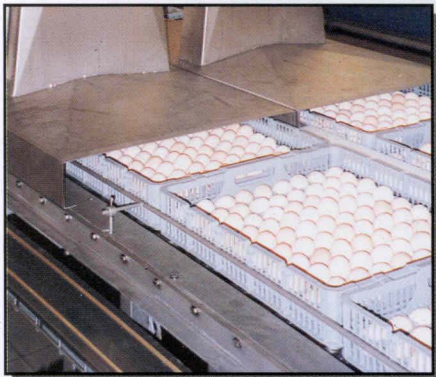




Cleaning of trays and boxes is an important task. For the boxes this starts, above left, with a pre-soak. The firm that manufactures this equipment, Linco, also manufacture water rides for theme parks! Another important aspect of hygiene is the removal of any dust or fluff from eggs or chicks (see below left).



from the environment. In all the areas of the hatchery where regular cleaning has to occur, such as in the egg transfer and chick handling room, design has again come to the fore to facilitate effective cleaning.

Underfloor heating is turned on after washing and disinfection to quickly dry the floors and remove the moisture that can favour microbial growth.

At take off an Attec chick separator and transportation system is used and, here again, the objectives are to quickly separate chicks and hatch debris and minimise human contact. Chick counting is done by a series of Pas Reform chick counters.

The chick handling area is able to

process 80-90,000 chicks per hour. Currently none of the chicks are vaccinated in the hatchery but the possibility exists if it should be needed.

In the chick handling area computerisation is to the fore and the staff pride themselves on the fact that an invoice for the chicks can be generated before the order leaves the hatchery.

The chick baskets are immediately sent to the wash area and the first stage of the wash procedure is a pre-soak followed by washing at 40°C, then by a soap and hot wash and a final disinfection stage. The baskets are then blow dried so that they remain wet for the minimum of time.

In Denmark salmonella control is a key issue. Control of all stages of the production chain is important and to do this Mølbjergs own half of the breeding farms and the other 50% are on long term 'rent and salary' contracts.

However, from 1997 the company has deliberately had a surplus of production so that should a breeder flock become salmonella positive it can be immediately killed out without adversely affecting egg supply.

This surplus capacity was achieved by entering into a long term contract with some Swedish broiler breeder farmers who consistently produce salmonella negative eggs.

Surplus hatchery eggs are sold on the European hatching egg market. Within the whole operation all flocks (houses) are tested every week for salmonella.

This is done by testing litter samples backed up by blood testing and extensive hatchery and broiler farm testing.

Today in Denmark only 2-4% of broiler flocks yield any strain of salmonella and Danish poultry producers are proud of the fact that the number of cases of salmonella associated



with food poisoning is declining and then most of the cases are associated with imported products.

So, if we come to summarise what Mølbjergs has achieved, one can simply say they now achieve on a daily basis that which most other hatcheries dream about.

They have achieved this by:

- Using single stage incubation.
- Having a board that is committed to chick quality and salmonella freedom.
- Paying attention to detail.
- Being prepared to have surplus breeding flocks in the system.
- Having no egg banks.
- Having stringent microbiological monitoring.
- Not sending setter trolleys to the farms.
- Operating an ISO 9002 system.

This has cost the company millions of kroner but they have the return in that their end product has a status that is second to none and is now being sought by major supermarket chains around the world.

The success of Mølbjergs is proof that quality does pay and this is the way the other companies will have to go if they want to satisfy ever more demanding customers and consumers. ■