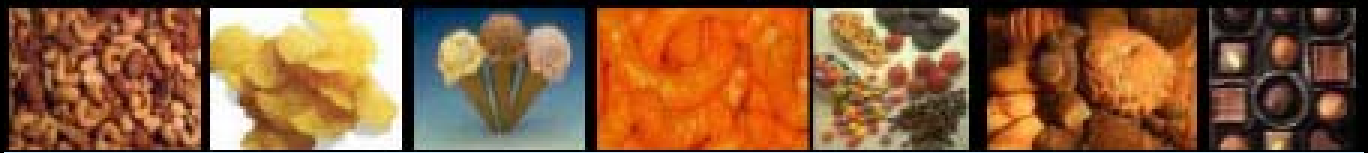




The Future of
Industrial Cleaning

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Use of UltraVapor in Specialty Food Manufacturing Plants. For beverage, cereal, confectionary and snack manufacturers.



Specific Benefits of UltraVapor for Specialty Manufacturers

- **Significant cost savings through:**
 - Reducing water consumption and waste water creation by up to 95% - the reduction in waste water can represent a significant cost savings for most plants.
 - Reducing, or in some cases eliminating, chemical usage by using the heat of the vapor to break down greases/oils/fats and to sanitize surfaces. Savings are not only through reducing purchases but also through the reduction in handling and storing of chemicals.
 - Eliminating damage caused to equipment, particularly electrical and motorized, caused by moisture and high pressure water spray. Reduced maintenance costs combined with a reduction in unplanned downtime due to repair activities.
- **Increased labor efficiency:**
 - Equipment can be cleaned with minimal dismantling and without the requirement to mask off electrical boxes, controllers, touch screens, sensors, etc saving significant time. The low moisture (6%) and low pressure of the vapor make it safe to use where water and foaming agents are not appropriate.
 - Using various attachments easily clean areas that were just not possible previously and clean conveyor belts automatically with CIP attachments, again saving labor hours.
- **Increased effectiveness; Revenue and brand protection:**
 - Proven effective in sanitizing equipment and eliminating allergens—see inset.
 - Can be used for intervention cleaning/sanitizing reducing the amount of time a line needs to be shut down should a problem be found. Maximize production.

Sanitizing Efficacy – in 2004, the Guelph Food Technology Center undertook 2 studies using UltraVapor to test its effectiveness against bacteria and in removing allergens. Their conclusions:



For Bacteria: Using Saturno equipment on surfaces infected with artificially high levels of pathogenic organisms representative of E coli, listeria and psuedomonas, without any chemicals or sanitizers:

"resulted in counts below the limit of detection...or significantly reduced (3 to 4 log reduction), across all work surfaces".

For Allergens: **"allergen levels decreased by as much as 2 log cycles"** AFTER equipment had already been cleaned using the accepted methodology of spray cleaning with 60 deg C water from a 1" hose.

"a water wash alone is not sufficient to clean food processing surfaces of allergen residues"



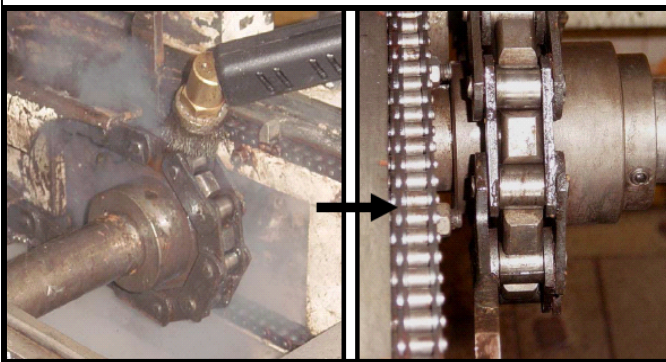
Typical Applications for UltraVapor

Cleaning conveyor belts and transfer equipment

UltraVapor cleans all types of conveyor belts removing food, stain, allergens etc quickly and easily. For solid belts similar to the one shown on the right suction equipment allows the belt to be cleaned, sanitized and dried in one pass. This can easily be done during production.

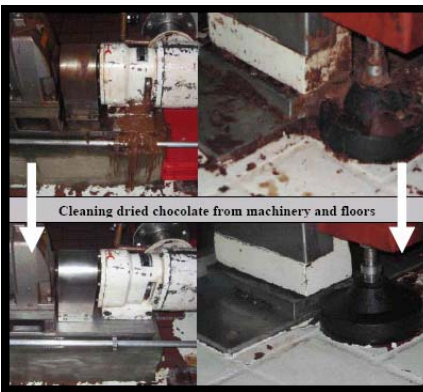


The bottom pictures show the drive cogs for an overhead bread conveyor that are covered with dry ingredients. This is easily cleaned, with the flour and other ingredients precipitating to the floor where they are easily swept or vacuumed up.



Clean and degrease drive chains— drive chains can quickly become encrusted with grease, food product, metal shavings etc affecting operation and leading to breakdown. With UltraVapor the chains can be cleaned in place and the resultant soils/grease etc captured on a piece of cardboard for simple disposal. Food grade lubricants and metal protectors can be added in the vapor stream.

The pictures to the left are from a confectionary producer and the drive chain was covered in chocolate and grease



Clean chocolate and icings etc sticky chocolates, icings, butter, lard etc melt easily with the vapor's heat and they can be blown down to the floor or suctioned off.

To the left is congealed chocolate on a motor and a table leg. To the right, an icing pump covered with a cream cheese icing.



Other Applications:

Clockwise from upper left:
1) clean motors safely, even when in operation
2) quickly remove sauces,

glazes and other substances from kettles and mixing equipment, 3) kill and remove black mould from floors and walls, 4) clean refrigeration units without damaging cooling fins or introducing moisture, and; 5) clean, sanitize and dry, food processing surfaces in one pass.

