



# WWTP

## Treatment of Wastewater for Military Applications



### DEVISE Packaged/Containerized Mobile Wastewater Treatment Plant with MBBR or MBR Technology

DEVISE ENGINEERING is an experienced Packaged Plant Manufacturer providing effective solutions in the field of Water & Wastewater Treatment.

DEVISE's technical approach includes the incorporation of well proven treatment processes as well as innovative high-end technologies so to provide smart and effective solutions that are implemented using compact, prefabricated and modular units.

DEVISE Packaged Plants for the Water- Wastewater Treatment are of the highest quality and performance.



### Technologies/Processes

DEVISE Containerized/Packaged Plants for Wastewater Treatment are effective high-rate biological treatment units based on proven technologies such as MBBR (Moving Bed Bio-Reactor) and MBR (Membrane Bio-Reactor) that provide effective treatment in very compact units suitable also for re-use applications.

## Characteristics and Capacities of DEVISE Packaged WWTP for Military Applications

DEVISE Containerized Waste-Water Treatment Plants (W.W.T.P.) are suitable either for established Military Camps or for field operating Battalions or even Brigades. The Treatment Units are Modular and fully Mobile and can meet any water effluent requirements. The main characteristic of the DEVISE Mobile Solution is its compactness and heavy duty design and construction suitable for any terrain. DEVISE Containerized Plants are currently operating in high temperature environments (Gulf countries) as well as in climates with freezing conditions (North Europe, Eurasia). The units incorporate robust design and innovative engineering for minimum maintenance and reduced supervision. The overall size of the plant is based on the ISO freight container dimensions. All models have integrated machine rooms with PLC equipped Electrical Panels.

### Treatment capacities of Mobile Units

The DEVISE Mobile W.W.T.P. for Military Applications can treat wastewater produced by human waste (black-water) i.e. WC, canteens, (grey-water) i.e. washing basins, showers, etc. as well water effluent from light industrial activities such as vehicle cleaning, machine or battle armour maintenance works. DEVISE ENGINEERING can manufacture either standard systems or tailor made ones for specific applications and custom specifications. The treated effluent produced can either be discharged safely to the environment or if requested a high quality effluent can be produced for re-use purposes, such as vehicle cleaning, cooling water, dust control, irrigation and others.

Packaged-Modular solutions can be produced to cater for stationary or mobile camps that amount from 100 to over 3000 personnel with volumetric capacities ranging from 40 to 700 m<sup>3</sup>/day.

### DEVISE Expertise – Specialized Services

#### Consultation Services

- Identification of requirements
- Determination of Specifications
- Testing & Quality control of equipment and installations

#### Design & Construction Services

- Design of specialized systems
- Installation of plants and equipment
- Plant start-up, commissioning and performance monitoring
- Troubleshooting & repair
- Supervision and Distance Monitoring of Plants
- Operation & Maintenance and after sales services

#### Customer Staff Training

### Main Advantages

#### Smart Design

- Pre-engineered & prefabricated plants
- Modular design
- Compact and high-rate performance
- Fully tested before dispatch
- Ready to plug & play
- Space saving - Small foot print

#### Easy & Reliable Operation

- Fully automatic – PLC controlled system
- User friendly interface (touch screen HMI)
- Remote monitoring
- Low maintenance requirements
- Self-cleaning mechanisms incorporated