



# Easy Clean Demands, Top of the List for Food Producers

When a customer demanded an easy clean mixer that didn't need dismantling or major operator involvement between batches, processing technology experts Hosokawa Micron Ltd. looked at their current range options to determine the best solution for the customer. After consideration it was agreed that the customer's demands could be best met by a uniquely re-designed and engineered Vrieco-Nauta conical mixer.

The customer, a yeast product processor, was vociferous in their demands for a mixer that could be cleaned quickly and easily between batches to prevent batch to batch contamination and yet which gave them additional benefits in terms of performance, operational flexibility and faster product turnaround.

As part of a new line the mixer was a significant unit in the major capital investment in technology upgrade at the plant and crucial to the company's production of a range of different yeast products. Ploughshare mixers were already employed on similar lines but the customer had encountered problems with their cleaning and was keen to avoid such problems in the future.



In response to the customer's demand Hosokawa Micron engineers developed a 1700 litre Vrieco Nauta conical blender, which incorporates a cantilever screw and semi domed cover

that facilitates a full clean in place design to meet the demand for batch integrity. The cantilevered screw design eliminates the bottom bearing and potential for bearing wear in the product zone whilst the semi domed cover means no sharp corners between vessel cover and wall, again helping the cleaning.

After the mixing cycle is complete and the blender discharged, the main orbit arm parks automatically against a set of water spray nozzles recessed into the mixer wall and hot water is injected against the screw which rotates to ensure all the screw surfaces are wetted and cleaned. The open screw design facilitates water drainage and the recessed spray nozzles are fed via an externally mounted spray lance.

In the parked cleaning position the top of the orbit arm is cleaned by a set of fixed spray nozzles and a powerful centrally located Toftejorg spray ball completes the vessel cleaning ensuring all the walls and underside of the orbit arm are thoroughly wetted.

The new blender has enabled the customer to achieve faster production turnaround times without the cross contamination between batches.