

LENNTECH

WATER TREATMENT SOLUTIONS



Water Treatment in
Hotels and Resorts





Access to clean and safe water has primary importance for tourism in hotel and resorts industry. This can be for drinking water in remote island locations, swimming pool make-up water and (golf) resorts irrigation water. Furthermore, the need to deal with wastewater in a sustainable manner is now seen as essential for the ongoing potential of a tourism destination.

Lenntech provides sustainable complete water treatment solutions in tourism and residential industry considering a wide range of technologies and strategies.

APPLICATIONS

- Drinking water
- Utilities water production
- Greywater reuse and recycling
- Irrigation

OUR SOLUTIONS

- Coarse and fine filtration
- Desalination
- Remineralization
- Disinfection



OUR ADVANTAGES

- Engineered and custom designed solutions for unique water and equipment needs
- Turn-key solutions including design, engineering, manufacturing, automation, installation, maintenance and training
- State-of-art technologies for effective water and wastewater reuse
- Full team of engineers for best on-line assistance and on-site service and support
- Worldwide operation and assistance with all language capabilities to support local projects



OUR TECHNOLOGIES

Drinking water

Luxury hotels and resorts located in worldwide exotic areas are resistant to rely on local public water supply, since it is often unstable, of poor quality or has undeveloped infrastructures. By creating their own water supply, hotels and resorts can ensure that their guests enjoy a pleasant stay with safe and clean drinking water access.

Lenntech solutions can provide high quality drinking water from well **brackish** or **sea water**. Most of the times, preferred technology will be **reverse osmosis**, which will remove dissolved salts and microorganisms.

Depending on the water source, Lenntech will provide you the necessary pre-treatment for suspended solids and organics removal – **ultra filtration, multimedia filtration, activated carbon** – and post treatment – **remineralization** to ensure that the water is properly mineralized and **disinfection** by **ozone, ultraviolet** or **chlorine** to ensure that the water will be (kept) free of pathogenic microorganisms at point-of-use.

Lenntech solutions provide safe water complying with World Health Organization (WHO) standards.

Greywater reuse and recycling

Greywater, generally defined as waste water from showers, baths, basins and washing machines, it is generally easier to treat than municipal waste water, generating the interest to its reuse and recycling. Typical applications for its reuse are toilet flushing, irrigation and other non-potable uses.



Greywater can be contaminated with different kinds of soluble and insoluble substances and must be treated properly. Aerobic and biological treatments will be used as primary treatment to remove dissolved and suspended biological matter, followed by ultra filtration to prevent particles, bacteria and viruses of passing through. Ultimately, water will be disinfected with ultraviolet and/or chlorination, to ensure residual disinfection at point-of-use.

Utilities water production

Along with drinking water, hotels also use water in their utilities, namely **swimming pools** and **spas**, **boilers** and **golf courses**. Even if not used for potable consumption purposes, water must comply with certain quality standards for safe use and utilities performance.

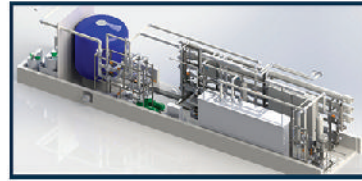
In swimming pools and spas disinfection is critical to protect against pathogens and ensure a good hygiene. Lenntech can provide **disinfection** technologies such as **chlorine** based (sodium hypochlorite, chlorine dioxide), **ultraviolet** and **ozone**. In addition, the water should be kept free of suspended material, by recirculation through **sand filters**.

High quality make-up water in boilers will allow **energy saving**, good **operation performance** and **reduced maintenance**. Lenntech will provide the solution to reach the necessary quality, amongst technologies of **reverse osmosis**, **softener**, polishing **ion-exchange** and/or **electro-deionization**.

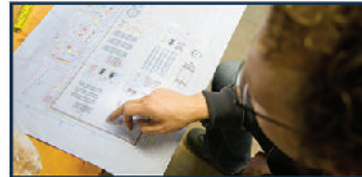
Golf courses irrigation present the highest water usage, especially during the seasonal peak when utilities are struggling to meet water demands. Given the typical location of resorts with golf courses, usually preferred water source is sea water. Lenntech can provide **plug-and-play sea water** treatment solutions, **containerized** or skid mounted, with **small footprint** and **easy operation**.

OUR SERVICES

Design



Engineering



Automation



Manufacturing



Transport



Commissioning



Maintenance



Training





Lenntech is currently active in more than 130 countries worldwide, providing ultimate water treatment solutions for all sorts of applications, from domestic equipment to industrial turnkey plants.

Lenntech Water Treatment Solutions

Rotterdamseweg 402M

2629HH Delft

The Netherlands

Tel: +31 152 610 900

Fax: +31 152 616 289

e-mail: info@lenntech.com

website: www.lenntech.com

Lenntech performs as an organization that strains itself at all time to secure quality, business continuity, continuous improvement, sustainability, satisfied clients, safe working conditions and prevention of pollution. All according to legislation and regulations. Lenntech works on management system of continuous improvement in the field of quality, safety, health and environment. In addition this management system meets the ISO 9001:2008, the ISO 14001:2004, the OHSAS 18001:2007 and VCA* 5.1 requirements so that the implementation of the system can be verified and confirmed by independent parties

