



COMPACT & MOBILE WATER TREATMENT PLANTS



DRINKING WATER
SYSTEMS



WASTE WATER
PLANTS



EQUIPMENT
FOR EMERGENCIES



SERVICE &
SUPPORT

IDRO GROUP SRL

Idro Srl specializes in the design, construction and supply of COMPACT & MOBILE water treatment systems providing clean water solutions to companies, organizations and communities needing to improve water quality, to meet sanitation needs and at time to resolve crises caused by natural and man-made disasters.

Idro Srl is an ISO 9001 quality certified company that values quality materials, excellent workmanship, superior customer service and ethical corporate behavior. The company has solid experience providing systems, equipment and service to the following valued client groups:

- Public and government entities such as hospitals, airports, ports, military corps, water management bodies, environmental and international cooperation bodies
- Inter-government Organizations (IGO) and non-government organizations (NGOs), private foundations, service clubs, charities and religious missions, humanitarian organizations and emergency relief agencies
- Hotels, tourist resorts, camps, settlements and residential developments
- The mining industry
- Private companies managing work camps, military camps or settlements for displaced people
- Architectural and engineering companies
- Construction companies



UNI EN ISO 9001:2008



UNI EN ISO 4001:2015



UNI EN ISO 45001:2018

COMPACT & MOBILE WATER TREATMENT PLANTS



DRINKING WATER SYSTEMS

Mobile Drinking Water Treatment Plants
Compact Drinking Water Treatment Plants



WASTE WATER PLANTS

Compact Waste Water Treatment Plants



EQUIPMENT FOR EMERGENCIES

Accessories & Emergency Response Equipment



SERVICE & SUPPORT

Training & Technical Support
Logistics & Transport



DRINKING WATER SYSTEMS

MOBILE DRINKING WATER TREATMENT PLANTS

Idro Srl mobile drinking water treatment plants are designed to produce safe drinking water from a wide range of water sources in areas not served by water infrastructure or with limited or contaminated water resources.

Idro Srl mobile drinking water units are user friendly and versatile, they can be easily trailer mounted and towed from place to place making them ideal for emergency intervention such as may be needed following natural disasters or in camps for displaced people.

Alternatively these units can be installed in permanent or semi-permanent locations with minimal site preparation required. This option makes the units ideal for short or midterm water supply systems for mobile camps, work sites, missions, villages and their extended communities.

POWERED BY ALTERNATIVE ENERGY SOURCES

The low energy consumption of many of IDRO's mobile drinking water plants make them ideal for use with alternative energy sources such as solar energy collected through photovoltaic panels and/or eolic energy generated by wind turbines.

Idro Srl has specifically developed solar powered versions of different mobile drinking water units for use with solar energy and they can be supplied with their own solar panels and accessories to render the units autonomous and independent of traditional energy sources.

Idro Srl not only purifies, unclean, polluted and/or contaminated water but also continues to research and develop environmentally sound technologies and practices to complement their range of products and services. These include the use of renewable energy, energy recovery systems and water recovery, reuse and recycling.





DRINKING WATER SYSTEMS

COMPACT DRINKING WATER TREATMENT PLANTS

Compact drinking water plants are designed to produce safe drinking water from a wide range of water sources in zones with limited and/or contaminated water.

The best and most reliable water treatment technologies are expertly configured for both space and treatment optimization. The result is compact, easy to transport and robust units that can be delivered onsite ready for rapid installation and immediate start-up.

Idro's compact drinking water treatment plants are supplied with tools, spare parts, chemicals and consumable material to cover commissioning, start-up and a specified period of operation.



MODULAR DRINKING WATER SYSTEMS

Idro's compact drinking water treatment plants can be incorporated in modular systems made up of a range of complimentary equipment such as photovoltaic systems, generators and fuel tanks, water storage tank and distribution pumps.

These systems provide complete and autonomous water treatment and supply solutions.



DRINKING WATER SYSTEMS FOR FRESH WATER SOURCES

Fresh water sources include rivers, lakes, ground water and rain water. The quality of fresh water can vary from source to source and can also change seasonally or as a result of activities around the water source.

Depending on the characteristics of the FRESH WATER, Idro's COMPACT & MOBILE drinking water units employ various purification technologies, and combinations thereof, including lamella sedimentation, filtration, microfiltration, ultrafiltration and disinfection.

The following systems produce drinking water from fresh water:

BLUE TWINS

- Mobile filtration unit with sand and active carbon filtration and disinfection
- Highly mobile unit with sections that separate from each other to enable lifting by two people
- No external power source required, pump water pressure keeps water flowing through the filters
- User friendly and delivered ready to start
- Ideal for use in emergencies



BLUE MICRO

- Mobile unit able to be mounted on trailer
- Microfiltration water treatment unit with active carbon filtration and disinfection
- Powered by solar panels and batteries on board
- User friendly
- Delivered ready to start



BLUE ULTRA

- Mobile unit able to be mounted on trailer
- Water treatment unit with rapid sedimentation, microfiltration, ultra filtration and disinfection
- Can be powered by its own generator on board
- User friendly
- Delivered ready to start



BLUE FILTER

- Mobile unit able to be towed by various types of vehicles
- Filtration module with sand and active carbon filtration and disinfection
- Electrolytic chlorine generator on board
- Fully automatic with dedicated control panel
- Also ideal pretreatment unit for salty water



BLUE FILTER PLUS

- Compact skid mounted filtration system
- Sand and active carbon filtration system with disinfection
- Manual or fully automatic operation available
- Also an ideal pretreatment unit for salty water
- Designed to fit inside standard size shipping container
- User friendly and delivered ready to start



BLUE LAMELLA

- Mobile unit able to be towed by various types of vehicles
- Water treatment unit with lamella sedimentation, sand and carbon filtration and disinfection
- Ideal for turbid water
- Powered by its own generator on board



BLUE LAMELLA PLUS

- Compact unit designed with the dimensions of standard size shipping containers
- Robust lamella sedimentation and sand filtration processes
- Ideal for turbid water
- Completely automatic



DRINKING WATER SYSTEMS FOR BRACKISH WATER SOURCES

Brackish water is water that has higher salinity than fresh water but not as high as sea water. The salinity needs to be treated to make the water safe for human consumption. Depending on the characteristics of the BRACKISH WATER, IDRO's COMPACT & MOBILE drinking water units employ various purification technologies, and combinations thereof, including rapid sedimentation, filtration, microfiltration, brackish reverse osmosis and disinfection. The following systems produce drinking water from brackish water:

BLUE B SYSTEM

- Highly mobile units able to be towed by various types of vehicles
- Two module system with sand and active carbon filtration, microfiltration, reverse osmosis for brackish water, remineralization and disinfection
- Cleaning In Place (CIP) system on board
- Completely automatic



BLUE B POWER

- Highly mobile unit able to be towed by various types of vehicles
- Autonomous module including sand filtration, micro filtration, low pressure reverse osmosis and disinfection
- Powered by its own generator on board
- Cleaning In Place (CIP) system on board



BLUE B ISLAND

- Mobile unit able to be towed by various types of vehicles
- Stand-alone module including micro filtration, brackish reverse osmosis, remineralization and disinfection
- Cleaning In Place (CIP) system on board
- Equipped with onsite electrolytic chlorine generator



BLUE B SHELTER

- Compact unit realized in standard size shipping container
- Sand filtration, micro filtration, brackish reverse osmosis and disinfection
- Cleaning In Place (CIP) system on board
- Completely automatic



DRINKING WATER SYSTEMS FOR SEA WATER SOURCES

Sea water is characterized by its elevated salinity which must be treated to make the water safe for human consumption. Depending on the characteristics of the SEA WATER, IDRO's COMPACT & MOBILE drinking water units employ various purification technologies, and combinations therefore, including rapid sedimentation, filtration, microfiltration, reverse osmosis, remineralization and disinfection.

The following systems produce drinking water from sea water:

BLUE SEA SYSTEM

- Mobile units able to be towed by various types of vehicles
- Two module system with sand and active carbon filtration, microfiltration, reverse osmosis for sea water, remineralization and disinfection
- Cleaning In Place (CIP) system on board
- Completely automatic



BLUE SEA ISLAND

- Mobile unit able to be towed by various types of vehicles
- Sand filtration, microfiltration, reverse osmosis for sea water and disinfection
- Cleaning In Place (CIP) system on board
- Completely automatic



BLUE SEA SHELTER

- Compact unit realized in standard size container
- Sand filtration, micro filtration, reverse osmosis for sea water, remineralization and disinfection
- Cleaning In Place (CIP) system on board
- Completely automatic
- Energy recovery system





WASTE WATER TREATMENT

COMPACT WASTE WATER TREATMENT PLANTS

IDRO's compact waste water plants and modular sewage systems are capable of treating civil waste water.

Treatment phases have been optimized in compact, easy to transport units which are delivered onsite ready for rapid installation and immediate start-up.

WASTE WATER RECOVERY AND REUSE

All IDRO compact waste water plants and modular sewage systems produce a treated water that can safely be discharged into the environment according to local and international norms. IDRO also produces purification plants specifically designed to recover clean water for the waste that enters the system.

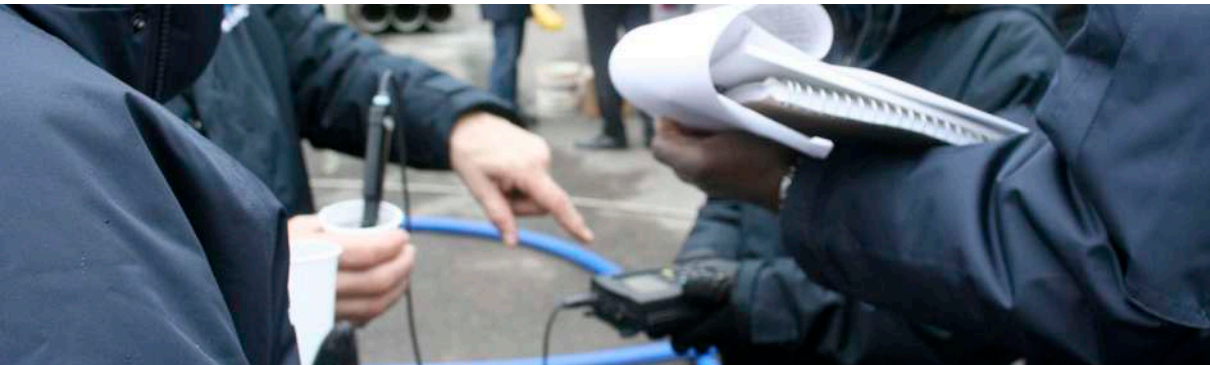
These systems have civil and industrial applications where the recovered water can be used for applications such as flushing toilets, washing vehicles and machinery, fire protection and industrial process water.

The recovery and reuse of waste water means less pressure on civil water supply and/or the environment and cost savings for the user.



WATER QUALITY TESTING

It is important to check the quality of the raw water going into any water treatment plant and it is essential to know the quality of the treated water coming out. IDRO supplies water analysis instruments and reagents to compliment all water treatment plants and provides training on their correct use.



WASTE WATER SYSTEMS FOR CIVIL WASTE WATER

The following IDRO products are specifically designed to treat civil waste water coming from kitchens, bathrooms and toilets. All the systems indicated below are easy to transport to site and are modular, meaning that as needs change systems can be added or taken away.

GREEN BIO

- Lightweight modular septic system designed to be transportable inside standard size shipping containers
- Sedimentation, anaerobic digestion, biofiltration
- Optional disinfection and disposal and through sub-irrigation
- No power needed
- Ideal pretreatment unit for MBR30



GREEN LIFT

- Lightweight pumping station designed to be easily transported inside standard size shipping containers
- Equipped with robust grinder pumps
- Optional basket filters available at inlet
- Plug and play system delivered ready to start
- Completely automatic



GREEN MBR 30

- Compact unit designed to fit inside 20' container which can also be the permanent plant housing
- Modular system including pre-treatment, biological oxidation, MBR (membrane filtration), sludge recycling, sludge dewatering and disinfection
- Treated water can be reused (irrigation, toilet flushing, vehicle washing etc.)



The following products in IDRO's GREEN SERIES employ technologies that allow for maximum performance in minimum space. The systems are modular and can be realized in stages if needed, the main technologies employed are Membrane Bio Reactor (MBR) and Moving Bed Biological Reactor (MBBR).

GREEN MBR

- Compact unit designed to the dimensions of standard size shipping containers
- Pre-treatment, denitrification, biological oxidation, MBR (membrane filtration), sludge recycling.
- Treated water can be reused for activities such as sub irrigation, toilet flushing or vehicle washing for example
- MBR technology reduces the system's footprint and therefore space requirement
- No bulking or floating sludge
- Modular so the system can be scaled up or down to cater to different capacity requirements



GREEN MBBR

- Compact unit designed to the dimensions of standard size shipping containers
- Pre-treatment, denitrification, biological oxidation with MBBR, sedimentation with lamella pack, sludge recycling
- MBBR technology reduces plant space requirement
- Very responsive to load fluctuations
- Modular so the system can be scaled up or down to cater to different capacity requirements





EQUIPMENT FOR EMERGENCY

EMERGENCY RESPONSE EQUIPMENT & ACCESSORIES

EMERGENCY RESPONSE

Following natural or man-made disasters that leave people without homes and compromise or destroy public infrastructure, it is essential to provide people with safe drinking water as quickly as possible and to (re)establish sanitation systems to avoid sickness and disease due to unhygienic environments.

IDRO is ready to provide emergency response equipment including drinking water treatment plants, water tanks, disinfection equipment and chemicals and water drainage kits directly from our warehouses.

All goods are user friendly and delivered with all necessary components for rapid onsite installation and IDRO is ready to provide technical assistance onsite, online or via telephone.





DISASTER PREPAREDNESS

The impact of a disaster can be limited by individuals, communities and authorities being prepared with emergency supplies, disaster management plans and known sources of supplies and equipment.

Emergency relief equipment, including water treatment plants, can be prepared IN ADVANCE of unforeseeable events in order to help local, national and international bodies safeguard against water and sanitation disasters in their regions.



POST EMERGENCY RECOVERY

IDRO's mobile and compact water treatment plants provide short, medium and long term water and sanitation solutions which makes them ideal for post emergency recovery.

Following are just some of the advantages offered by these systems:

- Compact design and small footprint of the systems means minimal clearing and little or no site works;
- Mobile units can be supplied with universal and NATO specified connections towable by a wide range of vehicles including military trucks;
- Robust design and quality materials ensure long equipment life so some units can be introduced for emergency response and remain part of the post emergency recovery for years to come.

ACCESSORIES & EQUIPMENT PRODUCT RANGE

CHLORINE GENERATOR

- Electrolytic chlorine generator requiring only salt, water and electricity to make chlorine onsite, ready for water disinfection
- Eliminates the need for transport of hazardous chemicals
- Ecological and environmentally friendly
- Solar powered versions available.



FLEXIBLE WATER TANKS

- IDRO supplies different types and sizes of flexible water tanks ideal for the accumulation of water treatment plant permeates and concentrates.
- "Pillow" tanks or water bladders are ideal for drinking water accumulation and storage.
- "Onion" tanks are self supporting flexible storage tanks which don't require any additional supporting framework, are ideal for raw water accumulation, water treatment plant concentrate collection
- Steel frame tanks have a modular steel frame which can be galvanized or coated steel.
- When the tanks are empty they pack down to a minimum size, perfect for transport and storage.



WATER JERRY CANS

- Easy to carry eight (8) liter jerry cans suitable for use with drinking water
- Resistant and reusable bags that pack flat
- Ideal accessory in remote or disaster stricken areas
- Easily customized with organization name and logo



GREASE TRAPS & ENZYMES

- Grease traps offer a simple pre-treatment which increases the efficiency of waste treatment plants
- IDRO grease traps are modular and easy to transport
- Enzymes are also available to optimize the degradation of fats and oils, accelerate the start-up of septic systems and biological processes.



WATER ANALYSIS LABS & REAGENTS

- Water quality monitoring is important and can be carried out in the field with portable laboratories
- Easy to use laboratories complete with instructions
- A wide range of parameters can be tested
- Replacement reagents and instruments available



SPARE PARTS & CONSUMABLES

- To ensure the long life of water treatment plants it is important to carry out maintenance using the right spare parts, consumables and chemical products,
- IDRO can supply customized kits with the initial supply of the plant and for years after.



REMOTE MONITORING SYSTEMS

- IDRO can design and install remote monitoring systems on many different types of water treatment plants
- These systems enable operators to check plants from their office computer or through a smart phone or portable computer from anywhere that an internet connection is available
- In addition, the operator can check all the parameters and can also modify settings from his computer without having to be in the field.





SERVICE & SUPPORT

TRAINING & TECHNICAL SUPPORT

TRAINING

IDRO understands the importance of training personnel in plant installation, operation and maintenance in order to ensure the trouble free operation and longevity of the systems. Training can be carried out at IDRO facilities in Italy or qualified technicians can be dispatched to train staff nominated by our clients wherever they are around the world.

TECHNICAL SUPPORT

Whether customers are seeking site preparation advice, copies of manuals or urgent spare parts, IDRO's experts are available to provide:

- Expert technical support, onsite or from a distance, for site preparations, installation and commissioning, spare parts enquiries and orders and troubleshooting
- Remote support via telephone, e-mail, video conference and messaging services
- Transport and delivery of components, spare parts and consumable items
- Site visits, inspections, training courses and technical interventions

Please ask us for a quotation for the ongoing operation and maintenance of your system.



SERVICE & SUPPORT

LOGISTICS & TRANSPORT

Working to the internationally accepted Incoterms IDRO delivers locally, nationally and internationally including to remote, and high risk locations.

IDRO has an office dedicated to logistics and transport of their water treatment plants and equipment. This office has the responsibility of organizing the most efficient and cost effective transport solutions and tracking goods to their final destination.

IDRO logistics collaborates with licensed national and international freight forwarders and of course to project and client specifications.

IDRO guarantees correct packing and marking of goods. The company has learnt from experience that there are unique challenges involved in transporting pre-assembled equipment around the world.

Secure packing, clear marking and concise documentation are all essential to ensuring the safe delivery of goods.

EXPERIENCE

IDRO has experience:

- delivering to remote locations
- organizing the movement of oversize machinery
- delivering goods to conflict afflicted areas
- handling and clearing dangerous goods
- dispatching emergency relief goods in 24 - 48 hours



OUR SERVICES

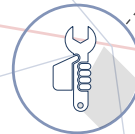
Financing

Thanks to this activity Idro Group provides financing for the construction of its plants, in the form of long-term rental or project financing, aimed at the realization of the same.



Maintenance

The Idro Group offers both extraordinary and scheduled maintenance service, which also includes control analysis.



Consulting

The Idro Group offers its consultancy for general and executive projects, for the feasibility study of the plants, for the technical specifications and the coordination of all purchases with technical and commercial supervision on supplies.



Assistance

The Idro Group's assistance services include technical assistance in plant management, supervision of installation and start-up, supervision of masonry works, personnel training, repair, refurbishment or extension of existing plants and the supply of products and reagents for water/ waste/ biomass treatment.





THE BEST
COMPETENCES
AT THE SERVICE
OF THE ENVIRONMENT

Idro Group is specialized in the design and construction of water treatment plants and clean energy production. By applying innovative technologies Idro Group develops: mobile and compact plants, systems for water purification, civil and industrial wastewater treatment and reuse, air deodorization plants and plants for biogas and biomethane production.

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