CASE STUDY

PROJECT STP INLET WORKS UPGRADE

PRODUCT Screw Screen

INDUSTRY Municipal

LOCATION NSW



BACKGROUND

A northern NSW regional Council was seeking to upgrade their sewage treatment plant inlet works by replacing an old step screen that reached end of life. The Council was initially seeking a like for like replacement, however, wanted better removal efficiency and a solution that required minimal maintenance and operator input in day-to-day use.

Key requirements included the ability to retrofit the new screen into the existing concrete channel to minimise site modifications, and incorporated screenings compaction and washing.

SOLUTION

Two screw Screens model SS-mK 390 with custom design features were selected for the project for side-by-side operation to meet all the replacement requirements.

DESIGN SPECIFICATIONS

- Liquid treatment capacity of 175 L/s per screen
- Screen element with 6 mm perforated holes
- SS partitioning wall in channel
- Automated washing in screening and compaction zones

DESIGN FEATURES

- Machine materials in SS316
- Custom partitioning wall in SS316 to split channel into two for side-by-side screen installation
- AS3000 Control Panel for automatic operation

RESULTS AND BENEFITS

- Turnkey solution. Almost identical dimensional match to existing unit for ease of installation and minimal modifications to existing infrastructure when the unit was delivered to site
- Improved removal efficiency. With 6 mm diameter perforated holes, improved removal efficiency was achieved
- Reduced volume of screenings. With compaction, a 50% reduction in volume of screenings and disposal costs justified the new screen installation costs.



Installed new screw screens



Screw screens with bagging system

