## Hygiene in a hospital kitchen

## Cost-effective cleaning: matching the machine with the material

Healthy and tasty food isn't the only thing on the menu for today's kitchen managers. Due to ever demanding regulations, their work revolves more and more around hygiene. At St. Franziskus Hospital in Mönchengladbach, meeting these increasingly strict standards is a matter of course.

St. Franziskus Hospital is part of the Maria Hilf Clinics company, which operates several medical care facilities. Since adopting the 'cook and chill' system, the team in charge of food and beverage catering for patients and personnel has received great praise. The benefits are obvious: High-quality meals that look and taste great delivered hot and fresh, higher flexibility throughout the entire value chain, and effective hygiene risk prevention.

## Managing change

Kitchen Manager Ulrich Schroeder has been working at the hospital since 1992 and was involved in the kitchen planning process from the outset: "The kitchen needs to be efficient. This is why we decided early on to switch from 'cook-and-hold' to 'cook-and-chill.' The new system not only raises food quality but also has logistical advantages. Together with my colleagues, I looked at 'cook-and-chill' operations around the country to acquire the necessary kitchen planning skills and successfully implement the system in our own kitchens."

In contrast to the "cook-and-hold" process, which involves cooking meals and keeping them hot until they are transported to the

Competence united (left to right): Veronika Schroeder (Chef), Ulrich Schroeder (Kitchen Manager), David Geisler (Divisional Manager of Procurement, Logistics, Service), Christine Dominik (Divisional Manager of Service, Clinoserv), André Schacht (Sales Manager for the Rhine/Ruhr region, IP Gansow).

patient, the "cook-and-chill" process requires the food to be cooked and refrigerated up to 72 hours before serving. The meals, usually cooked to 75 percent, are refrigerated to three degrees Celsius for a maximum of 90 minutes, then stored in a cool environment Once they arrive in the ward, they are 'regenerated' per induction heating on a tray trolley connected to docking stations that provide the power. The regeneration process takes 35 minutes. Once ready, the meals can then be served hot and fresh to the patients David Geisler, Procurement, Logistics and Service Manager at Maria Hilf Clinics, explains the advantages of the new system "Switching to 'cook-and-chill' has turned us into experts for high-quality, fresh catering on a large scale. At this stage, we're running only at about 70 percent of capacity, so we're looking at supplying other organizations in the region, like hospitals, retirement homes, company cafeterias and the like." All the necessary renovations were implemented cost-effectively during construction of the building extension, also thanks to sound planning at the outset. The docking stations required for the multi-purpose trolleys for instance, were installed at all 28 wards. Besides the kitchen we also upgraded the equipment in the scullery to accommodate the new system.

At present, 24 part-time staff work in the scullery to support the kitchen team (26 full-time and part-time staff), which is in charge of preparing meals and cleaning the kitchen. Pick-up of the meals at the chilling station and delivery to the ward is handled by Clinoserv, a wholly-owned subsidiary of Maria Hilf Clinics. At the ward, nursing staff are in charge of regenerating the meals for distribution to patients.

"Our recipes needed some adjusting to ensure smooth operations. For instance, the manufacturer recommends a regeneration period of 50 minutes, which would have required two 'docking stations' per ward to ensure all patients receive their meals on time. It turned out not to be necessary: By optimizing the cooking process, we can reduce regeneration to 35 minutes without compromising quality. Now, we only need one docking station in each ward. Considering the cost of about 12,000 Euro per unit, you can imagine the savings," David Geisler adds. Thanks to the tweak in the cooking process there was no need to order an addi-

tional 28 docking stations. Today, 1,950 patient meals and 150 staff meals are served every day. Preparing meals in advance has allowed for greater flexibility in day-to-day operations, while weekly production days have been reduced from seven to five. On weekends, only one cook needs to be on stand-by.

## Cleaning and hygiene

Christine Dominik, Divisional Manager at Clinoserv, was also involved in the kitchen planning process at an early stage to ultimately ensure optimum hygiene conditions: "Non-slip floor tiles (GS-certified tiles) are mandatory for kitchen areas. As an unfortunate side-effect of these slip-resistant tiles (R11), they are difficult to keep clean and require specific cleaning methods. That's because organic contaminants tend to collect in the recessed areas and they can only be removed with intense cleaning." This was taken into account during the kitchen design phase: Floor areas are as spacious as possible and dense coverage is avoided, allowing the kitchen to be cleaned quickly, thoroughly and cost-effectively. "It was important for us that the floor cleaning be carried out using only a small amount of water. Otherwise, the additional moisture introduced to the air inside the room would promote microbial growth. The principle behind mechanical scrubber driers, which scrub the floor using only minimal quantities of chemicals and then suck up the cleaning solution immediately after the cleaning process, addresses this need," Dominik adds. André Schacht, Sales Manager with cleaning machine manufacturer IP Gansow, was again brought in to look at ways to further optimize the cleaning process.

André Schacht explains: "With a total area of 1,700 square meters, of which only 30 to 40 percent are covered, the kitchen is perfect for machine cleaning. Our premium product line-up offers particularly well-suited solutions for this type of layout. Fitted with a heavy-duty vacuum system and automatic brush pressure adjustment, along with selectable cleaning programs, these IP Gansow scrubber driers ensure optimum results without requiring special skills to operate. They are also very compact."

For the kitchen, the choice fell on the 41 BF 57 scrubber drier, while the scullery and corridors are cleaned using the larger 91 BF 72. As standard, both machines come with an easy-access tiltable tank system to facilitate hygienic interior cleaning and preventing microbial contamination. They use fine K320/0.6 mm grip brushes, which penetrate the recesses of the non-slip GS tiles to remove deeply ingrained dirt. The casing of both machines is made from shatter-proof ABS plastic with a galvanized frame.

André Schach explains IP Gansow's comprehensive tech support: "To ensure optimum reliability and availability, we provide regular servicing of the machines, including those parts that fall under normal wear and tear. In addition, we carry out annual accident prevention inspections in accordance with VGB paragraph 29 (German accident prevention regulations) and the DGU V3 electrical inspection. This further eases the workload for the user." Both machines run for approximately two hours per day,



It takes intensive cleaning to capture organic contaminants caught in the recesses of the non-slip floor tiles.

Photo: IP Gansov



Operated in shifts by the hospital staff, the 91 BF 72 is used every day in the scullery and corridors. Its compact design makes it particularly well-suited for cleaning narrow spaces.

Photos: IP Gansow

operated in shifts by kitchen staff. Based on the cleaning schedule, kitchen cleaning starts at about one o'clock in the afternoon.

"The staff are thrilled with our new kitchen and the switch from manual to machine cleaning. After a short induction and training session, they were able to clean floors considerably faster, with less effort, and with consistently better results," says Ulrich Schroeder, who is in charge of kitchen cleaning. IP Gansow's system automatically doses the cleaning agent, which saves chemicals, time, and money, and it makes the cleaning process more environmentally responsible. "We're saving 60 percent of the time we used to spend on manually cleaning our 'old' kitchen", he adds. "It's been about a year and a half since we switched to 'cook and chill', and so far the feedback has been extremely positive. We not only improved meal quality, but were also able to optimize all sub-processes, including the automated floor cleaning, which is indispensable for achieving the standard of cleanliness and hygiene required in a kitchen environment. Thanks to the significant time savings and improvement in cleaning quality, our investment in the two cleaning machines will be amortized within just three years," David Geisler summarizes.

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