



MS Bar Screen Solves Odor & Debris Issues at Water Reclamation Facility

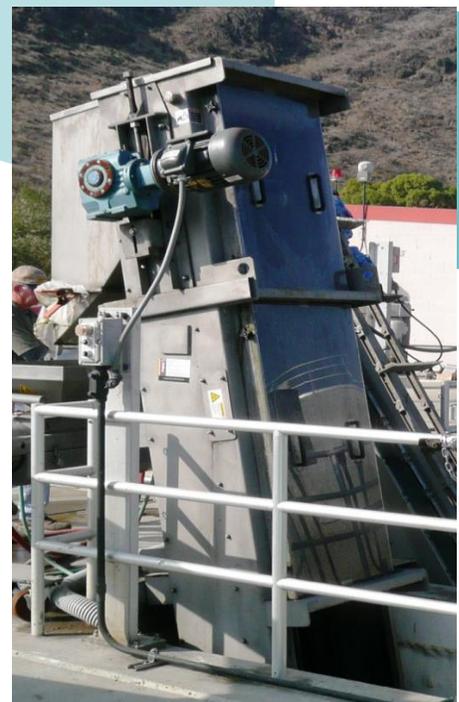
Background

The Camrosa Water Reclamation Facility in Camarillo, California, serves approximately 6,900 sewer connections and reclaims about 1.5 million gallons of wastewater per day. The reclaimed water is used to irrigate lawns and gardens as part of the Camrosa Water District's overall plan to rely less on scarce and expensive potable water for outdoor irrigation.

The District was experiencing issues with their treatment process created by a mechanical bar screen at the headworks portion of the plant. The most significant issue was the inability of the Parshall flume to record accurate levels. The flume measures and reports the flow through the system to ensure that the District is in compliance with their discharge permit. Since the mechanical screen was not effectively removing debris collecting on the screen's bars, the levels in the channel frequently rose and fell, creating errors in the measurement's accuracy.

Also, due to a lack of lower bearing and cross members in the screenfield, the screen would build up with debris that would blind off portions of the screen. The debris against the bars would result in the bending of the rake fingers exacerbating the problem even more. The removal of this debris required someone to go down into the channel, a confined space entry. Since the screen was not enclosed, debris was spread across the plant's grounds, requiring additional cleaning. The mess and smell of sewage attracted swarms of flies making the working conditions unpleasant. The facility personnel realized the screen needed to be replaced.

Customer: Camrosa Water District
Industry: Water Reclamation





Debris collected on the old screen's chains and scraper mechanisms that frequently required cleaning

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- Robert Barone

Camrosa WRF Superintendent

Why Camrosa chose Headworks

Mr. Robert Barone, Camrosa WRF Superintendent explained, “We knew we needed a better solution. After taking into consideration the frequent maintenance costs, flow problems, and unpleasant maintenance issues, we realized this screen was not efficient and needed to be replaced.”

Camrosa needed an effective, reliable screen that could get the job done. After careful consideration, the Headworks® MS Bar Screen and Screwfactor™ were selected to solve the plant’s problems. The MS Bar Screen was designed to handle a peak

flow of 5 MGD (19,000 m³/ day) and was designed with 3/16 in (4.76 mm) bar spacing. No other manufacturer was able to provide a screen with such tight openings.

Solution

The screen was installed in the existing channel and all of the plant’s screening related problems disappeared. To eliminate the erroneous flow readings, Headworks recessed the side frame and bottom of the bar screen into the channel walls and floor. This provided the plant with the headloss that was needed to secure accurate flume readings.

Since the MS Bar Screen is completely enclosed, debris is no longer scattered across the facility, the sewage smell has been dramatically reduced, and even the flies have abandoned the surrounding area. Most importantly, the Headworks’ bar screen doesn’t require the time and money the previous screen demanded in order to operate effectively.

When asked about the current installation, Robert Barone, answered with a smile, “Everyone at the plant is happier operating with the new screen. We no longer spend our time cleaning debris scattered around the facility and the flies are almost nonexistent. Although the Headworks MS Bar Screen was not the least expensive solution, it eliminated all of the issues created by the previous screen, making it the most fiscally responsible solution in the long run.”