

## Maintenance hours cut, chemicals wiped out – spray jets clear of scale!

**R**ank Hovis McDougall is a pace setter in the food processing industry. Accordingly, the firm sets itself very high standards of hygiene and quality. But delivering high standards often involves the drudgery of regular, repetitive maintenance at inconveniently short intervals. No-one likes to constantly be obliged to dismantle and re-assemble machinery plus issue special chemicals and safety equipment. Possibly back-up tooling has to be considered, and stocks of special components kept to hand.

Profitability is constantly eroded by the cost of labour, chemicals, protective clothing and spare parts and by the inefficient use of energy.

Wherever hot water is used in a process, if the plant is fed by a hard water supply, there is a constant risk of limescale being rapidly deposited in equipment of all types.

At McDougall's factory in Reading, Berkshire, high volume preparation of dry mixes for pre-packaged foods requires regular cleaning of the food bins.

Mr Mike Stamp, McDougall's site engineering manager,



worked with Wincanton Catering to design and install a custom built cleaning bay system. The food bins are cleaned in the system twice each day, by bombarding them from powerful spray jets installed in the base of the cleaning bays, and from rotating ball and jet nozzles fitted at the top. The cleaning solution, heated to 60°C, also contains sodium hypochlorite to break down fatty residues in the bins.

The cleaning system works well, but the hard water used led to a rapid build-up of heavy scale in the nozzles and jets of the spray fittings. Even when the temperature was reduced to 40°C for the cleaning solution, the scale had to be cleaned away at least twice per week.

Mike Stamp explained, "This situation necessitated the unpleasant job of dismantling the spray heads, then soaking them in a strong chemical cleanser. Overall, this caused severe disruption to the production process."

Following advice, a *HydroFLOW* C60 descaler unit was installed. This was merely strapped to the water inlet for the cleaner bays. The results were "immediately impressive". Maintenance intervals have been slashed to once every 10 or 12 weeks instead of twice per week! Now a simple wipe over the nozzles replaces dismantling and a soak in chemicals.

McDougalls are delighted by the gains in efficiency, cost and productivity.



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