

## The Challenge

Industrial wastewater is a complex matrix of chemicals, oils, heavy metals, and toxic organics each requiring tailored treatment strategies. From petrochemicals to mining, textiles to food processing, each of which requires a tailored treatment strategy.

At GI Aqua Tech, we understand that no two industries are alike.

# **Project Highlights**

# Denim Manufacturing Facility

### Client:

Textile production line

### Challenge:

1,500 L per batch of chemically intense, dye-laden wastewater

#### Solution:

G.NANO-based treatment unit with 4,000 L/h capacity

#### Result:

- Discharge met international water reuse standards
- Enabled reuse of treated water in non-potable processes





## **Facility Type:**

Multi-sector industrial zone

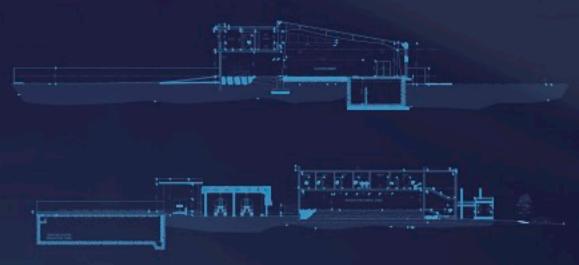
### Challenge:

Diverse effluent stream with oils, salinity, COD, metals – under strict regulatory pressure

#### Solution:

1,200 m³/day prefabricated portable treatment plant delivered under EPC scope

## **Architectural Drawing**



### **Result:**

- Full compliance with MODON's discharge limits
- Seamless deployment in a decentralized setting
- High-efficiency removal of mixed contaminants



This project proved that prefabricated, high-performance treatment systems can scale effectively across Saudi industrial cities.





## **How We Solve It**

Our modular platforms combine proprietary G.NANO chemistry with multi-stage chemical-physical conditioning. Whether deployed in centralized facilities or integrated into existing industrial lines, each unit is:

- Fully prefabricated and rapidly deployable
- Remotely monitored and adaptable to load variations
- Designed for minimal footprint and maximum uptime

# System Highlights:

- Remote Monitoring
- No Sludge Generation
- Scalable Modular Design
- Chemical Separation & Contaminant Targeting
- Low Energy, High Efficiency



