

CASE STUDY



PROJECT	WASTEWATER TREATMENT FOR ABATTOIR
PRODUCT	Dissolved Air Flotation (DAF)
INDUSTRY	Food and Beverage
LOCATION	New South Wales

BACKGROUND

A large abattoir in New South Wales was having issues with their Dissolved Air Flotation (DAF) treatment plant that is used for removing tallow from their wastewater stream. Poor understanding of the operation of the DAF and little maintenance over the years had seen the asset and its components become blocked and damaged.

The abattoir approached MAK Water to source replacement components for their plant that had been purchased from an overseas vendor and help to get the DAF operational again. MAK Water was selected as the preferred service provider because of its extensive experience with DAF plants in wastewater treatment applications and its ability to source the specialist components required.

SOLUTION

- Sourced and installed new plate packs into the DAF plant
- Ensured that the required spacing could be achieved with the new plate packs
- Replacement guides manufactured from LDPE and 316 stainless steel to be suitable for the harsh operating conditions
- Trained operations personnel in appropriate use and maintenance of the machine to prolong its working life

The works required using a crane to lift off the top section of the DAF, weighing in at almost two tonnes, so that the internal plate packs could be accessed. The hardened tallow then needed to be broken up using hot water to loosen the sheets before they could be removed. Once the DAF had been cleaned out the guides and plate packs were fitted prior to the top being lifted back into place.



Collapsed and damaged plate packs in DAF



New installed plate packs in DAF

RESULTS AND BENEFITS

- **Fast turnaround.** Quick and easy supply chain between the OEM and MAK Water to meet client's needs
- **High quality.** Reliable expertise in planning and executing repair works on the non-MAK plant
- **Cost saving.** By using a water treatment specialist the client achieved a trouble free start-up
- **Training.** Process training to better understand the operation and maintenance requirements of the DAF