

CASE STUDY

PROJECT	TRADE WASTEWATER UPGRADE
PRODUCT	Internally Fed Drum Screen (IFDS)
INDUSTRY	Food and Beverage
LOCATION	Western Australia



BACKGROUND

One of the largest bottlers of non-alcoholic ready-to-drink beverages in the Asia-Pacific region was having problems with its Waste Water Treatment Plant (WWTP) that was used to treat their factory waste prior to discharge to the local water authority. The plant was unreliable, required excessive operator input, which combined with its high chemical consumption made it expensive to run.

MAK Water was asked to review the operation and propose a solution, to reduce the solids going into the process through better screening, reduce chemical consumption and operator input and improve the quality control of the treated water.

SOLUTION

MAK Water provided a turn key solution which produces trade waste which complies with the water authorities discharge requirements.

Highlights include: -

- A REKO Internally Fed Drum screen (IFDS) and support platform for the removal of solids from the waste stream
- New buffer tank to absorb peak flows into the WWTP with associated civil works (Foundation and suitable bunding) and pump sets
- Fully Automated PLC control system capable of treating 500m³ per day of trade waste.



REKO Internally Fed Drum Screen and platform

RESULTS AND BENEFITS

- **Plant Reliability.** The high quality equipment and robust design has provided reliable operation with minimal maintenance
- **Turnkey solution.** MAK Water designed and built a custom treatment system to meet the clients discharge and special requirements.
- **Lowest total operating cost.** By installing a new buffer tank, chemical usage was reduced as low and high pH flows neutralised each other.
- **Compliance.** The system ensured environmental discharge requirements were met and ensured the best possible recovery of high BOD flows.



133KL Buffer Storage Tank and access Platform