

RETORTS

Canned foods are processed in a machine known as a retort, and the most common ones consists of a horizontal shell into which baskets filled with cans are loaded. [A very different type is called a hydrostatic cooker; for more on that see *Sappirim* Volume 25]. The retort is sealed shut and steam fills the shell to cook the cans and the food that is inside them. If that is the only way *ta'am* spreads between the cans and the shell, the shell (and baskets) can be *kashered* with steam. The *b'liah* happened via steam, and therefore the *kashering* can be performed with steam.

In some cases, the cans are heated with hot water rather than with steam. Those retorts must be kashered with water [or with steam that condenses into water, as abovel since, as we have seen, steam cannot be used to kasher a machine whose b'liah happened through water. In other cases, the cans are cooked/heated with steam, but the cans are cooled with water, and it is common that the first blasts of that "cooling" water is actually hot water. [This is done to avoid "shocking" the hot cans with very cold water]. If so, ta'am transfers both through steam (during cooking) and water (during cooling), and therefore that retort must be kashered with water.

The following are some *kashering* pointers relevant to retorts:

• Retort shells can be *kashered* even if they are covered with rust; see DK 13.

- Most retorts have two features to help ensure maximum heat transfer: vents (through which air escapes as the retort fills with steam) and bleeders (small openings in the shell through which steam escapes during processing, thereby encouraging the remaining steam to circulate). Kashering should take advantage of these features: vents should be open as the retort heats up, and bleeders should be open during kashering.
- Cans typically go into the retort in "baskets", and layers of cans (within each basket) are separated by "dividers". If the factory does not have dedicated baskets and dividers for kosher (or pareve), then these must be kashered before a kosher production. Dividers should not be piled on top of one another during hag'alah, because that prevents hag'alah water from coming into contact with all surfaces (i.e., the places where they touch); see DK 95.
- Some continuous retorts have a separate shell for cooling. Generally, the water and cans are hotter than yad soledes bo in the first parts of that shell. Accordingly, it must be kashered.
- In some cases, the cooling water becomes hotter than yad soledes bo and is recovered after use. If so, (a) non-kosher or dairy water must be drained before a kosher production, and (b) the tank in



which the cooling water is stored, must be *kashered*.

<u>מראה מקומות</u>

שולחן ערוך סימן תנ"ב סעיף ה'