

WARE WASHING 201

Congratulations! You've graduated ... to the next level of ware washing expertise. In the last installment, we discussed the basic requirements of a typical ware washing area. Now, we are going to focus on the design of this critical component of any foodservice operation, and address some beneficial techniques that can be used. The ware washing area in any facility, regardless of size, significantly impacts two of the most critical concerns foodservice operators have today: labor costs and food safety, specifically the risk of cross-contamination.

Flow – Yes, Even in Ware Washing

If you are a frequent reader of this column, this may come as no surprise to you ... proper *FLOW* within the ware washing area is essential. Consider for a moment all that occurs in the ware washing area – servers, bussers or banquet personnel dropping off soiled wares, scrapping, sorting, racking, washing, rinsing, sanitizing, drying, stacking, and storing. With all of this activity, mixing both soiled and clean wares, the ability for people and product to move through the ware washing area can impact all aspects of the operation. First, the service staff must have the ability to get in and out of the ware washing area easily. Any racking or preliminary scrapping that must occur must be convenient or it will not occur.

Once the wares are dropped off, I prefer to see them move through the ware washing area in a single direction – from point to point, without backtracking or crossing paths of other ware in process. In fact, I strongly recommend and try to include in all of my designs separate soiled and clean entrances. In essence, I try to avoid requiring the culinary staff to enter the ware washing area through a soiled entrance in order to retrieve clean items. Too often I see ware washing areas designed where all of the clean items wind up in the rear of the space, and then must travel through the only entrance, typically by the soiled drop-off, as they are brought back into the kitchen. Needless to say, this increases the risk of cross-contamination.

Size Does Matter

Perhaps the most common mistake that I see in ware washing areas is a mismatch between the capacity of the dish machine and the capacity of the clean dish table. To offer some perspective on this issue, a typical 44" conveyor machine can process roughly 250 racks per hour, depending on the manufacturer. A 48 inch clean dish table at the end of this dish machine would allow for only two racks ... two racks!! Every time the table fills with two racks, a table limit switch will shut down the conveyor so that the motor does not burn out, reducing the capacity of the machine. The better solution would be to provide additional clean dish table space, allowing the staff greater time to process and store the clean wares, not to mention saving on the equipment costs on the front-end. The extra clean dish table space would allow for additional clean rack space, and is far less expensive than a larger dish machine. Keep in mind that low-temperature dish machines will require even longer clean dish tables than their high-temperature counter parts, as it takes the chemically processed items longer to dry.

You've Got to Keep them Separated

The concept of separation can be used in two different ways to influence the ware washing area's layout. First, I always try to isolate the ware washing area by surrounding it with solid walls. These areas are messy, wet, and always full of soiled food product and it is not desirable to have the water and food product seep into the production areas of the kitchen. The solid walls help to confine the mess, and improve facility safety. The second application of the separation concept promotes the use of different dish machines for different products – usually dishes/flatware and glassware. Glassware is a sensitive product in that it easily shows residue. By using a separate machine that is dedicated for glassware only, the food product that is removed from the plates and flatware will not be introduced into the wash water used for the glassware, and the results will be much improved. Using separate machines is also advisable when there are large quantities of products that must be washed, but it need not be limited to the

high volume applications. For instance, I have included small undercounter dish machines – even if only to be provided at some future date – for smaller operations that wanted better ware washing results.

Where Does the Time Go?

Three compartment pot wash sinks typically include drain boards in either side, one for the accumulation of soiled wares and the other for the accumulation of items that have already been washed, rinsed, and sanitized. Review with me for a moment this common scenario ... a stack of pots and pans is resting on the soiled drain board waiting to be processed. The pot washer sorts through the stack of items and organizes them in such a manner so that they can be easily accessed and cleaned one by one. As the pot washer is about half-way through the stack, a cook comes by and drops off another stack of soiled pots and pans, placing this new stack right on top of the old one. The pot washer must now stop and re-organize the assortment of soiled pots and pans, which was already organized.

This duplication of effort results in a great deal of lost productivity. In fact, pot washers often spend more time re-sorting their work space than they do washing dishes. Fortunately, the solution for this dilemma is simple and inexpensive. To avoid this perpetual reorganizing, I typically include a separate shelving unit in the ware washing area, specifically dedicated for the accumulation of soiled wares. This then allows the pot washer to pull the items he or she wants to wash next without having to re-organize the space. In addition, the use of such a rack significantly increases the surface area dedicated for the accumulation of soiled items.

Buffering

There is an entire category of equipment that has been designed to help with the processing of soiled wares. From mechanical three compartment sinks and trough-tied collectors to pulpers and extractors, these items are designed to save labor and improve the ware washing process. There is one system, however, of which I am not a big fan ... it is the rotary tray accumulator, which is often used in

large business and institutional dining settings. These are the four or five tier systems that go around and around, enabling patrons to place their trays on one side and the staff to pull and process the trays on the opposite side. The main purpose of this system is to provide the ware washing staff with a buffer, that is a way to delay the trays for a moment when they are arriving faster than they can be broken down and processed. My problem is that these systems run into the tens of thousands of dollars, and once that buffer is full they do not offer any additional benefit. Inevitably, there are tray racks missing, which reduce the overall capacity, or the top tier is too high for the ware washing staff to reach. Instead of promoting these expensive limited systems, I have developed custom, decorative enclosures for standard pan rack carts that I use in conjunction with a standard conveyor belt. These simple, inexpensive carts can offer the same buffering at a much lower cost. The ware washing staff monitors the carts, swapping them out with empty racks as required. Though not right for every application, this is a cost effective solution that offers the same buffering benefit as the tray accumulator, at a fraction of the cost ... and is just one more design technique that can significantly improve the ware washing area.