

## INTRODUCTION

Many restaurants, food manufacturers, school kitchens, military kitchens, and other food operations use steam kettles to help them cook large quantities of food (i.e., soups, sauces, drinks, etc.). Steam kettles can range in size from tabletop to floor standing models. While simple to use, improper use could expose you to harm. In this lesson we will cover the types of kettles available, the hazards, the personal protective equipment, and the safe work practices associated with these kettles.



## TYPES OF STEAM KETTLES

There are three different types of energy sources for steam kettles. These include:

- Direct steam
- Gas
- Electric

In addition to the energy source, kettle types include:

- Tilting
- Stationary

## HAZARDS

When using and cleaning a steam kettle, you could be exposed to one or more of the following hazards:

- Burns from making contact with the outside of the kettle, steam, or hot food
- Slips and falls from spilled liquid on the floor
- Explosion of the unit from too much pressure building within the kettle
- Electric shock or electrocution from improperly grounded units
- Exposure to cleaning chemicals



## PERSONAL PROTECTIVE EQUIPMENT

To help minimize the chances of an accident occurring, you should use the appropriate personal protective equipment (PPE) when using or cleaning the steam kettle. PPE may include:

- Closed-toe, non-slip shoes
- Close-fitting clothing
- Apron
- Oven mitts
- Gloves
- Safety glasses or goggles
- Face shield
- Protective clothing

Inspect all provided PPE for wear or damage. Report worn or damaged items to your supervisor. Do NOT wear damaged PPE.

## SAFE WORK PRACTICES

### Before Using the Steam Kettle

Before using the steam kettle, you should do the following:

- Remove all jewelry and tie back long hair.
- Inspect the kettle for damaged parts.
  - Report damaged parts to your supervisor.
  - Do NOT use a kettle that has damaged parts.
- Check the psi (pounds per square inch) gauge to assure that the kettle is at manufacturer-recommended psi levels.
- Check the water level in the reservoir to assure that there is the appropriate amount of water in the kettle jacket.
  - Refill water as needed.
  - Refill water in accordance with the manufacturer's instructions.

### When Using the Steam Kettle

When using a steam kettle, you should do the following:

- Make sure that the kettle has been turned on in accordance with the manufacturer's instructions.
- Assure that the thermostat has been set to the appropriate temperature for the contents.
- To help minimize the chances of liquid splashing, it is recommended that you lower food into the kettle instead of dumping it.
- Do NOT overfill the kettle.
  - Overfilling the kettle could cause boil overs or hot food to spill out of the kettle when stirring or transferring food into other containers.
- Be aware that condensed water on the lid may drip down to the floor when the cover is lifted.
  - Immediately clean up any spilled liquid or food.
  - Any liquid that is left on the floor could become a slipping and fall hazard.
- Avoid making direct contact with the heated outside of the kettle and with any hot food.
- Alert others who may be standing next to the kettle when you are opening or removing the lid because of the steam that will be released when the lid is removed.
- Avoid making contact with the steam.
  - If your model does not come with a handle to help you with the removal of the lid, use an oven mitt to help you avoid making contact with the heated surface of the lid.

### Tilting Kettle for Food Transfer

When using a tilting kettle for food transfer, you should do the following:

- Assure that you are using a container that is deep enough to contain and minimize product splashing.
- Make sure that the container you are transferring product into is on a stable, flat surface that is as close as possible to the kettle.
- Tilt the kettle in accordance with the manufacturer's instructions.
- To help minimize the chances of steam or hot food making contact with you, stand to the left or right side of the kettle.
  - Where you stand will depend on the handle placement of your model.
  - Do NOT stand directly in the pour path of hot contents.
- To help minimize the chances of food splashing, power slowly and maintain control of the kettle body handle at all times.

## Cleaning the Steam Kettle

When cleaning the steam kettle, you should do the following:

- Make sure that the kettle has been turned off in accordance with the manufacturer's instructions.
- Assure that all lockout/tagout procedures have been completed in accordance with the manufacturer's instructions and your company's policies and procedures.
- Only use detergents that have been recommended by the manufacturer.
  - Do NOT use detergents that are not recommended or specified by the manufacturer because they could damage the kettle.
- Use all detergents in accordance with the manufacturer's instructions.
- Only use cleaning tools that are recommended by the manufacturer.
  - Using tools with certain bristles could damage the kettle.
- Clean the kettle in accordance with the manufacturer's instructions and your company's policies and procedures.

## CONCLUSION

To conclude, steam kettles are used by a variety of food operators to cook vast amounts of food. While simple to use, improperly using the kettle could expose you to harm. Injuries that could occur include burns, slips and falls, and the unit exploding from too much pressure building in the kettle. To help minimize the chances of an accident occurring, you should use and clean the kettle in accordance with your company's policies and procedures. If you have questions about your steam kettle, please speak with your supervisor.