

## CASE STUDY - COOLROOM

CS010

Client: Commercial Kitchen



### Situation:

A commercial kitchen serves breakfast, lunch and dinner to approximately 400 people every day. Two coolrooms are used to defrost food prior to food preparation. The food is stacked onto trays and carry shelves, covered in plastic to contain moisture from evaporation.

The coolrooms required cleaning on a fortnightly basis, as the walls and ceilings would be covered in mould. This cleaning regime had been conducted for a number of years. There are two fans circulating the chilled air into each of the coolrooms.

The facility manager contacted their air conditioning service team about finding a solution, in order to save the costly labour and downtime (more than \$10,000 per year). The requirement was to control re-growth and test to check whether the SAN-AIR treatment improved the situation.

### Treatment:

One coolroom was used as a control with no SAN-AIR treatment. In the other coolroom, SAN-AIR was introduced and replaced every month. The test method involved contact dip slides with a develop count at 28°C. Samples were taken from coil fins and the wall opposite the fans.

### Step 1: Surface cleaning

Clean both rooms to bring them to an equal baseline of cleanliness. For both cool rooms, SAN-AIR coil cleaner/ surface cleaner was used to wipe down every surface including the coils of the air handlers. With the walls, cleaning cloths were changed every full height wipe to ensure there was no cross contamination.

### Step 2: Air Handler Sanitisation

SAN-AIR 50g and 250g Gel packs were installed in the air handling units of coolroom B only.

### Step 3: Mould Measurement

There was no need to test initially due to the mould being clearly visible. Visible mould always tests in the one million counts. Inspection after 2 weeks revealed mould was no longer growing. After a month, still no mould. It was resolved to monitor the mould and bacteria counts on surfaces every month for 6 months.

### Result:

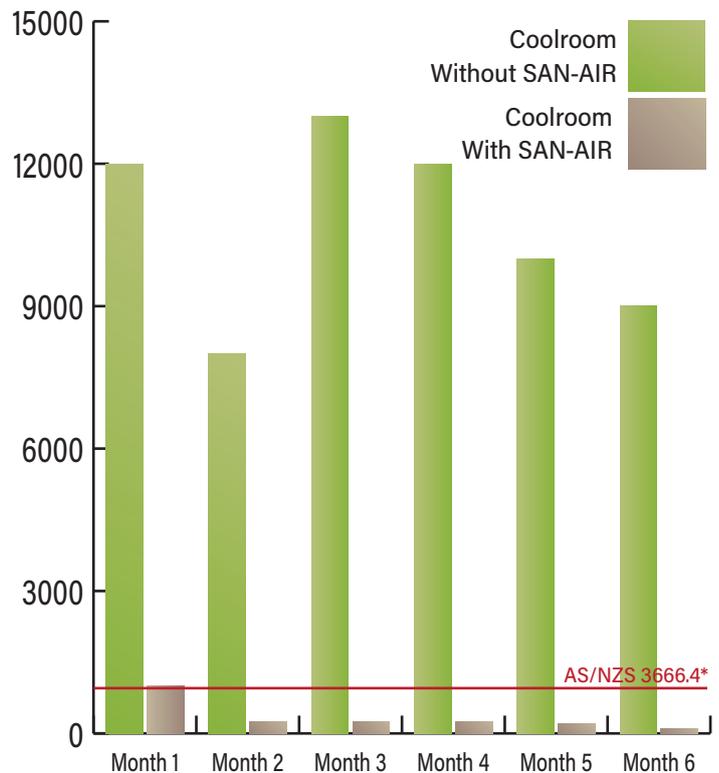
- In 2 weeks, SAN-AIR reduced mould counts
- Over 6 months, SAN-AIR maintained reduced counts in the coolroom which had continuous SAN-AIR treated air handlers
- SAN-AIR showed a better than 90% mould reduction for the SAN-AIR treated coolroom compared to the coolroom which was not treated with SAN-AIR

### Conclusion:

The circulating air in a coolroom can be significantly treated for bio-burden contamination by using SAN-AIR.

### Colony Forming Units (CFU)

\* Australian Standards AS/NZS 3666.4 are set at 1000 CFU



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