

CHEMICAL DOSING & CONTROLLERS



THERALUX QUANTUM AOP
(PHOTOCATALYTIC OXIDISER)

THERALUX COMMERCIAL
MINERAL CHLORINATORS

THERALUX COMMERCIAL
UV SYSTEM

GRANUDOS

CHEMICAL STORAGE &
BUNDING

Theralux Active™ Quantum AOP (Photocatalytic Pool Steriliser)

Theralux Active Quantum AOP (Photocatalytic Steriliser)

Theralux Quantum AOP is brand new technology to the swimming pool industry with the benefit of being used and approved by high profile industries such as hospitals and drinking water purification companies.

A photocatalytic oxidiser, known by scientists as "Nature's Silver Bullet," neutralises what chlorine, Ozone and conventional UV sterilisers cannot and achieves exponential reductions in unwanted bacteria, pathogens and viruses.

Theralux Quantum AOP uses new Nano Crystal Technology: a prime focus of the science world today; possessing the power to sterilise sewage into drinking water without the use of chemicals. One of the many benefits of Theralux Quantum AOP is the significant reduction of residual chemicals, such as Chlorine, Bromine or Hydrogen Peroxide.

Features & Benefits

- Combined Photocatalytic & Hydroxyl Radical technology: most powerful, proven oxidiser
- Only treatment that instantly destroys all bacteria, micro-organisms, pathogens and viruses found in water that even chlorine and other treatments cannot touch, including Naegleria Fowleri and Adenovirus
- Two power options:
 - 55 Watts for flow rates up to 14m³/hour (65,000 litres of pool volume)
 - 110 Watts for flow rates up to 28m³/hour (130,000 litres of pool volume)
- Ensures a significant reduction in chemical consumption
- Reaction is contained within the chamber releasing only pure, fresh water
- Comes pre-assembled with all necessary sensors and control components
- Ultimate sterilisation without compromise to health; eliminates sore eyes, itchy skin, discoloured hair, strong odours whilst creating no risk to the health of pool users
- Sea water compatible
- 14,000-hour lamp life
- Quantum units are supplied with flow switch & lamp life indicator and reset switch.
- 2 Year Warranty



Technology

Built to be installed easily into an existing set-up, the Theralux Quantum AOP is completely safe and significantly more powerful than Chlorine, Hydrogen Peroxide, UV or Ozone. Photocatalytic Oxidisation has an immensely powerful effect with the ability to instantaneously destroy viruses, bacteria and pathogens, and more astoundingly possessing the ability to convert sun tan oil, urea and other contaminants back in to their harmless molecular form.

Meticulously designed, Theralux is delivering the first cost-effective, photocatalytic steriliser specifically for the swimming pool industry, for a toxic free swimming sensation. Not only does it eliminate undesirable side-effects such as sore eyes, itchy dry skin, discoloured hair and strong odours, but it also makes water crystal clear, and most importantly it creates no risk to the lungs or health of bathers and swimming pool attendants.

All Theralux Quantum AOP units are supplied complete with flow switch and a lamp life indicator.

Theralux Quantum AOP 55W
Theralux Quantum AOP 110W

Code: THERAQ6055
Code: THERAQ6110



AOP 55W



AOP 110W



S.P.A.S.A. N.S.W. Product of the year 2020

Theralux Semi-Commercial Mineral Chlorinators

Theralux Therachlor has a range of advanced mineral pool system for semi commercial pools e.g learn to swim centres, hotels, motels etc. Chlorination output from 75g/hr to 150g/hr.

- Advanced switch mode technology
- 316 stainless steel insulated cabinet, without air external ventilation, highly resistant to corrosive atmospheres. IP-65
- Temperature & water flow control
- Electronic current control
- Includes external control with 4-20mA
- Self diagnosis
- Easy user interface with backlit LCD display
- Transparent cell housing for easy inspection
- Self cleaning cell easily accessible & low maintenance
- Includes software and electronics for the optional pH and Redox control

Therachlor SMC75 Chlorinator

Code: THERACH6075

Therachlor SMC100 Chlorinator

Code: THERACH6100

Therachlor SMC150 Chlorinator

Code: THERACH6150



Theralux Commercial Mineral Chlorinators

Theralux Therachlor has a range of advanced mineral pool system for commercial swim centre pools.

Chlorination output from 250g/hr to 500g/hr.

- High performance electrochlorinators for intensive commercial exploitation & high capacity (public installations)
- Waterproof high power performance switch modes, without forced ventilation
- Electronics 316 in stainless steel insulated cabinet without air external ventilation, highly resistant to corrosive atmospheres. IP-65
- Electronic current control
- Temperature & water flow control
- Includes external control with 4-20 mA
- Prepared for industrial control by CAN or Profibus bus
- Extended salinity range: 500 - 35.000 ppm
- Compact mounting design with integrated cell & housing
- Methacrylate electrodes cassette to ease inspection
- Cell easily accessible & of a low maintenance
- Electrodes of a low current density and long life: 20.000 hours
- Includes software & electronics for the optional pH control

Therachlor SMC250 Chlorinator

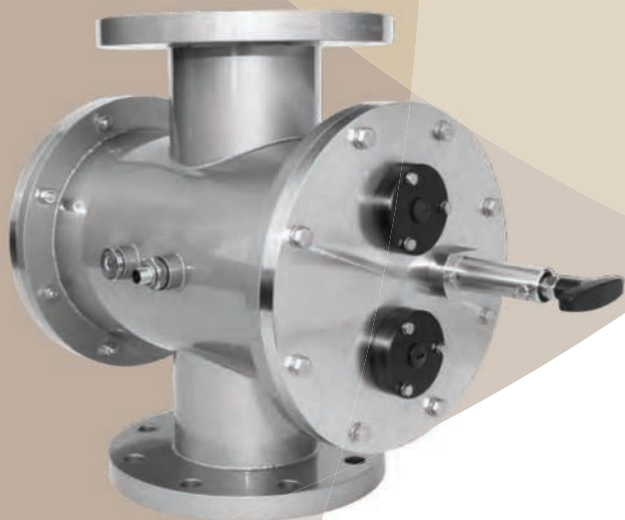
Code: THERACH6250

Therachlor SMC500 Chlorinator

Code: THERACH6500



Theralux Commercial UV System



Theralux Commercial UV System

The Theralux UV is a compact UV system. Designed for all types of water treatment. The long-life medium-pressure UV lamps are compact & emit a broad spectrum of wavelengths with a high intensity.

Theralux UV systems prevent fouling of the quartz sleeves & UV sensor with an effective manual or electrical 'anti-fouling mechanism'.

The Power Control System (PCS) enables the UV lamps to run at the most optimal setting to save energy & increase lamp life. This reduces operational costs & increases your return on investment.

The PLC controller ensures optimal operation of the Theralux UV. It provides the operator with valuable information about inputs & outputs, actual UV dose, UV intensity, lamp & system running hours, 4-20mA UV output, maintenance, warnings & alarms. The controller can be equipped with a BUS-connection to communicate with an external master PLC.

Outdoor pools

For disinfection, chlorine is obligatory in public outdoor pools. When chlorine reacts with sweat, urine, fats or other components, it produces disinfection by-products, such as chloramines (combined chlorine).

Disinfection by-products are present in the pool water in the layer just above the water level. During swimming these products are inhaled by the swimmers. Scientific reports suspect the disinfection by-product named trichloramine (TCA) to cause childhood asthma and allergic diseases.

Ultraviolet (UV) light is simple and proven technique for removing chloramines and, most importantly, trichloramine (TCA). UV light contains the energy (wavelengths) to break down chloramines via photolysis. Breaking down TCAs requires short wavelengths below 240 nm emitted by medium-pressure (MP) UV lamps.

Besides breaking down TCAs, the bestUV systems are able to disinfect pool water. Chlorine resistant micro-organisms like *Cryptosporidium* & *Giardia* introduced to outdoor pools by human or animal feces, are effectively killed by medium-pressure UV lamps. Safe and sparkling pool water is the result of using bestUV systems in outdoor pool water.

Indoor pools

Swimming in pool water should be a healthy & pleasant exercise. A clear, safe, sparkling swimming pool with no unpleasant smell is the right of every swimmer & the objective of every pool manager.

The physical, chemical & microbiological states are constantly changing in a busy swimming pool. Swimmers, sweat, urine, pool toys & other factors introduce pollution almost continuously into indoor pool water.

Vigilant filtration, dosing & disinfecting are necessary to maintain a water quality that is ideal in indoor pools.

For disinfection, chlorine is obligatory in commercial pools. When chlorine reacts with sweat, urine, fats or other components, it produces chloramines (combined chlorine). These chloramines produce the typical "chlorine smell" & "red eyes".

The most important component causing this effect is trichloramine (TCA), nitrogen trichloride. Trichloramine is the most irritating of all chloramines. Scientific reports indicate that trichloramine may cause childhood asthma & allergic diseases. In pool water treatment, reducing TCA is a critical goal.

Besides the effects of TCA on humans, their highly corrosive properties can also be harmful to the structure of the pool building.

Ultraviolet (UV) light is simple & proven technique to remove chloramines, & most importantly trichloramine (TCA). UV light contains the energy (wavelengths) to break down chloramines. Short wavelengths below 240nm can break down TCA. For mono- & dichloramines resp. 245 and 300 nm are effective.

The broad spectrum of bestUV's medium-pressure (MP) UV lamps contains all the wavelengths needed to break down all chloramines found in pool water.

Theralux UV system can ensure a more pleasant & healthy environment & less corrosion in the pool building.

Granudos 10-CPR Touch XL

Granudos 10-CPR Touch XL swimming pool disinfection system using IQ Granu-Chlor 700 granulated Calcium Hypochlorite & IQ Granu-cid acid with flocculant dosing is completely controlled by the autocontrol system CPR Touch for free chlorine, pH, redox & temperature. Granulated Calcium Hypochlorite is dosed directly from the integrated hopper. Acid is dosed within the system from the container to correct the pH & to avoid scaling. Granulated Calcium Hypochlorite & acid are dosed separately at intervals to the dissolving system from where the very low concentrated chlorine solution is conveyed by a venturi nozzle to the pool water. The dosing of the chemicals is controlled directly by the integrated autocontrol system. The booster pump of the Granudos works also as metering water pump. The metering water is returned into the cycle via the dissolving system. The autocontrol system and the peristaltic pumps for flocculent and acid are integrated well accessible under a transparent cover at the front of the unit. Unit is self cleaning.

Housing with retention tub: Solid one part rotational sintered polyethylene shape containing all functional parts.

Chlorine dosing: Dosing hopper for chlorine granulate for 15 kg, dosing motor, dosing screw, knocker to support the dosing

Acid dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 3/8" in the dissolving system

Flocculent dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 1/2"

Dissolving system: Pre-filter d75, flushing tank, booster pump app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. level switch min/max flushing tank

Suitable for Pools: 10,000 – 400,000 ltrs

10-CPR Touch XL Code: GR24660

15 kg Hopper Upgrade Code: GR24660

* Shown with 15 kg Hopper Upgrade. Model may differ from product shown.



Granudos 10-S5

Chlorine dosing directly from integrated hopper 5 kg. (upgrade to 15 kg available)

Acid is dosed into the system directly from the canister to correct the pH and to avoid scaling. Chlorine and acid are dosed separately in intervals to the dissolving system and are dissolved completely. Then the chlorine solution is conveyed by a venturi nozzle to the pool water. Dosing manually or linked to an external control system. All functions are permanently monitored.

Housing: Solid one part rotational sintered PE shape containing all functional parts.

Chlorine dosing: Dosing hopper for chlorine granulate for 5 kg, (upgrade to 15 kg available) dosing motor, dosing screw, knocker to support the dosing.

Acid dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 3/8" in the dissolving system.

Dissolving system: Pre-filter d 75, flushing tank, booster pump app. 1000 l/h at 1,2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring in the flushing tank.

Micro processor controller S5: Operation & visualisation via 5-line LC display and three buttons. Fault indications are displayed in plain text. Stepless adjustment of dosing performances chlorine and acid. External dosing control with controllers for free chlorine and pH- value with non-volt contact or 230 V/AC impulse length controlled or frequency. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction.

Suitable for Pools: 10,000 – 400,000 ltrs

10-S5 Code: GR27282

15 kg Hopper Upgrade Code: GR24660

* Shown with 5 kg Hopper. Model may differ from product shown.





GRANUDOS 45/100-CPR TOUCH XL

Granudos 45/100-CPR Touch XL swimming pool disinfection system using IQ Granu-Chlor 700 granulated Calcium Hypochlorite & IQ Granu-cid acid dosing is completely controlled by the auto control system CPR Touch for free chlorine, pH, redox and temperature. For the disinfection & pH regulation of swimming pool water. Chlorine dosing directly from the chemical drum. Acid is dosed into the system directly from the canister to correct the pH and to avoid scaling. Granulated Calcium Hypochlorite and acid are dosed separately at intervals to the dissolving system from where the chlorine solution is conveyed by a venturi nozzle to the pool water. The dosing of the chemicals is controlled directly by the integrated auto control system. The booster pump of the Granudos works also as metering water pump. The metering water is returned into the cycle via the dissolving system. The auto control system is mounted well accessible at the unit. Unit is self cleaning. Vertical support: Rotating drum carrier steel, zinc and blue powder coated, drum fixing device with clamp bands and safety belt

Chlorine dosing: Dosing hopper to be screwed on the chemical drum. Dosing motor, dosing screw, knocker to support the dosing. Capacitive switch for empty monitoring of the drum

Acid dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 3/8" in the dissolving system

Dissolving system: Pre-filter d 75, flushing tank, booster pump app. 1000 l/h at 1.2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring of the flushing tank

45-CPR Touch

Pools: 400,000 - 750,000 ltrs

Chlorine max output: 2 kg/h

Acid max output: 3 l/h

Code: GR26403

100-CPR Touch

Pools: 500,000 - 4,000,000 ltrs

Chlorine max output: 4 kg/h

Acid max output: 3 l/h

Code: GR26680-1



Granudos 45-S5 & 100-S5

Granudos 45-S5 & 100-S5 uses IQ Granu-Chlor 700 granulated Calcium Hypochlorite is dosed directly from the integrated hopper. IQ Granu-cid acid is dosed within the system from the container to correct the pH and to aid in cleaning. Granular Calcium Hypochlorite and acid are dosed separately at intervals to the dissolving system from where the very low concentrated chlorine solution is conveyed by a venturi nozzle to the pool water. Dosing manually or linked to an external control system. All functions are permanently monitored.

Vertical support: Rotating drum carrier steel, zinc and blue powder coated, drum fixing device with clamp bands and safety belt.

Chlorine dosing: Dosing hopper to be screwed on the chemical drum. Dosing motor, dosing screw, knocker to support the dosing. Capacitive switch for empty monitoring of the drum.

Acid dosing: Peristaltic dosing pump, suction lance with empty report of the canister, dosing valve 3/8" in the dissolving system.

Dissolving system: Pre-filter d 75, flushing tank, booster pump app. 1000 l/h at 1.2 bar, venturi, mixing cyclone. Monitoring of the pump by pressure switch. Monitoring of the suction performance of the venturi. Level monitoring of the flushing tank.

Micro processor controller S5: Operation and visualisation via 5-line LC display and three buttons. Fault indications are displayed in plain text. Stepless adjustment of dosing performances chlorine and acid. External dosing control with controllers for free chlorine and pH-value with non-volt contact or 230 V/AC impulse length controlled or frequency. Relay system to assure dosing of only chlorine or acid or none. Switch-off of the dosing at malfunction. Unit is self cleaning.

45-S5

Pools: 400,000 - 750,000 ltrs

Chlorine max output: 2 kg/h

Acid max output: 3 l/h

Code: GR28189

100-S5

Pools: 500,000 - 4,000,000 ltrs

Chlorine max output: 4 kg/h

Acid max output: 3 l/h

Code: GR27242

Granudos 15-PR Touch XL

Swimming pool disinfection system using IQ Granu-Chlor 700 granulated Calcium Hypochlorite & IQ Granu-cid acid controlled by the auto control system for pH & ORP. Granular Calcium Hypochlorite is dosed directly from the integrated hopper. Acid is dosed within the system from the container to correct the pH & to aid in cleaning & to avoid scaling. Granular Calcium Hypochlorite & acid are dosed separately at intervals to the dissolving system from where the very low concentrated chlorine solution is conveyed by a venturi nozzle to the pool water. The very simple to operate auto control system for pH-value & ORP is prefitted, the probes in the flushing tank.

Housing: Solid one part rotational sintered PE shape containing all functional parts

Auto Control System: This system controls pH & ORP with very simple operation.

Program switch with 8 operation & service programs. Start automatic: first the pH-value is brought to the proportional range, only then chlorine dosing is started. Proportional dosing for both Chlorine & Acid. Remote control by modem / SMS possible.

Measuring of pH-value & ORP. The probes for pH & ORP are fitted within the flushing tank, directly in the flow of pool water through the Granudos

Chlorine dosing: Dosing hopper to be filled with 15 kg dry chlorine. Dosing unit with gear motor 24VDC with dosing screw & holder, heated nozzle, solenoid hammer.

Acid dosing: Peristaltic pump, acid carboy lance with level switch for empty indication of acid container, injection valve to dissolving tank.

Dissolving system: For the chemicals with prefilter PVC d75, splash tank, booster pump, venturi nozzle, mixing & dissolving cyclone. monitoring switches for level in tank min/max, suction performance (flow) of venturi. switch off dosing at malfunction.

Suitable for Pools: 1,000 - 400,000 ltrs

Chlorine max output: 2.5 kg/h, Acid max output: 1 l/h

Code: GR28095

Model may differ from product shown.



CPR Touch XL-2S Controller

The CPR Touch XL-2S Controller is ideal commercial pools, where a reliable dependable compliance of water quality is required. Measurements of free chlorine, pH-value, redox/ORP & temperature are handled by the system. Stable & reliable measurement are due to large, self cleaning chlorine & redox electrodes. Operation & visualisation via user-friendly 7" Touch-Graphic display ensures easy operation. Each system is delivered individually tested & completely pre-mounted on a board. Easy & quick installation.

Control techniques:

- Coloured 7" Touch-Graphic display to indicate the current data & status of unit
- Faults & alarms are illustrated by self-explaining icons
- All control parameters are adjustable to ensure optimal pool conditions
- Integrated test programmes for all functions
- Proportional control characteristic to ensure compliance with the selected set points
- Start-up automatic with pH preference dosing
- Input for external release, shock chlorination & ECO mode

Measuring cell:

- Compact acrylic glass block to take the electrodes, flow regulator & sample water valve. Pressure resistant design for measuring water recirculation
- pH-electrode with high reliability reference system
- REDOX electrode with large & self-cleaning platinum round plate
- Free chlorine electrode consisting of a large & self-cleaning surface round gold plate & counter electrode with reference system Ag/AgCl
- Temperature sensor for temperature measurement

Dosing techniques:

- Dosing with self-priming peristaltic dosing pumps
- Dosing of disinfection & pH-control chemicals directly into measuring water after measuring cell
- Controls Salt/Mineral Systems



CPR Touch XL-2S Controller - Liquid

Code: GR24648-1

CPR Touch XL-2S Controller - Elektrolyse (salt/mineral)

Code: GR26302-1

Chemical Storage & Bunding

Small Chemical Storage Drums

A small drum where space is at a premium. Features a large screw top lid, handles holes & measuring increments.

Use blue for Liquid Chlorine & black for Acid.

A. 60 ltr Black Drum

Code: PTANKS060BK

B. 60 ltr Blue Drum

Code: PTANKS060BL



Chemical Dosing Tank

Ideal for dosing chlorine. A dosing pump to be mounted to the top of the tank.

Flat & rigid maximises space. Designed for contents of up to 1.5SG. Convex Base for complete drainage. Calibrated volume indication (moulded-in permanently). Stackable for storage.

C. 110 ltr Chemical Dosing Tank

Code: PTANKS0110

D. 210 ltr Chemical Dosing Tank

Code: PTANKS0210



Chemical Dosing Tank Bund

Designed to bund the 110 & 210 ltr Dosing Tanks. Capacity 250 ltrs

E. 250 ltr Dosing Tank Bund

Code: PTANKB0250



Chemical Storage Tanks

These tanks are certified to the Polyethylene tank standard for Water & Chemicals – Standard AS/NZS4766:2006. Designed for contents of up to 2SG.

Self-supporting roof design means no support poles are necessary. Extra thick corrugated walls for maximum strength. Double strength UV+ resin ensures ultimate protection against Australia's harsh sun. One-piece construction with no joins, seams or part-lines. Compatible with over 1900 chemicals including Ammonia, Sodium Hypochlorite, Hydrochloric Acid, Chlorine, Sulphuric Acid, food ingredients & more. Natural & other colours available.

Other sizes available on request. Australian Made.



F. 600 ltr Chemical Storage Tank
Code: PTANKS0600



G. 1000 ltr Chemical Storage Tank
Code: PTANKS1000



H. 1600 ltr Chemical Storage Tank
Code: PTANKS1600



I. 2000 ltr Chemical Storage Tank
Code: PTANKS2000

Self Bunded Tanks

Self-Bunded Tanks negates the need for costly concrete bunding & is protected from rainwater ingress. Compatible with over 1965 chemicals.

Features Include: Level transmitter mount, Weather proof vent, Inspection hatches, Mechanical level indicator, Bolt down lugs, Outer tank exceeds 110% capacity of storage tank, Bund alarm float switch, Bund drain, Outlet sealed to inner & outer tank, Lifting lugs, High level alarm float switch, Bund alarm & high level alarm on exterior of tank, Top fill assembly with camlock & drain & Tank outlet and valve. 25 Year design life. Tanks from 1,500 ltr up to 30,000 ltr.



Drum & Tank Guide

		Volume (litres)	Height (mm)	Base [®] (mm)	Top [®] (mm)
A/B	PTANKS060XX	60	700	385	385
C	PTANKS0110	110	675	500	500
D	PTANKS0210	210	930	580	580
E	PTANKB0250	250	585	682	856
F	PTANKS0600	600	950	1000	1000
G	PTANKS1000	1000	1500	1000	1000
H	PTANKS1600	1600	1610	1500	1500
I	PTANKS2000	2000	2255	1175	1175