you bring the unit to the desired temperature, and then add the sausage. After the initial temperature overshoot, the unit will cycle within a 20-30° range. Note that the temperature will never get lower than the temperature setting on the switch. So if you want the temperature to vary around 150°, set the switch temperature lower, e.g. 140°.

## **CLEANING**

Allow smoker to cool completely. Clean your smoker with a mild detergent and warm water. Rinse and hand dry all parts. It is recommended to wipe down the inside of the smoker occasionally to remove the smoke residue. With normal use and maintenance, this smoker will give you years of enjoyment.

## **WARNINGS**

- The Smoker is hot when in use. Use handles or knobs and wear gloves.
- Do not immerse cord, plugs or heating element in water or other liquid.
- DO NOT use on rainy days.
- Unplug unit when not in use.
- When in use, never leave smoker unattended for long periods of time.
- Allow smoker to fully cool before adding or removing parts.
- Use only a grounded outlet.
- Turn the control to "OFF" before disconnecting, then remove plug from wall outlet.

## **CURE**

"To Cure" is to add salt or salt brine, with or without sugar, spices, nitrites and other ingredients, to meat or poultry products. There are many steps in the process of curing, including smoking, cooking, drying, chilling and the addition of cure ingredients. Cure is a preservative to help prevent botulism. Our LEM cure is a mixture of salt and sodium nitrite. The FDA strictly regulates the use of cure, so follow the directions closely. DO NOT use more than directed. Normal usage is a scant ¼ teaspoon per pound of meat or one ounce for each 25 pounds of meat. Always keep cure out of reach of children. Nitrites in cure prevent meat from becoming acidic and prevent the formation of botulism. Botulism is a type of food poisoning. The low cooking temperature used for jerky and sausage making are ideal for the formation of botulism. Proper cooking temperatures can eliminate bacteria. LEM recommends bringing the internal temperature of the meat to 165°.

For all types of sausage seasonings, casings and other meat processing equipment see your local dealer or call LEM Products toll free at 1-877-536-7763. Or visit our web site [www.lemproducts.com](http://www.lemproducts.com).



# **LEM 20 LB. SMOKER**

## **USE AND MAINTENANCE INSTRUCTIONS**

**MODEL 738 – INSULATED 20 LB. SMOKER  
WITH 18" STAND**

***PLEASE READ BEFORE OPERATING EQUIPMENT***



### **IMPORTANT**

**Your smoker should not be left unattended when in use.**

**Please use basic safety precautions.**

**This unit is not recommended for cold smoking.**

For more products on smoking food or sausage making go to [www.lemproducts.com](http://www.lemproducts.com) or call 1-877-536-7763 to request a catalog.



**BEFORE USING**

Thoroughly hand clean all parts before first use with warm soapy water to remove the protective lubricant applied during manufacturing. Rinse and dry thoroughly.

**PROCEDURES FOR SMOKING THE PERFECT SAUSAGE**

Start with a stuffed casing at room temperature.

**DRYING THE SAUSAGE**

You can achieve the drying by placing the sausage in your smokehouse with the damper open at about 140-150° for one hour.

Reasons for drying the sausage: Drying the sausage brings all the sausages to about the same temperature for an even smoke color. Drying conditions the surface of the sausage to ready it to accept smoke. Drying causes a "skin" to form on the outside surface of the sausage. Drying also attaches the casing to the sausage so as to avoid forming a fat layer between the sausage and the casing. Drying gives the collagen casing strength to hold up during cooking.

**SMOKING THE SAUSAGE**

Smoking can be achieved by placing a pan of sawdust/chips in the smoker on the burner. The sawdust/chips must be soaked in water at least one hour. Soak in half the volume of water that you have sawdust/chips. (4 cups sawdust/2 cups water) Heat the smoker to approximately 170° to ignite the sawdust/chips to achieve smoke. Close the damper to half open at this point.

**COOKING**

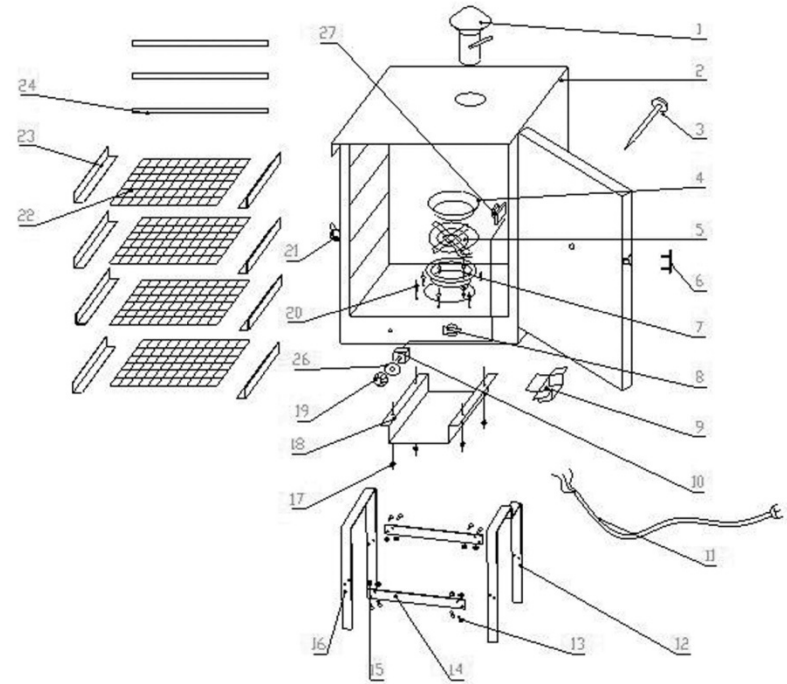
As the sawdust/chips burn, the water will evaporate and a dry heat will set in. The dry smoke will set the smoke in the sausage. After most of the sawdust/chips have burned, remove the pan from the smoker and let the pan cool for 5-10 minutes. After this time, fill the pan half full of water and return to the burner. Close the damper and turn the temperature to approximately 180-190°, this will cause a high humidity to cook the sausage.

High humidity will cook the sausage very quickly as well as tenderize the casings; especially natural casings. High humidity also helps to cook the sausage without drying it out too much. Cook sausage until the internal temperature of 165° is reached.

**COOLING**

Proper cooling is important for the safety of the product as well as the desired look of the finished product. Remove the sausage from the smoker and place in cold water to stop the cooking process. The cold water will start the sausage cooling and keep the casing tender. Do not place the sausage directly in the refrigerator. This could cause the sausage to sour and wrinkle.

**A little time and patience can give excellent results.**



| Ref. | Description | # Pieces | Ref. | Description | # Pieces |
|------|-------------|----------|------|-------------|----------|
|------|-------------|----------|------|-------------|----------|

|    |                              |   |
|----|------------------------------|---|
| 1  | SMOKESTACK                   | 1 |
| 2  | SMOKER HOUSING               | 1 |
| 3  | THERMOMETER                  | 1 |
| 4  | STAINLESS STEEL PAN          | 1 |
| 5  | HEATING ELEMENTS             | 1 |
| 6  | HANDLE                       | 1 |
| 7  | HEATING PLATE                | 1 |
| 8  | KNOB                         | 1 |
| 9  | JUNCTION BOX                 | 1 |
| 10 | TEMPERATURE RHEOSTAT & PROBE | 1 |
| 11 | POWER LINE                   | 1 |
| 12 | SMOKER STAND (RIGHT)         | 1 |
| 13 | ALLEN SCREW                  | 8 |

|    |                                 |   |
|----|---------------------------------|---|
| 14 | STRENGHTEN BOARD                | 2 |
| 15 | NUT – BASE BOARD                | 8 |
| 16 | SMOKER STAND (LEFT)             | 1 |
| 17 | NUT                             | 8 |
| 18 | BASE BOARD                      | 1 |
| 19 | RHEOSTAT KNOB                   | 1 |
| 20 | BASE BOARD SCREW                | 8 |
| 21 | LATCH                           | 1 |
| 22 | SHELF                           | 4 |
| 23 | SHELF BRACE                     | 8 |
| 24 | DOWEL                           | 3 |
| 26 | PLATE FOR THERPERATURE RHEOSTAT | 1 |
| 27 | THEMPERATURE PROBE BRACKTS      | 1 |