

TECOFIL INTERNATIONAL SRL is a company specialized in the design, construction and installation of systems and plants for the treatment of primary, residual water and sludge (mainly civil and industrial purification systems).

TECOFIL SRL, born in 1991, specialized and consolidated at national and international level in the construction, installation and management of sludge treatment systems, with the birth of INTERNATIONAL, expands its experiences and knowledge to develop and implement a careful design and development of industrial remediation and pollutant treatment systems in water and land.

The company was founded in 2007 as a need for TECOFIL SRL to assist, directly, continuously and with greater efficiency, on the international installation market for water treatment.

The ability to solve complex problems relating to the environment characterizes our business philosophy which, combined with the experience and professionalism of our technicians, forms the basis of the company's growth at national and international level.

With the help of the most innovative design and automation techniques, it can be considered a leading company in the design, construction, sale and installation of machines and engineering systems for the treatment of water and civil and industrial sludge.

The support it offers begins with the identification of the problem which is examined by an extremely qualified and experienced team who uses its own internal laboratory and any scale simulations with its own pilot plants to then propose the best technological solution.

The ability to propose integral projects aimed at solving complex environmental problems significantly increasing the field of knowledge and resources formed the basis of the company's development. Over two hundred treatment plants, both civil and industrial in Italy and abroad, built in a few years of activity, with perfectly functioning technologies that meet the requirements of the environmental laws in force, constitute the best guarantee certificate for those who face the problem of building a new plant, expanding or modernization of an existing undersized or otherwise not compliant with current regulations.

A dynamic and flexible structure allows any extraordinary intervention with exceptional rapidity, after-sales assistance can include both simple ordinary maintenance checks and total management of the water and sludge cycle.

The different applications, throughout the sector of the water treatment market are concrete proof of the constant search for a very high-quality standard, making sure that TECOFIL INTERNATIONAL systems can be used in both civil and industrial settings.

The sectors in which the treatment plants designed and built by TECOFIL INTERNATIONAL are used are:

Tourism: water softeners for consumption and waste water treatment for both hotel structures and industrial laundries with recovery of purified water in a new production cycle.

Transport and refining industry of hydrocarbons: with systems for the treatment of oily residues with water reuse.

Food production industry: with softening systems to improve the water quality of the production cycle.

Network of hospitals and polyclinics: with softener systems.

Water resources management: with water purification plants for civil consumption and waste water treatment plants for civil and industrial water management.

In general, TECOFIL INTERNATIONAL provides:

- Advanced systems for the treatment of water for human consumption (softeners, reverse osmosis systems, spare parts, filtration matrices and ion exchange)
- Automatic dosing stations of sodium hexametaphosphate (formed by solution preparation tanks, flow control system and automatic pumps)
- Softening systems, for the elimination of hardness; complete with network filters, ion exchange resins and accessory elements for correct operation.
- Electronic descaling systems (CalcareStop)
- Descaling systems through "sacrificial anode", Ion-Scale-Buster; for diameters from ¾ "to 8"
- Chemical products for the treatment of primary water (sodium hexametaphosphate, salt for softeners, ion exchange resins)

- Wastewater treatment plants with recirculation of treated water (in a new production cycle, as in the case of industrial laundries)
- Treatment plants with recirculation of treated water (in a new production cycle, as in the case of industrial laundries, or in landscape irrigation, as in the case of hotel structures).

Container plants for waste water treatment:

- Containerized plants for the treatment of waste water by means of physico-chemical processes, "turnkey", divided into waste treatment rooms, chemical products room and chemical laboratory room;
- Compact systems for the treatment of waste water by means of oxidation processes with adhered biomass, accelerated sedimentation systems, continuous filtration on quartz sand, systems for pressure filtration on quartzite and carbon, UV systems for the elimination of the bacterial load, sludge dehydration systems by means of draining bags;
- Compact plants for the treatment of waste water by means of biological oxidation with suspended biomass (biological oxidation tank with air insufflation), complete with management systems of the resulting sludge;
- Systems for the optimization and modernization (revamping) of existing purifiers, in order to improve the performance, both for the recovery of the efficiency of the treatment and for increases in input flow.

Components for aerobic oxidation waste treatment plants:

- Pumping stations as well as submerged and centrifugal pumps for waste water, complete with support bases and spare parts
- Combined primary treatment systems for waste water:
 - Grids for solids with a diameter greater than 1 cm
 - Rotary drum grates for solids with a diameter greater than 1 mm
 - Combined WATERMASTER systems
 - Combined systems of sand removal, de-oiling and classification of collected sand (PISTA)
- Electromagnetic flow meters and meters
- Submersible and Jet-Mix mixers for storage and denitrification tanks
- Venturi-Jet mixing systems complete with submersible pumps
- Ventilation systems, consisting of side channel blower and air distribution systems (with micro-bubble mat)
- Tools for the determination of the management parameters of the treatment processes (pH, redox, dissolved oxygen, turbidity)
- Stations for the preparation of solutions and dosage of chemical products in line
- Pneumatic panel for the management of treatment systems complete with accessories for air line and pneumatic valves
- biological percolation towers and their components (with distribution channels, walkways and access stairs)
- Lamellar packs for biological percolation towers, ready to use or their sheets for "on site" assembly with raw materials for the preparation of the rubber (allows a reduction in transport costs when the dimensions of the towers exceed 500 m³)
- Sludge conditioning systems (tank, mixer and automatic dosing systems)
- Flotation unit using dissolved air (D.A.F.), complete with flash mixer, for sludge management, with inlet flow rates from 1 to 50 m³ / h, with sludge with concentrations up to 10 g / l
- Filter presses for sludge treatment, with automatic or manual opening; complete with feed pumps and instruments for safe management, with conveyor belts for the collection and management of dehydrated sludge
- Swan-neck conveyor belts for the management of sludge or "drawer" trolleys for the management of separate sludge

- Peripheral traction settlers and their components, for the management of the separation of sludge from the treated water, complete with systems for the management of sludge and clarified water
- Sludge thickening systems and their components, for managing the concentration of sludge before final drying; complete the separate water management system; with part in carbon steel and partially immersed in AISI 316L stainless steel
- Accelerated sedimentation systems, complete with lamellar packs for sedimentation, Thompson 316L channels
- Waste water chlorination systems, through automatic dosing of gaseous chlorine, complete with safety systems and management against accidents and leaks
- Waste water chlorination systems by automatic dosage of sodium hypochlorite
- Devices for the disinfection of clarified water with ultraviolet radiation and ozone
- Batteries for pressure filtration on quartz sand and on coal, with automatic or manual operating mode based on user needs; complete with pressurization units for backwashing
- Gravity filtration batteries (Dynaclaro), on quartz sand, with continuous counter-washing, complete with distribution channels and blowers for the continuous mixing of the filtration bed
- Sand of different grain sizes and activated carbon by filtration. Water treatment products (aluminum polychloride, ferric chloride, caustic soda, bacterial suspensions, polyelectrolytes)
- Hydro-pressure groups for the management of service and reuse waters
- Groups for bilge water management, complete with pumps, level sensors and pipes for channeling water
- Level regulators and flow meters for device management
- Electrical panels for the management of treatment systems
- Chemical analysis laboratories for the control of the main management parameters

Components for waste treatment plants by means of chemical-physical precipitation of pollutants:

- Automatic systems for dosing and preparing solutions (polyelectrolyte preparation stations)
- Integrated treatment and chemical separation systems through accelerated sedimentation
- Systems for separating solids by dissolved air (U-D.A.F.), Complete with flash-mixer units, dosing line and devices for the management of flotation air
- Conditioning stations for sludges of chemical origin
- Filter presses with automatic or manual plate opening, complete with sludge feed pump and safety sensors
- Scrubbers and towers for the treatment of process gases, complete with waste water recirculation system
- Systems for the separation of oils, through lamellar packs for the treatment of water with a high content of oils and fats
- System of increase of the surface for the ponds of oxidation through floats
- Multi-substrate filtration batteries (quartzite, carbon, zeolite) for the tertiary treatment of clarified water
- Reagents for chemical plants: polyelectrolytes (anionic and cationic), flocculants (aluminum polychloride, ferric chloride), pH regulators (caustic soda, hydrochloric acid), oxidizing agents (sodium bisulfite, potassium permanganate), desimulants, etc.