

WATER FOR PUBLIC AND COLLECTIVE SWIMMING-POOLS



UVGERMI®

NEW 2024
RANGE

ULTRA NATURAL TECHNOLOGY

www.uvgermi.fr

MADE IN FRANCE

| PUBLIC POOLS | WELLNESS CENTERS | SPAS
| THALASSOTHERAPY & BALNEOTHERAPY | HYDROTHERAPY |



ISSUE

The chlorine used to disinfect the **water in swimming pools and wellness centers reacts with nitrogenous pollutants** introduced by users (urine, sweat, saliva, hair, etc.) and produces various compounds. **Trichloramine** is the most volatile of these compounds. It is emitted into the atmosphere, causing **eye and nose irritations as well as respiratory disorders that are harmful** to human health (*recognised as an occupational illness since May 2003*).



NEEDS

This concentration is generally maintained by adding large quantities of new water. **This is an expensive solution for public authorities and wellness centers**, because regulations also stipulate that water renewal rates must be reach at least **30 litres per day per user**, at an average cost of €9 exc. VAT per 1m³ of treated, heated water, without having the desired results.



REMINDER OF THE REGULATORY FRAMEWORK

Aside from health considerations, regulations **require the combined chlorine level** (chloramines) **to be kept below 0.6 mg/l**, this level is reduced to **0.4 mg/l** if swimming babies use the pool (*ANSES report, June 2010*).



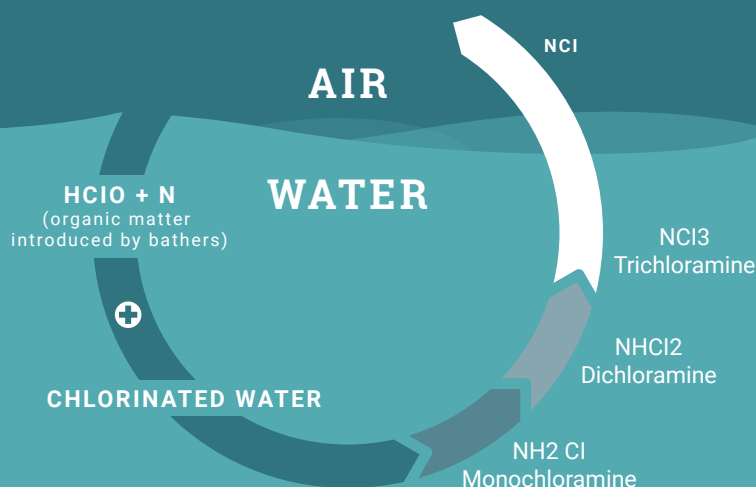
SOLUTION

Our low pressure UVDECHLO dechloraminators are recognised for reducing **chloramine concentrations in water by 80% on average**, and **nitrogen trichloride concentration in air by 50%**.

The ministerial approval we were granted shows that **UVDECHLO has no impact on THM levels**.



To this day, over 3,000 pools have been equipped with our UVDECHLO technology.



Chloramine production in pool facilities

PRINCIPLE

The dechloramination process using low pressure UV lamps **reduces the combined chlorine concentration in pools through a photochemical action on all organochlorine compounds in water** (monochloramine, dichloramine and trichloramine).

Studies conducted by **Professors BATCHELEY** (USA) and **DE LAAT** (France) and their teams show that low pressure UV technology **is effective on these three types of chloramines**.

Low pressure UV lamps, widely employed in drinking water processes since 1904, can be used safely because they **do not allow chlorine subproducts**, such as THMs to form.



BENEFITS

Optimisation of operating costs for facilities equipped with UVDECHLO reactors

Power modulation = energy saving Automatic control linked to the chloramine levels measured on the line

Better management of new water additions: reduced by 50%

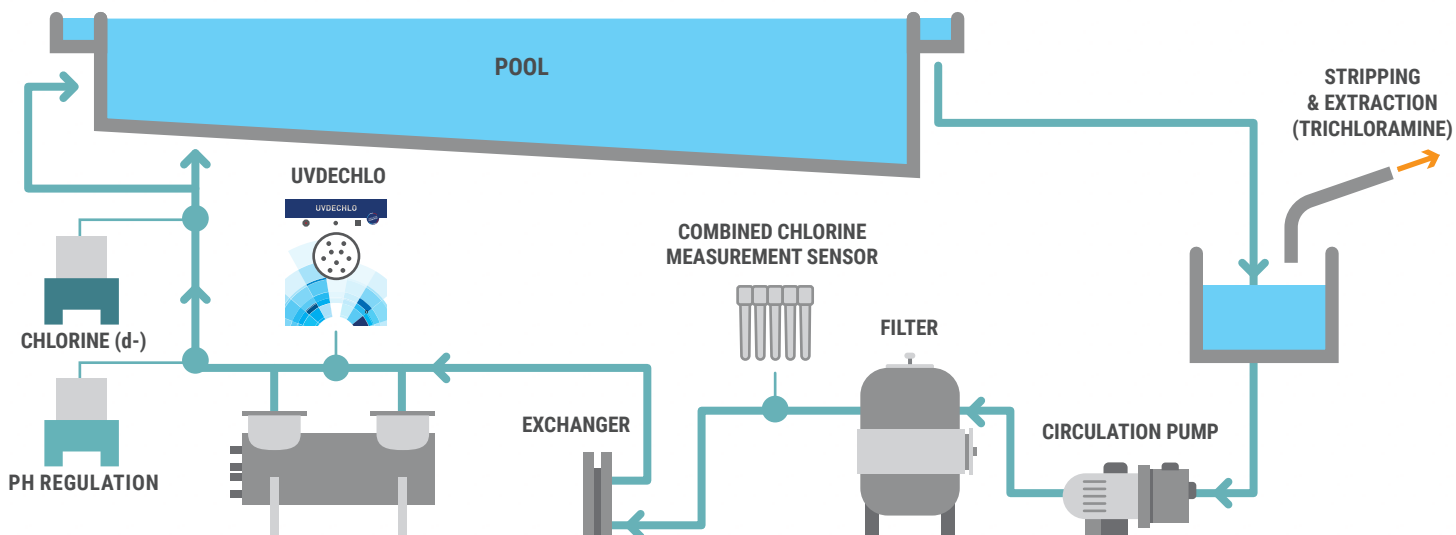
Low maintenance costs

Simple installation on a bypass

Lamp service life guaranteed up to 16,000 hours or 2 years

No production of by-products, such as THMs

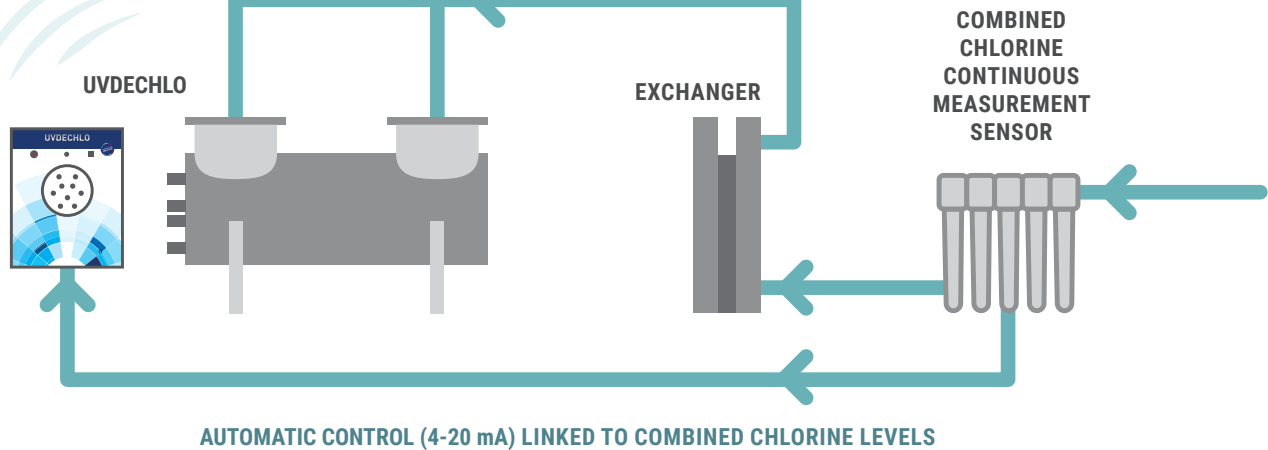
Comfortable bathing, improved working conditions for staff.



	NUMBER OF LAMPS/ POWER	TREATED FLOW RATE (m ³ /h)	CONNECTION DN FLANGE (PVC) (mm)	DIAMETER/ LENGTH (mm)	POWER/ FREQUENCY (V/Hz)
UVDECHLO AD300 ECOENERGY	1x300 Watts	10 to 50	80 (90)	140 / 1550	230/50-60 Hz
UVDECHLO BD300 ECOENERGY	2x300 Watts	50 to 100	125 (140)	220 / 1550	230/50-60 Hz
UVDECHLO CD300 ECOENERGY	3x300 Watts	100 to 200	150 (160)	320 / 1550	400 V Three-phase+N+E / 50-60 Hz
UVDECHLO DD300 ECOENERGY	4x300 Watts	200 to 300	200 (225)	355 / 1550	400 V Three-phase+N+E / 50-60 Hz
UVDECHLO CD600 ECOENERGY	3x600 Watts	300 to 450	300 (315)	400 / 1570	400 V Three-phase+N+E / 50-60 Hz
UVDECHLO FD600 ECOENERGY	6x600 Watts	450 to 900	400 (400)	500 / 1570	400 V Three-phase+N+E / 50-60 Hz

AUTOMATIC CONTROL LINKED TO CHLORAMINE LEVELS

Through an automatic control linked to chloramine levels, **the energy consumption is reduced by 30%** when chloramine levels are below 0.2 mg/l.



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