

Index Textile

A Mellifiq reference project

Ensured waste water effluent compliance at textile print company

**Large scale system for
BOD and COD treatment**

MELLIFIQ

Index Textile, Honduras

There is an increasing worldwide consumer demand for printed textiles and Honduras is committed to expanding their domestic industry. The South American textile print company Index has set out to satisfy this demand for the North American and international market. With over 400 employees and in business since 1993, the company exclusively delivers high quality consumer goods to prominent brands such as Under Armour and O'Neill.

Facts

Industry:	Index Textile
Purpose:	Industrial wastewater treatment
Capacity:	25 tons per day

Solution:

Ozonetech RENA Tellus X1000

Dimensions (WxDxH): 3500 x 1812 x 2135 mm

Total input power: 21 kW

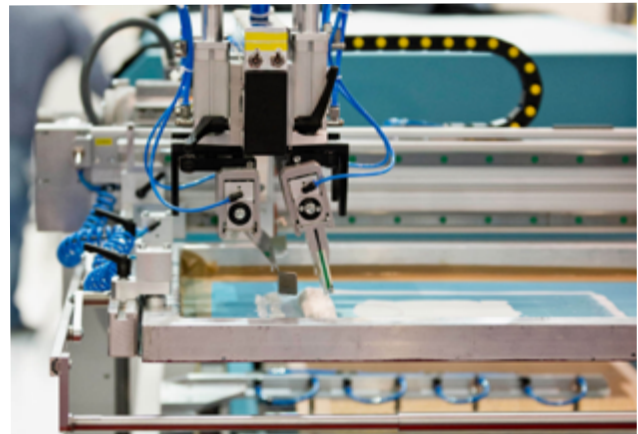
Noise level: 49 dB

Solution includes:

- Foam collection
- Monitoring
- Controls
- Built-in capacity redundancy for future increase of wastewater loads
- Frequent lab testing of biological and chemical oxygen demand

The problem

Large quantities of solvents and tightened effluent requirements needed a solution. The process of textile screen printing requires ample amounts of solvents which leave the factory as wastewater. These compounds, such as alcohols and aldehydes, are difficult to degrade biologically or by other means. Due to tighter effluent requirements, the factory was in dire need of an effective solution, especially since the facility could not build a new treatment plant due to restricted available space.



An automatic screen printing press.

The solution

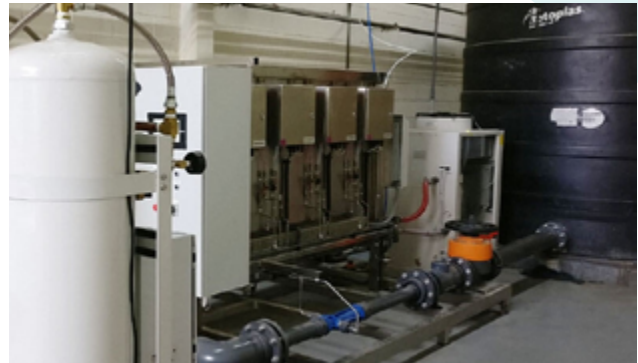
Pilot project and extensive treatment trials led to a highly tailored full scale system. Index contacted Mellifiq in search for an efficient treatment system. In order to evaluate the required capacity, our pilot project consulting services were employed. Our engineers treated actual wastewater, sampled directly from the effluent stream, using our in-house pilot facility. Following extensive treatment trials, incorporating

filtration, pH control and ozone oxidation, a full scale system was designed.

The system includes our Ozonotech RENA Tellus X1000 water treatment system, foam collection, and monitoring and controls. The solution was delivered with built-in capacity redundancy for future increase of wastewater loads.



The complete solution designed by Mellifiq, including a complete Ozonotech ozone system with optimized ozone dissolution, control unit, oxygen system, cooling unit, reaction tank and foam collection.



The Ozonotech ozone system is connected to a collection tank for allowing the required reaction time.

Evaluation

Levels now reduced below the new requirements. The system was installed and successfully commissioned on site by our engineers, including connections to the collection tank, sensor installation with calibration, and start-up of ancillary equipment such as cooling system, foam collection system and ozone dissolution optimization. The ozone system handles 25 tons of high concentration wastewater per day.

The result of the effective oxidation is clear. After installation, COD and BOD levels were reduced to below 20 ppm, below the environmental regulations enforced upon the facility. The performance is continuously monitored through integrated ORP sensors and frequent lab testing of biological and chemical oxygen demand.

“The ozone system is working. I really appreciate your help to make this project successful”

Operations Manager, following our on-site commissioning

About Mellifiq

Mellifiq is a multi-awarded environmental service company group, that has since the early nineties evolved into a world leading system and solution provider with multiple groundbreaking applications for industrial, municipal, and real estate clients. We supply cutting-edge technologies to manage the most sophisticated air, water, and energy challenges.

Mellifiq offers a complete range of air and water treatment technologies and solutions across multiple industries such as processing industry, energy sector, food and beverage, pharmaceutical, wastewater treatment and commercial real estate.

Mellifiq offers strong and renowned brands, such as Ozonotech, Nodora and Water Maid, and world-class engineering services combined an excellent track record of more than 40 years of innovation. We help our clients achieve the most efficient and sustainable solutions while creating the maximum value for their businesses.

With several business units across Europe, Mellifiq is headquartered in Stockholm where research and development, production, QA and certification all take place. Our unique technology and our extensive expertise have made us the Center of Excellence for the world's most complex projects, and a global player with installations on all six continents.

Everyday millions of people rely on our solutions for ventilation, disinfection, sanitation, and odor control. We are committed to raising the bar for the concept of clean and the industry standard for engineering, technical services and general contracting.

For additional information, visit our website at www.mellifiq.com

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