Consumer demand for innovative flavor profiles, organic ingredients and sustainable operations is adding pressure to an already competitive industry. To protect market share and profitability, bakeries need to find ways to address these issues while controlling costs and meeting production goals. Innovative, new equipment for cleaning and sanitizing bakery equipment is now available to help bakeries meet these challenges. Using unique technology, this new system produces highly effective cleaners and sanitizers on demand, right in the plant. The solutions are just as effective, if not more than the traditional, toxic chemicals in use today.

In addition, use of the system provides many benefits including improved worker safety and productivity, environmental improvements and cost savings.

**SYSTEM OVERVIEW:**

**KLARION FROM SPRAYING SYSTEMS CO.**

The Klarion system uses proprietary electro-chemical activation (ECA) technology to produce a sodium hydroxide cleaner and a hypochlorous acid sanitizer in ready-to-use concentrations. The solutions are:

- Direct replacements for caustic chemicals and sanitizers currently in use. No changes to standard operating procedures are required when converting to Klarion solutions
- Non-irritating to skin and eyes and fragrance-free for improved worker safety
- Drain and disposal friendly
- Approved for use in organic food processing
- Salt-free and safe for use on stainless steel
- Suitable for use with CIP systems or portable tanks, vats, mixers, conveyors, ovens and more
- Compatible with one another so the need to rinse between cleaning and sanitizing is eliminated
- Residue-free

**HOW BAKERIES CAN IMPROVE EFFICIENCY, EMPLOYEE SAFETY AND SUSTAINABILITY BY RETHINKING THE USE OF TOXIC CLEANERS AND SANITIZERS**
KEEP EMPLOYEES PRODUCTIVE, ON TASK AND SAFE

Bakeries using the Klarion system report happier, healthier and more productive workers.

- Employees can clean and sanitize equipment free from cumbersome, layered personal protection equipment (PPE). This makes the cleaning and sanitation process much more comfortable, particularly when cleaning in hot environments. The elimination of PPE means workers can spend more time cleaning and less time adding/removing safety gear.
- The Klarion system eliminates the need for workers to dilute or be exposed to toxic chemicals. The Klarion cleaner and sanitizer are produced in ready-to-use concentrations.
- Traditional chemicals can trigger mild to severe allergic reactions to skin and eyes. These health hazards can result in worker absences, worker’s compensation claims and reduced productivity. The Klarion system eliminates the costly and dangerous risks associated with the risk of traditional chemicals.
- Using the Klarion system is easy and straightforward. Worker involvement is low and training can be completed in less than an hour. Using the two Klarion solutions is also very simple. Workers can be easily instructed on how to use the cleaner and sanitizer in just a few minutes. Many bakeries have found this beneficial since a larger percentage of staff can be deployed to cleaning and sanitation tasks as needed.

ADVANCING SUSTAINABILITY AND FARM-TO-TABLE TRANSPARENCY

Clean labels and organic production are high priorities for many bakeries. Replacing toxic chemicals used for cleaning and sanitation with Klarion solutions that are approved for organic production, help bakeries advance their commitments to natural, safe, sustainable operations.

Klarion solutions are generated on-site in safe-to-handle concentrations. The cleaner and sanitizer are more active than traditional chemicals and are to be used within 30 days of production. The solutions are drain and disposal friendly and can dramatically reduce waste water, associated treatment costs and potential fines.

Additional benefits of on-site generation of chemicals include the elimination of pollution due to transportation of chemicals and the disposal and recycling of chemical containers.
COST REDUCTIONS CONTRIBUTE TO INCREASED COMPETITIVENESS AND IMPROVED PROFITABILITY

Bakeries considering a change to on-site generation of cleaning and sanitizing solutions will discover many hard and soft cost savings. The total savings can be significant.

- Bakeries pay based on the volume of solutions produced. There is no equipment purchase required
- Klarion systems are monitored remotely by the manufacturer; performance issues are addressed in real time
- The system requires minimal maintenance and no special skills for operation
- Freight charges, ordering and inventory management of chemicals and PPE expenses are eliminated
- Chemical container disposal/recycling costs are eliminated
- Wastewater disposal costs and potential municipal fines are reduced or eliminated
- Worker’s compensation claims and unscheduled absences due to chemical exposure are eliminated
- Worker productivity is increased – no time spent diluting chemicals or gearing up and less training time is required
- Improved safety may help reduce worker turnover
- Valuable floor space is freed up – the need to store chemical containers is eliminated
- Water use is reduced; no rinsing is required between cleaner and sanitizer use and there is no filmy residue left behind

NEW TECHNOLOGY FROM A TRusted, DEPENDABLE PARTNER

The Klarion system is one of several recent innovations for bakeries introduced by Spraying Systems Co. The company has a long-standing reputation for helping bakeries reduce waste, minimize downtime and improve cleaning efficiency and offers a wide range of products. Its offering includes automated systems for applying moisture, mold inhibitors, light oils, release agents and viscous coatings. Nozzles, spray guns and TankJet® tank cleaning equipment from Spraying Systems Co. are also widely used in bakeries around the world.

Spraying Systems Co. products, including the Klarion system, are supported by an extensive network of experts. The company has more than 90 sales offices around the world dedicated to helping processors solve cleaning, coating, cooling and drying challenges while reducing consumption and waste and improving worker safety and sustainability.

For more information, visit klarion.com.
To speak with a Klarion sales engineer, call 630.517.1010.