

HIGH SCREENINGS CAPTURE BAND SCREEN FOR DAWSON STP

CASE STUDY



THE CLIENT

The Dawson STP which is owned and operated by Midcoast Water, treats up to 4.3 millions of litres of sewage per day.

The site is one of largest facilities in the region and treats effluent to a tertiary level.

OVERVIEW

Hydroflux were engaged to design and supply a new fine screen facility for the site, to increase screenings capture at the plant's inlet. The new fine screen was to replace an outdated step type screen.

The benefits include:

- Highest screening capture rate of 84%
- Significant reduction in maintenance associated with blocked pumps, aerators and mixers
- Automatic unattended operation
- Complete stainless steel construction

The equipment installed is the HUBER Escamax[®] Band Screen. The key to this technology efficiency is the

Item	Value
Peak Flow	250 L/s
Band Speed	6 m/min
Aperture	6mm perforations
Headloss	300mm

fact that it uses a series of perforated plates as the screening medium.

The plates rotate in a track system and discharge screenings at the top point where a transfer system outloads the screenings into a skip.

Perforations provide almost twice the screenings capture over wedgewire and bar profiles.

This is why the HUBER Escamax[®] achieved the industry leading validated screenings capture ratio of 84% at the UK WIR Test Facility.

The retrofit of this technology is simple, as the screen is delivered in a single section with the necessary supports. Council's in-house team installed the unit and integrated the screen into their existing control system.

