

# TWO PERFORATED BAND BELT SCREENS HUBER ESCAMAX<sup>®</sup> IN ORLANDO, FLORIDA CASE STUDY



# THE CLIENT

The City of Orlando – home of Disneyworld and the Universal Studios – houses since April 2007 another attraction: the first Perforated Band Screens HUBER EscaMax<sup>®</sup> in America. The Ironbridge wastewater treatment plant treats wastewater from around 400,000 people in Orlando, Winter Park, Maitland and Casselberry, and it serves portions of the Counties Orange and Siminole.

## **OVERVIEW**

Ever increasing maintenance work on their prior screens prompted the plant management to look for screens requiring less maintenance and achieving better solids removal. They solicited offers from various screen manufacturers and specified screens with a capacity of 2,330 l/s (37,000 GPM), an installation angle of 60°,.6 mm diameter perforations, that is made of stainless steel material 1.4571 (SS 316L) and fully passivated in an acid bath.



After thorough comparisons between the offered screens, including presentations and discussions of manufacturers with the city engineers and plant operators, the City of Orlando decided for our EscaMax<sup>®</sup> screens. A very important factor for this decision was the good experience they had made before with the HUBER Service Department. Operators and plant management knew that they could rely on our round-theclock aftersales service.

#### THE INSTALLATION

"We are impressed by the manufacturing quality, functionality and performance of our new HUBER screens. HUBER's service is also outstanding!" These were accolades stated by Gil Vasquez – Maintenance Manager at the Ironbridge wastewater treatment plant in Orlando, Florida.

The two supplied EscaMax<sup>®</sup> screens were installed by plant personnel with support by HUBER. The city engineers did an excellent job of planning and preparing the site for screen installation. Our team of service engineers on-site consisted of Erwin Wagner from Berching and Tom Taylor, Hank-Jan van Ettekoven and Don Zufall from our Subsidiary in Huntersville, NC. We would like to use this opportunity to express our thanks to the city engineers and the involved Ironbridge plant personnel for their excellent planning and installation work.





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## OUTCOME

Since the Escamax<sup>®</sup> screens were put in operation, no maintenance has been needed. The city engineers were instantly impressed by the screens' high manufacturing quality and the operators now also praise their ease of operation and excellent performance. The perforated band elements of the EscaMax<sup>®</sup> are effectively cleaned with spray nozzles, followed by a rotating brush. Every fourth perforated screen elements is provided with rakes for reliable lifting and removal of coarse and bulky solids.

Two new wash-presses HUBER WAP 4 were also installed after the EscaMax<sup>®</sup> screens. Good equipment for screenings washing and compaction is especially important where screens with a very high capture rate are installed: their screenings contain a lot of fine inorganic as well as organic material that should be washed out and returned to the wastewater stream before the screenings are compacted. The city engineers and the operators realized that they could further improve reliability and performance of their mechanical pretreatment by installation of a pair of HUBER wash-presses; and they realized that they could save considerable disposal costs by doing so. Another advantage of good wash-presses is that they return organic material and its high BOD to the raw wastewater stream. In this way the BOD remains available for the treatment plant's denitrification process.

After we had an excellent reference installation at Ironbridge, we could sell another four EscaMax<sup>®</sup> screens in America within a period of six months.

