

PLANTS FOR CIVIL WASTEWATER TREATMENT

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HOW WE DO

- <u>Design and Realization</u> of industrial and civil wastewater treatment plants.
- <u>Technical consulting</u> for feasibility studies, general projects and executive projects.
- <u>Coordination and technical assistance</u> for every phase of the plants installation.



## ONE ISSUE: MANY SOLUTIONS!

The same issue never has the same solution. Every context has its peculiarities: technical expectations, cost containment, environmental characteristics, logistics, and so on.

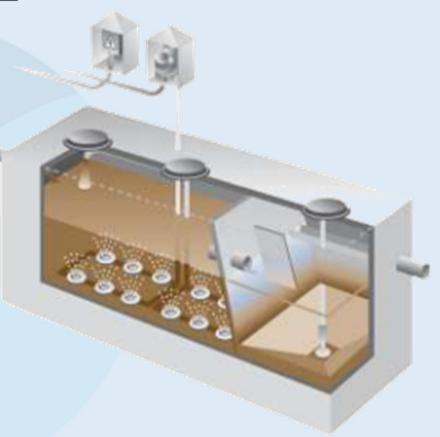
Our KNOW-HOW allows us to put into the field a Total Flexibility and reach the Maximum Effectiveness.





# PRE-ASSEMBLED PLANTS

- CIVIL WASTEWATER TREATMENT
- INDUSTRIAL WASTEWATER TREATMENT
- FIRST RAIN WATER TREATMENT
- RECOVERY AND REUSE OF WASTEWATER
- RECOVERY AND REUSE OF METEORIC
   WATERS
- RECOVERY AND REUSE OF GRAY WATER
- HYDROCARBON SEPARATORS



#### PLANTS CAN BE REALIZATED BY PRE-ASSEMBLED MODULS IN:

- REINFORCED CONCRETE
- POLYETHYLENE
- STEEL



### CIVIL WASTEWATER PURIFICATION: MONOBLOCK SYSTEMS

- TOTAL OXIDATION biological purifiers
- Biological purifiers with bacterial bed
- MBR biological purifiers
- Pre-assembled lifting stations
- Imhoff tanks
- Mineral oil and hydrocarbon separators
- SBR Sequency Batch Reactor









## CIVIL WASTEWATER PURIFICATION: MONOBLOCK SYSTEMS

The plants consist of a total oxidation compartments obtained through the air insufflation and final sedimentation with the recycling of sludge.

The absence of joints in the tanks prevents infiltration and leaks and delivers full guarantee against hygiene problems

#### PRE-ASSEMBLED MONOBLOCK PLANTS FOR CIVIL WASTEWATER PURIFICATION



## CIVIL WASTEWATER PURIFICATION: MONOBLOCK SYSTEMS

#### **BENEFITS**

- Simple process
- Cheap solution
- Low maintenance
- Minimum polluting impact
- Easily expandable
- Totally / partially underground



#### PRE-ASSEMBLED MONOBLOCK PLANTS FOR THE PURIFICATION OF CIVIL WASTE WATER





## SBR - Sequencing Batch Reactor

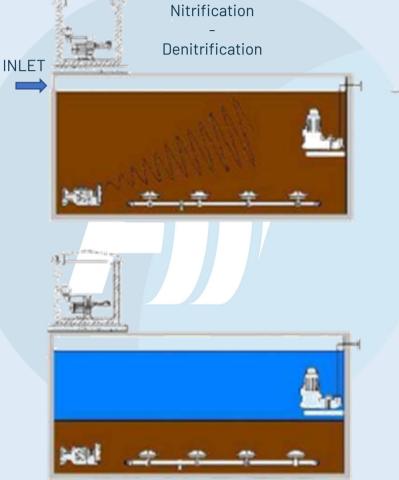
#### **BENEFITS**

- Discontinuous discharge
- Small size
- Combined treatment

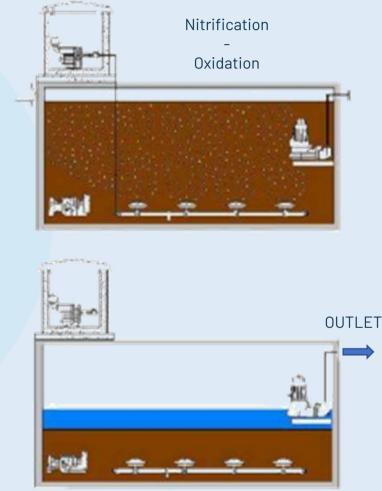
   of:oxidation, nitrification,
   denitrification and
   sedimentation
- Flexible process
- Simple management
- High automation
- Variable polluting loads

#### **APPLICATIONS**

- Campsites
- Restaurants
- Department stores
- Sports centers
- Handicraft activities



Sedimentation



Drainage

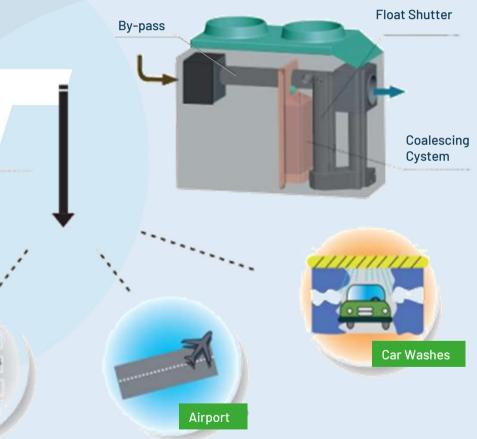


# OIL & HYDROCARBON SEPARATORS

#### STEEL SEPARATOR

# **Float Shutter** Service Station Ρ Parking

#### POLYETHYLENE SEPARATOR





#### **APPLICATIONS**

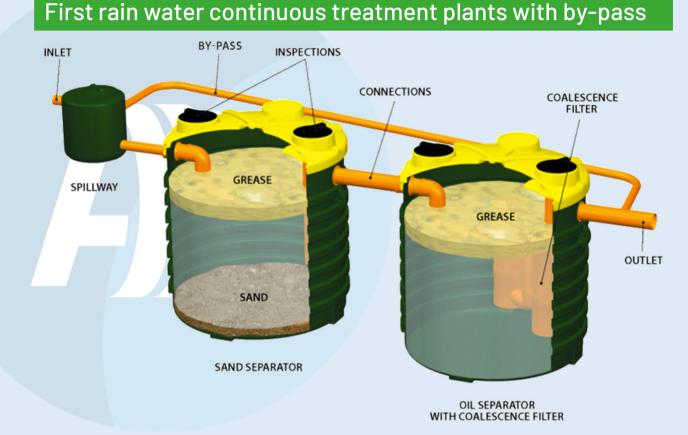
- Discontinuous discharge
- Parking lotsCar washes
- Car repair shops

- service stations
- roads and highways
- Airports
- run-off rainwater treatment of surfaces subject to risk of accidental pollution



# RAINWATER TREATMENT

- Mechanical and electronic equipment
- Systems and equipment for the treatment of <u>FIRST RAIN</u> <u>WATER</u>
- Collection tanks
- Automatic tank cleaning devices
- Accessories for bathtubs



The first rain defines the initial surface runoff of a rainstorm, that is the most polluted part of entire rainfall: it's called the first foul flush. During the first foul flush, pollutants, that has been settled in the previous dry period all over the urban area, are washed away from impermeable surfaces





- Civil dwellings
- Schools
- Public buildings
- Hospitals
- Sports centers
- Industries





Recovery Of Meteoric Water And Recovery Of Gray Water For Saving And Reuse



# HYDRAULIC AND HYDROLOGICAL INVARIANCE

Technologies and systems to limit the hydrogeological risk through sustainable urban drainage systems.

Models of natural drainage systems are replicated with economic and low environmental impact solutions.





#### EQUIPMENT FOR LAMINATION BASINS







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