Volume 19



SPRAY DRYERS

Some historical background is necessary to understand the current policies regarding the kashering of spray dryers.

In the 1980s, people in *hashgachah* began considering how to *kasher* spray dryers, and the main *shailah* at the time was whether they require *libun gamur* or *hag'alah*. At first, that issue was left undecided, with strong belief that *libun gamur* was required, and it was only with the passage of time that the criteria noted in the previous installments became clarified.

During this interim time, Rav Belsky proposed a line of reasoning to justify the use of spray dryers without performing *libun gamur*. A מרדה (peel) is the tool used to remove pizza and similar items from a commercial oven, and the letter of the law is that it must be *kashered* with *libun gamur*. Realistically, a wooden מרדה cannot withstand *libun gamur*, and since bread is a staple food the Rabbis allowed Jews to use the non-kosher מדרה assuming it was *aino ben yomo* from non-kosher use.

Rav Belsky said that a similar halacha should be applied to spray dryers. If spray dryers must be *kashered* with *libun gamur*, Jews will not be able to eat any food that contains spray dried materials, and that is such a significant imposition that it is equal to the inability of Jews to obtain kosher bread. Just like in the case of a מרדה we allow Jews to use a non-kosher as long as it is will call the table to the mand the proper *kashering*, so too a spray dryer can be used when it is aino ben yomo without libun gamur. Furthermore, even if it is determined that a spray dryer can be kashered with hag'alah, in practice there was no way to meet all of the hag'alah requirements. Therefore, the Rabbi should make some sort of *kashering*, but in truth an aino ben yomo spray dryer can be used without a true and proper *kashering*. [However, since the primary *heter* is that the dryer is *aino ben yomo*, a firm rule was established that a spray dryer can never be kashered when it is ben yomo (i.e., one cannot rely on *peqimah*) and it must be completely unused for 24 consecutive hours before "kashering" begins].

Many accepted this dramatic leniency.

By the 1990s, the criteria listed in the previous installments became clarified, and a talented and dedicated OU *Mashgiach*, Rabbi Yaakov Blugrond put in herculean efforts to find a way to perform a full *hag'alah* where all surfaces of the dryer were in contact with 212° F water. In response to this, Rav Belsky said that all spray dryers should be *kashered* as per Rabbi Blugrond's method, but where that is not yet realistically possible one can rely on the original lenient comparison to a מרדה.



Rabbi Blugrond's *kashering* procedure is as follows:

• Fill a kettle with water and bring that water to a boil

The kettle should be one that holds as much water as possible, and that can heat water quickly (see below).

Preheat the dryer to about 250° F

This heat will allow the *kashering* water to maintain temperature (somewhat) as it passes through the chamber. It will also render the dryer a *kli rishon*.

• Turn off the heat in the dryer

This prevents the water from boiling out during the *kashering* stage.

 Pump water from the kettle through the spray nozzles

The atomizer is not suited for *kashering*, and water must be sprayed through spray nozzles.

• Circulate the water back to the kettle

The first pass of water coming out of the dryer will not be at *hag'alah* temperatures, and by circulating it back to the kettle will give it a boost in temperature.

If the kettle is not "strong" enough to meaningfully heat the water as it circulates through, it may be necessary to introduce direct steam injection to the piping between the kettle and dryer.

• Continue pumping the water through the spray nozzles

As water continues to circulate between the kettle and dryer the temperature of the water exiting the dryer will rise. *Kashering* is complete when that exit temperature is at *roschin* (see Chapter 10).

This procedure should be repeated – separately – for the ductwork, cyclone and other equipment attached to the spray dryer. Additionally, any small equipment used with the spray dryer (e.g., brushes, shovels) must be *kashered* or replaced, and the atomizer (or atomizers, if the factory uses more than one) must have *hag'alah*.

In the coming installment we will discuss the kashering of other dryers

CRC POLICIES

49. Rav Belsky suggested that spray dryers should have the same status as a מרדה which is to say that they can be used without a proper *kashering* if they are *aino ben yomo*. Should we adopt this approach?

Currently, all spray dryers under cRc auspices are *kashered* with *roschin* exiting the drying chamber. אי"ה we will maintain that standard going forward, and any exception must be approved on a case by case basis by Rav Reiss.

Other *hashgachos* take a similar approach, and if a reputable *hashgachah* determines that it is appropriate to allow a lesser form of *kashering*, we will respect that decision and accept the product as kosher.

50. Sometimes a *hashgachah* will allow "*pegimah*" before *kashering* instead of requiring the equipment to be *aino ben yomo* (see Chapter 64). Can this also be relied upon for a spray dryer?

No

<u>מראה מקומות</u>

שולחן ערוך סימן תנ"א סעיף ד' שולחן ערוך יו"ד סימן ק"ח סעיף ג'