Operator's Edge
The Successful Independent Operator's Resource

Slicers: An Overview

Slicing fresh and on demand has become more prevalent in today's foodservice operations.

Commercial slicers are generally categorized as manual, semi-automatic or automatic. This equipment utilizes a rotating blade on a movable carriage in either a gravity-fed angled or spring-loaded upright configuration.

While manual versions require unit staff to move the carriage, automatic models use a motor to drive this component.

Manual slicers for front-of-house use also are available and geared for on-demand slicing or lighter volume. With semi-automatic units, a secondary motor moves the product carriage back and forth.

Higher volume operations, such as schools, hospitals or sandwich shops, typically use automatic slicers. Users can adjust automatic slicer activity from 20 to 60 strokes per minute.

Vegetable cutters have slower RPMs and utilize sharp blades to help retain the cell structure of the product. This extends shelf life and produces a product with a higher quality appearance, taste and aroma. Users can choose from a variety of discs to replicate a number of hand-cutting styles.

Angled units drop food slices directly onto a receiving table while upright slicers typically use a lever arm to stack products in various patterns.

The bigger the slicer knife, the higher the motor's torque will be. The most common knife sizes are 12 inches and 13 inches. Smaller operations can make do with 9- or 10-inch cutting blades. Medium-duty slicers typically include 12-inch blades, while heavy-duty models have blades between 12 and 14 inches in size.

Although most slicers are constructed of either anodized or burnished aluminum, units are available that combine aluminum with stainless steel. Knife blades are typically constructed of hollow-ground, high-carbon steel, though some units include chrome-plated steel or hardened steel alloys.

Operators can choose from a number of slicer options. Top-mounted knife sharpeners offer easy access and added convenience. Full gravity feed food chutes are available on heavy-duty models. Slide bars on some slicers are continually lubricated during operation for smooth, easy carriage movement. Heavy-duty clear plastic covers offer added protection for slicers when not in use. Slicer stands and models offering noiseless operation also are available.

How to Know When to Replace Slicers

Although slicers have an average service life of about 10 years, this equipment can last decades, depending on use and care. Here are a few ways to tell when it is time to replace a slicer.

A slicer that is not operating properly will impact the quality of the food being prepped. Operators should be aware of specific signs that indicate the unit needs to be replaced.

Broken or malfunctioning parts: These can impact the slice quality and affect the operator's ability to properly clean the slicer. Depending on the replacement and repair costs, broken components may signify a new unit is

needed.

Change in menu: Menu changes that include increased slicing volume, especially with different food items, a new and/or an additional slicer may be necessary to keep up with production and decrease the risk of cross-contamination.

Signs of wear and tear: A cracked base or other excessive signs of wear can impact the integrity of the slicer in terms of food safety and operation. Especially with older units, replacement should be considered.

Increased service calls and high repair costs: Slicers can last five to more than 20 years with proper care and maintenance. When service calls begin to increase and repair costs start to add up, these are signs the slicer's service life is ending.

Older models: The NSF updated its requirements for slicers constructed after Nov. 12, 2012. For this reason, older units should be systematically replaced whenever possible.

Slicer Applications
Foodservice operators can employ slicers in numerous ways to support a variety of menu applications. Here are a few examples.

The main function of slicers is to provide portion-controlled slicing. By allowing users to set slice thicknesses, these machines can yield uniform portions.

Slicers are most often used to prepare deli meats and cheeses for sandwiches, but can also provide uniform slices of vegetables for grilling or garnishing. Gear-driven slicers are ideal for cutting thicker sausage, meat and cheese.

Most slicers can yield portions ranging from paper-thin to 1 1/4-inch thick. Larger units can hold food pieces up to 7 1/2-inches in diameter and up to 12 inches long.

Because this equipment helps guarantee uniform portion sizes, it is useful in controlling food costs. In addition, slicers present the dual benefit of cutting both faster and potentially more safely than knives.

Maintaining Slicers
Properly cleaning and maintaining slicers is important to reduce the risk of bacteria growth and cross-contamination. Although these units don't require much maintenance, there are a number of procedures that can help extend the service life of slicers. Here are five maintenance steps operators can take to ensure a long and safe service life from their slicers.

1. Clean with antibacterial soap and hot water and sanitize after each use. To best maintain food safety, thoroughly clean a slicer blade before switching to any foods that will be eaten raw.

2. If used for continual slicing, the unit's blade and carriage table should be thoroughly cleaned every two to four hours with soap and water or a sanitizing solution.

3. Remove food chutes for cleaning.

4. Some slicer components can be placed in the dishwasher for easier cleaning.

5. Depending on the amount of use, basic slicer maintenance includes sharpening the blade and oiling the transport rod and carriage rod.

Motors are usually sealed and are, thus, maintenance-free. Antibacterial protection on knobs, handles and other key slicer parts can impede bacterial growth and help improve food safety. Permanently mounted knife covers allow cleaning without exposing the blade, while removable carriage systems provide easy cleaning and sanitation.

A slicer constructed out of aluminum can be more likely to scratch and pit in the casting, which can collect pathogens. Stainless steel works is more durable for high volume use and decreases the odds of contamination.

Spec Check: Slicers
Operators must determine both their current and future needs in how the slicer will be utilized prior to purchasing this equipment. Here are several factors foodservice operators should weigh when purchasing slicers.

Usage Time: When specifying a slicer, operators should figure out how many hours it will be used daily. This will help determine whether a light-, medium- or heavy-duty unit is needed.

Slicing Volume: Heavy-duty, high-volume slicers cut in varying thickness and offer oversized 13-inch chrome-plated blades for busy operations. For foodservice operations that will utilize the slicer for one to four hours a day, a medium-duty type will suffice. These slicers typically slice without manually feeding product onto the carriage.

For minimal slicing that will occur between 30 minutes to an hour a day, a light-duty slicer should be sufficient.

Horsepower: Horsepower is another consideration when purchasing a slicer. Slicers include a belt- or gear-driven knife motor that ranges from 1/4 to 1/2 hp. Automatic slicers feature a separate DC motor driven by a chain and sprocket system and end-users can disengage it for manual operation.

Product Size: The width and height of the product being sliced will determine the appropriate knife diameter. The larger the product being sliced, the bigger the knife required. Available sizes are 9, 10, 12, 13 and 14 inches.

Safety Features: Slicers can be hazardous to operate by inexperienced personnel.

Depending on the experience of the staff, additional safety features may be needed to protect operators during operation and cleanup. These include table walkout mechanisms or interlocks that prevent the slicer from being turned on if the carriage is removed or can lock out the blade if the carriage tray is removed. Slicers are available with several interlocks that not only help with safety, but also conserve energy by shutting off the machine automatically after inactivity. Features that allow the operator to quickly turn off the slicer and child-proof safety switches also are available.

Energy Efficiency and Slicers
Slicers are among the most energy-efficient production tools used in commercial kitchens. Slicers by design utilize minimal energy. Most models can run off of 115-120V electric outlets at 60 Hz and draw from one to seven amps.

Some models have several interlocks that not only help with safety but also conserve energy by shutting off the machine automatically after 30 seconds of inactivity.

Water and energy consumption can be decreased by utilizing slicers with removable parts that can be cleaned more quickly in the dishwasher.

Source: Foodservice Equipment & Supplies