CASE STUDY

PROJECT TRADE WASTEWATER TREATMENT FOR BAKERY

- **PRODUCT** Dissolved Air Flotation
- **INDUSTRY** Food and Beverage
- LOCATION Adelaide, South Australia



BACKGROUND

A bakery facility in Adelaide had waste water from the baking process discharging into the local sewage network. The bakery needed to improve its trade waste water treatment system in order to comply with the local authority discharge permits.

MAK Water was commissioned to supply and install an onsite waste water treatment plant. Suspended solids, biological oxygen demand (BOD), and oil and grease were the main contaminants that needed to be reduced through the treatment process.

SOLUTION

ROTATING DRUM SCREEN

 Primary effluent screening (1mm) to remove grains and other large contaminants

DISSOLVED AIR FLOTATION (DAF)

- Capable of treating 1,800 L/h of wastewater from the production facility, to meet SA Water trade waste discharge standards, this system removes suspended solids, oil and grease and BOD.
- A DAF process was chosen as it is very effective in targeting removal of high levels of oil and grease which was the main compliance issue.
- Discharge flow to sewer and treated water pH are measured for monitoring by SA Water representatives.

RESULTS AND BENEFITS

- **Compliance**. Compliance with SA Water's trade waste standards.
- Automation. Fully automatic process with minimal operator involvement.
- Lowest total operating cost. This solution enabled the site to reduce its trade waste discharge costs and therefore lower total operating costs.



The dissolved air flotation and rotating drum screen on site at the bakery



The process is fully automated with minimal operator involvement and complies with SA Water's Trade Waste standards.

