

# EscaMax® Perforated Plate Screen

White Paper – Miami Dade South WWTP, FL



## Largest EscaMax Screens in the United States “Exceed Expectations”

In the winter of 2009, Miami Dade County initiated a discussion with Huber Technology around a large screening project at the South District Waste Water Treatment Plant. After competing successfully with several other equipment manufacturers for the project, Huber successfully won the project in September, 2011 and delivered 4x 10ft wide, 20ft tall EscaMax 6000x2752x3 & WAP4 one year later in November, 2012. The screens were stored onsite as the WASD completed their identification and contract negotiations with the installing contractor. Two of these impressive machines were brought online in February 2014, the other two in November 2014.



These large screens are rated at 71.25 MGD at a maximum of 12” headloss. In June, 2014 Huber personnel were present for hydraulic testing with impressive results. Flow was diverted to one screen at an initial rate of 75 MGD (5% above rated flow) and the EscaMax began running continuously in low speed mode with a consistent but light blinding layer. This flow was maintained for 40-50 minutes with consistent performance and the upstream water level hovered approximately 1 foot below the overflow weir. At this time, the plant operators decided to increase flow until the upstream water level overflowed the weir and this did not occur until 85-90 MGD.

At this extreme flow rate, a large number of rags were pushed through the upstream course screen (3/4") and scoured from the channel bottom. A very thick blinding layer began to appear on the screen as the upstream water level approached the overflow weir. However, the Huber EscaMax was not finished and the massive machine switched quietly into high speed mode and the witnesses felt proud as upstream water level fell by several inches. Unable to overwhelm the screen, the site had issues with a faulted slide gate and upstream water levels backing up in their system so the testing was stopped. The EscaMax never allowed upstream water to escape over the weir. All 90 MGD had to face the EscaMax and leave their baggage behind on the screen where it was efficiently removed, washed conveyed and compacted.



Given the extreme conditions the utility managers concluded that the Huber screens "exceeded expectations". Huber Technology will be able to use the installation as a strong reference for upcoming EscaMax projects thanks to the high quality machines and top quality personnel from Huber.

Huber's experience with municipalities and with wastewater processes is extensive as is its knowledge of the technologies it provides. This industry-technology insight allows Huber to work with organizations to ensure that systems are geared to perfectly match up to immediate tactical challenges and long-term strategic goals.

