IRIDE
ACQUE

CASE STUDY MODA - RIUTILIZZO

panama
TRIMMINGS

Panama

Il trattamento delle acque non è una questione di etichetta

Panama

Water treatment is not a matter of labels

PROBLEM

- **TREATMENT DIFFICULTIES** The presence of resins and other chemical compounds makes it difficult to treat these highly resistant effluents with traditional systems.
- **HIGH SUSPENDED SOLIDS LOAD AND HIGH COD** The wastewater from the label production departments in the fashion sector is characterized by high levels of suspended solids and high Chemical Oxygen Demand (COD) due to the presence of resins with a strong tendency to polymerize.
- **CLOGGING OF PIPES AND CONTROL SENSORS** The formation of "sticky" solid agglomerates causes blockages in the pipes, clogging of pumps and rotors, and inhibition of control sensors in the system.

SOLUTION

→ **EMER GLOBAL REACTOR** To minimize contact between wastewater and equipment, a plant has been designed with a single reactor, the "EMER Global Reactor," in which all treatment stages occur sequentially. The effluents, even during the loading phase into the reactor, are treated to reduce the polymerization of resins, thus preventing them from adhering to the surfaces of the equipment. In this compact and fully automated reactor, which contains a limited number of mechanical and electronic components, all treatment stages are performed: removal of suspended and floating solids, coagulation, sedimentation, advanced catalytic oxidation (EMER), and final sedimentation.

ADVANTAGES

+ **ACHIEVEMENT OF TREATMENT STANDARDS FOR DISCHARGE INTO THE PUBLIC SEWER**
+ **COMPACT AND ENGINEERED SYSTEM** Reduced number of electromechanical equipment
+ **REDUCED OPERATIONS FOR OPERATION AND MAINTENANCE**
+ **REMOTE MONITORING AND CONTROL** HMI automation software via HMI (Human-Machine Interface) allows for managing all treatment phases — even remotely — and, when necessary, adapting them to changing conditions of the incoming wastewater.
+ **REDUCED PLANT FOOTPRINT**
+ **SAVINGS ON OPERATING COSTS**

Process Flow Diagram