PERFORATED BELT SCREEN

Alawir Sewage Treatment Plant, Dubai, UAE

The incoming channels of Al Awir STP in Dubai, UAE transports sewage highly polluted with partially very fine solid contents. Mena Water FZC got the order to replace the 3 existing coarse screens and build up a fine screen system.

Start up of the plant was in August 2008. After successful startup additional four screens were installed at the extension stage new inlet work.

The perforated belt fine screen is a very effective system for mechanical pre-treatment of sewage.

- Perforated belt captures fine screenings and solids by building up a screening carpet
- Rake combs mounted on the belt remove coarse materials

Increasing of the screening capture efficiency by more than 86% and 95% removal of oil and grease, resulting in

- Significant reduction of BOD and COD
- Smooth operation of the subsequent step
- Smooth operation of sludge treatment components
- No jamming of pumps, aerators, etc
- Smooth operation of the entire plant
- Reduces scum and floating matters in the treatment step

PROJECT DATA

- Perforated Belt Screen
  - Capacity 7 x 75 m³/min
  - Channel width 1200 mm
  - Channel depth 1 3050 mm
  - Channel depth 2 2800 mm
  - Perforation 6 mm
  - Material SS 316
- Screw Conveyor
  - Length 15m and 10m
- Washing Compactor
  - Capacity 2 x 10 m³/h

Pretreatment at Sewage Plant