Water Treatment Solutions in Pulp and Paper
Eimco Water Technologies, a division of the Canadian based company GLV Inc., has assembled some of the most comprehensive water technologies available on the market.

Water is a shared resource and we truly believe that any small improvement in the way we use this resource can have a BIG impact on the environment.

Eimco Water Technologies specializes in the design and international marketing of solutions for the treatment and recycling of municipal and industrial wastewater and water used in various industrial processes, such as in the pulp and paper markets.

Our products include screening, sedimentation, filtration, flotation, biological treatment and membrane technology that are recognized for both performance and efficiency.

Since 2004 several acquisitions have been completed (Brackett Green, Caird & Rayner Clark, Copa, Enviropur, Jones & Attwood, and some of Metso Paper’s water treatment technologies), which have almost tripled our capacity and portfolio. These acquisitions bring to Eimco Water Technologies well established cutting-edge technologies, recognized trademarks, access to new markets including energy and seawater desalination, an extensive installed OEM equipment base worldwide, a growth platform in Europe and extended international presence.
Eimco Water Technologies has thousands of installations worldwide and high competence in pulp and paper. We add value to customer’s processes by improving productivity and fulfilling the environmental requirements. Through our water treatment processes customers will increase their productivity, among other things machine runnability and product quality, and additionally reach optimized water treatment costs.

An extensive range of RTD (Research and Technology Development) equipment and facilities are available for tests in laboratory, pilot and full-scale trials. The aim is to master all equipment, machines and processes to the finest detail. This includes a comprehensive understanding of water management systems, ranging from fresh water treatment and optimization of internal water circulation to treatment of effluents.

We supply entire systems for production and management of fresh and process waters as well as for efficient treatment of waste waters and effluents in the pulp and paper industry.

We deliver tailor made water treatment solutions from raw water intake, clarification and filtration to process water recycling and wastewater treatment.
We offer a wide range of products proven during decades of dependable service for cost-effective treatment of water.

As environmental awareness and regulations have increased, we have been a leader in developing equipment to meet increased demands, not least in the protection of fish and marine life at abstraction points. Our products meet all the demands of raw water abstraction screening requirements and pipeline filtration requirement.

The Reactor Clarifier™ Solids-Contact units are designed and built to provide the most economical solution onto precipitation and clarification requirements. The basic design provides for coagulation, flocculation, solids recirculation, clarification and positive sludge removal in a single basin—eliminating the need for multiple tanks and associated piping. We have also several different clarifier units that are all backed by years of experience in the engineering and manufacturing assuring the best fit to unique plant requirements.

There are several different applications for Eimco Water Technologies clarification such as removal of turbidity, algae, color, iron and metals, water softening and many others, that involve removing suspended solids from raw water.

Sometimes the clarified water requires further polishing by filtering. The residual solids can be efficiently removed by means of our granular media filtration where filter sand and anthracite are mainly used.

The filter underdrain system is the heart of Eimco Water Technologies’ filter system as in every granular media filter. When the underdrain is well designed, durable and efficient, the filter will provide years of continuous service and provide a durable, corrosion resistant system for collecting filtered water.

Both the air scour and backwash water are used in media washing. These are evenly distributed from the bottom and backwash water is collected near the surface with backwash troughs enabling minimum media losses.

Utmost clean demineralized process water e.g. for steam boiler circulations can be achieved by ion exchangers or reverse osmosis membrane technology.
Today’s requirements for decreased water consumption ask for improved water management at mills. Our solutions and significant experience from the pulp and paper industry respond to that challenge.

Microflotation is a well-known method of particle separation. It is also called Dissolved Air Flotation (DAF). It has long been used in the pulp and paper industry for different applications such as separation of ash, fines, resin and other detrimental substances from the process, recycling water and/or fiber and in all stages of process and effluent water treatment.

In microflotation micro-size bubbles are created by dissolving air into water under pressure. When the air saturated pressurized water is released, micro-bubbles are formed. Suspended solids and colloids attach to air bubbles and one another due to chemical, physical and electrical forces. These particle flocks then float to the water surface and is scraped off. Coagulation and/or flocculation chemicals can be used to improve the separation.

Eimco Water Technologies’ advanced microflotation technology is called FlooDaf® Microflotation. Its main features are rectangular shape, automatic dispersion water and basin level control. As a result of this, FlooDaf Microflotation can have high hydraulic loading and a small footprint still maintaining good separation efficiency with discharge of sludge at high dry solids also at varying conditions.
A delivery from Eimco Water Technologies ensures close cooperation with the customer. Starting from evaluation of the best technical solution to installation and start-up, we take pride in supplying complete processes for every customer’s need. Eimco Water Technologies has several high efficiency products and processes that are developed to meet these more stringent requirements of today’s pulp and paper production.

Wastewater Treatment

Pulp and paper mills are facing demands for higher quality of process water to increase machine speed and improve product quality. At the same time, conversely, mills are under pressure to decrease water consumption and to have more efficient effluent treatment to reduce environmental load to even lower level. For most mills a conventional biological effluent treatment is inadequate to reach the tight effluent concentrations.
Eimco Water Technologies’ primary and secondary clarifiers are designed and built with over 50 years of engineering and manufacturing experience and most importantly by using the information attained from hundreds of references in pulp and paper wastewater treatment processes.

One of our key technologies is FlooBed® MBBR (Moving Bed Biofilm Reactor). It is a compact and high loaded system designed for pulp and paper effluent treatment. It can be used for the whole mill effluent treatment as single or multiple stages, or it can be combined with activated sludge process FlooBed BAS process. The FlooBed process can also be constructed into the existing basins and used to upgrade the old activated sludge process. Because of the good sludge quality produced and low free sludge concentration the following clarification can be done with conventional or lamella clarifiers or with microflotation. Because of its compact size it can be built close to the production site and later even integrated into the mill water circuits.

At some production sites requirements for the treated wastewater are so stringent that these cannot be met despite of thorough biological treatment. In these cases Eimco Water Technologies can provide an efficient tertiary treatment system.