

CERTZDos

307-328 Chemical Dosing

### Selection Guide



In terms of how we approach kit selection our starting point is primarily safety. There are questions we look to answer before we even start to think about controllers and probe selection. For example, what equipment represents the least risk? Which chemicals will minimise operator risk? Is there sufficient space for the equipment to be installed safely? Is the equipment easily accessible for interaction and maintenance? Can sample and injection points be easily accessed? Is there a safe route for chemical lines to be run?

All commercial sites should consider Risk Assessments and Method Statements (RAMS) and with our assistance in kit selection, the best operating strategy can be implemented.

The team are more than happy to assist with selecting equipment from the following pages. We can also arrange an FOC On-site Survey to thoroughly assess kit selection from a safety and technical point of view. Please contact the CertiChem team.

### Installation, Commissioning & Training -Please see page 309 for details.

The first weeks following the installation of a dosing system are crucial in terms of the satisfaction of the end client. If the installation is performed correctly and goes smoothly, there is less chance of teething problems which may lower confidence. CertiDos Engineers install and commission many systems, all year round. Before attempting an installation, there are a number of site preparations that we ask to be completed. One of the most important being water balance and sanitiser levels. For a full list of requirements and further advice, please contact the CertiChem team. We are more than happy for the trade to install our systems and if you would like us to attend to commission and train the operator once the installation is complete, this can be arranged.

As a distributor, we take industry guidance notes very seriously and will only sign jobs off once deemed 'safe'.

Operator training is a crucial part of ensuring that the equipment is correctly operated and maintained. Staff training needs will vary. We provide 'handover' training following commissioning. In some cases, longer and more in depth training may be required. At the time of carrying out an On-site Survey, we can assess the training needs of the on-site staff and advise if a more intensive session is required. We can also return to site further down the line to deliver 'refresher' training or to train new members of staff.

### Preventative Maintenance -Please see page 309 for details.

'Service visits' or 'Planned Preventative Maintenance (PPM)' form an essential part of the smooth running of any chemical dosing system. The frequency of visits will depend on the facility, bather load and the site's own maintenance schedule. As a general rule, we recommend at least two service visits a year at 6 month intervals. Depending on the individual site requirements, more or less frequent visits may be required. We can act on your behalf as our trade customer, and provide the necessary service contract for your client. Again, this can be assessed at the time of an initial presite survey.

From help sizing dosing pumps up to specifying complete systems, we're here to help. CertiChem can be contacted on 01993 777200 or certichem@certikin.co.uk

### On Site Installation, Commissioning Training – Trade Only

Installation, commissioning and training is available for all of our chemical dosing equipment. Our dedicated team of dosing engineers can ensure that systems are set up and continue to run safely and efficiently for years to come. The information below outlines the available packages and are Trade only cost (exclusive of VAT).

### Installation, Commissioning & Training

-	CDEICT	Installation, Commissioning & Training	£1095.00
-	CDEIICT	Installation Inspection, Commissioning & Training	£665.00
-	CDECT	Commissioning & Training Only	£545.00
-	CDET	Training Only	£385.00

Prices quoted based on UK Mainland only. For overseas including Channel Islands, Isle of Wight and the Isle of Man, please contact the CertiChem team.

Installation, commissioning and training typically lasts for two consecutive working days.

Commissioning and training typically lasts for one working day. Training typically lasts for half a working day. Time frames include travel there and back. Based on one monitoring and control system.

WE would Recommend

Service Visits - Planned Preventative Maintenance Nett Price		
- CDESER4 Service Contract - 4 visits p	er year £2002.00	
- CDESER2 Service Contract - 2 visits p	per year £1140.00	
- CDESER1 Service Contract - 1 visit pe	er year <b>£630.00</b>	
- CDESER1 Service Contract - 1 visit pe	er year £630.00	

Service visit or Planned Preventative Maintenance (PPM) form an essential part to the smooth running of any chemical dosing system. The frequency of visits will depend on your facility, bather load and own maintenance schedule. Please speak with a member of the CertiChem team to discuss your requirements fully.

Prices quoted based on UK Mainland only. For overseas including Channel Islands, Isle of Wight and the Isle of Man, please contact the CertiChem team.

Service visits typically consist of 1 working day per visit.

Service spares charged as extra. Prices based on one monitoring and control system.

Call Outs			Nett Price
-	CDECAL	Initial call out fee - Inc 1st hour on site	£218.00
-	CDESHR	On site hourly rate	£62.70

As well as the above we offer one off emergency and non emergency call outs. Costs will depend entirely on the nature of the call out and time spent on site. The 'initial call out fee' covers travel to site plus the first hour on site. **Please contact CertiChem with postcode**. We reserve the right to price accordingly.

Prices quoted based on UK Mainland only. For overseas including Channel Islands, Isle of Wight and the Isle of Man, please contact the CertiChem team.

Service spares charged as extra.

### Free On Site Survey

Don't forget that we offer free, no obligation, on-site surveys that will allow us to specify not only the equipment but the level of service plus training that will be required. To arrange a visit to your site, please contact the CertiChem team or complete the pool/spa questionnaire at the back of this section.





### **5 Year Warranty**

Was your dosing system installed by us or one of our approved installers?

Do you have a current service contract with an approved contractor?

If the answer is yes to both questions then relax - your dosing system is covered by Certikin's 5 year warranty!\*

\*Terms and conditions apply - please contact the CertiChem team for a copy.

### System Upgrade Offer -SAVE UP TO £200!

Thinking of upgrading your chemical dosing equipment? Why not upgrade to a current CertiDos system and take advantage of our loyalty promotion.....



### OUT WITH THE OLD

### What are you waiting for?

Upgrade your chemical dosing equipment today!

Let us supply and install a brand new chemical dosing system with up to date functions and features.

We can commission the system and provide you / your client with dedicated operator training.

Contact the CertiChem team on 01993 777200 for further details or why not complete the dosing questionnaire on page 327

To make it even easier, we can complete a free site survey to ensure that the equipment supplied is best for you!

\*Terms and conditions apply - contact the CertiChem team for more information



You could save up to £200.00\* when replacing your old dosing equipment. Upgrading could increase your profit margin or allow you to pass a saving onto your customer - the choice is yours!

Special nett prices on start up chemicals, testing equipment and other accessories also available when replacing a full system.



You've decided to upgrade why not add connectivity to your new controller. View live information and water parameters as well as historical logs using any internet enabled device. See page 319 for more information.







#### Ethernet

Controller is connected to a local area network with internet access. Once configured, the user can access the controller 'live' via the ERMES web server using any internet enabled device. Ethernet users can send alerts by email.



USB

For local connection only. Controller is fitted with a USB port. Once a USB drive is connected, the event log is automatically transfrerred for further analysis. A special version of the software is provided for reading the logs on a compatible computer.



Using a data SIM card, the controller is connected to the mobile data network. The controller automatically connects to ERMES and can be accessed 'live' via the ERMES web server using any internet enabled device. GPRS users can send alerts by email and SMS.ERMES uses approx 250mb data per calendar month.

### Domestic Systems



#### CertiDos WPRH CDEPAWPRH H WPRH Dosing System

1) Controller with integral peristaltic pumps (solenoid pumps available on request) 2) Pre-filter

Price

Price

£1950.00

£1910.00

- 3) pH Electrode
- 4) Flow Sensor
- 5) ORP Electrode



### CertiDos LRH

н CDEPALDPHRH LRH Dosing System

- 1) Controller
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor 5) ORP Electrode



Redox based systems indicate the Oxidation Reduction Potential (ORP) of the water (sanitiser activity) and not directly the quantity of sanitiser present.

ORP is an indication of the activity level of the sanitiser and can be used to control a set point to safe guard bathers. ORP (Redox) can be used in conjunction with amperometric systems which can then show both the ppm level (sanitiser quantity) and activity of the sanitiser (displayed as a mV value) see page 316

The systems shown offer an economical method of monitoring the pool or spa water quality and are best suited to domestic applications.

\* Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information

### **Recommended Accessories**





Chemical storage tank and bund - page 323

Pump mounting bracket - page 325





Chemical dosing pump - page 321

Withdrawable injection valve - page 325

# **Domestic Feeder Systems**

Tablet feeders or salt chlorinators can be directly 'plugged in' to the integrated socket on the controller making it ideally suited to both domestic and light commercial applications.

Integral software has pH priority to ensure optimum conditions for sanitation.

Controllers with feeder sockets are available with ORP probes; open amperometric cells or closed amperometric probes.

The Autopilot Digital has the functionality required to connect.

Feeders and the Autopilot Digital can be found on page 299

- \* Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information
- \*\* Approved installers can purchase equipment for self installation at a reduced cost

#### **Recommended Accessories**





Chemical storage tank and bund - page 323

Withdrawable injection valve - page 325





Electrovalve - page 324

Available upon request



Autopilot Digital page 299



### CertiDos WPSRH

Н	CDEPAWPSRH	WPSRH Dosing System	
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- 1) Controller with integral peristaltic pump and feeder output (socket) - solenoid pump available on request
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor
- 5) ORP Electrode
- Chemical to be dosed must be positioned below the unit

Price

Price £1865.00



CertiDos	WPSOC	& WPSCP	

CDEPAWPSCP £3455.00 Н WPSCP dosing system (closed probe)

1) Controller with integral peristaltic pump and feeder output (socket) - solenoid pump available on request

- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor
- 5) Closed Amperomtric probe

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# Light Commercial Systems - Open Cell



CertiDos WPOC

#### н CDEPAWPOC WPOC Dosing System

- 1) Controller with integral peristaltic pumps (solenoid pumps available on request)
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor
- 5) ORP Electrode

Open amperometric cells offer a relatively low cost method of automating the monitoring of the chlorine residual (displayed in ppm) of a water sample.

Broadly speaking, most applications are suited to an open amperometric cell. However, the cells functionality depends on a constant flow and pressure across the sample block. Also, the cells output can be affected by other factors such as combined chlorine, stabilisers and other oxidants.

Calibration can be required more frequently than closed Amperometric options

Please note that circulation must operate on a 24/7 basis when using open amperometric systems

- Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information
- \*\* Approved installers can purchase equipment for self installation at a reduced cost

### **Recommended Accessories**

Price

Price

£2825.00

£3094.00





Chemical storage tank and bund - page 323

Pump mounting bracket - page 325



CertiDos LOC

н CDEPALDPHCL6 LOC Dosing System

- 1) Controller
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor 5) ORP Electrode



Chemical dosing pump - page 321

Withdrawable injection valve - page 325



Chemical Dosing

# Domestic Active Oxygen With pH Control

CertiDos WDPHOS Dosing panel for pH monitoring and control plus Active Oxygen timed addition.

\* Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information

**Recommended Accessories** 



Chemical storage tank and bund - page 323



Withdrawable injection valve - page 325

Carboy Bund page 323





CertiDos WDPHOS					Price
H	CDEPAWDPHC	S Controller with integra	al solenoid	pumps	£1696.00
	<b>2</b>				
Hyd	rogen Peroxide		No in pack	Unit Price	Price
DI		Hydrogen Peroxide 12% Algicide	1	-	£103.95

As with any hazardous substance, care should be taken when storing and handling



See page 292 for more information on the Certikin UV systems.



### High End Domestic / Commercial Systems

Chemical to be dosed

2

CertiDos WPCP

2) Pre-filter

3) pH Electrode

Flow Sensor
ORP Electrode

CDEPAWPCP

Н

CERTIDos

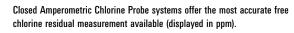
1) Controller with integral peristaltic pumps

- (solenoid pumps available on request)

WPCP Dosing System

must be positioned below the unit





Please contact CertiChem for further information.

Light

5

Price

Price

£3490.00

£3700.00

- \* Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information
- \*\* Approved installers can purchase equipment for self installation at a reduced cost

### **Recommended Accessories**



Chemical storage tank

and bund - page 323



Replacement membrane cap - page 324







### CertiDos LCP

H CDEPALDPHCL3 LCP dosing system

- 1) Controller
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor
- 5) Closed Amperometric Chlorine Probe

Chemical dosing pump - page 321 Withdrawable injection valve - page 325

# Heavy Use Commercial Systems

### CertiDos PRC System

A commercial grade system giving pH and chlorine monitoring and control. The system also features a Redox (mV) monitor for general analysis of the water quality (display only). The system uses closed amperometric probes to give the most accurate measure of the levels available.

### CertiDos M5 System

A complete sampling and monitoring panel featuring a 5 channel controller offering pH, ORP, Free Chlorine, Total Chlorine and Combined Chlorine. The MAX5 offers a comprehensive monitoring solution for a commercial facility.

- \* Pumps (where applicable), tanks and other accessories are required in order to form a complete system. See page 320-323 for more information
- \*\* Approved installers can purchase equipment for self installation at a reduced cost

### **Recommended Accessories**





### CertiDos PRC н

CDEPALDPRC3 PRC Dosing System

Price £3655.00

- 1) Controller
- 2) Pre-filter
- 3) pH Electrode
- 4) Flow Sensor
- 5) Closed Amperometric Chlorine Probe
- 6) ORP Electrode



#### CertiDos M5 Н CDEPAMAX5

- Price £7010.00
- 5) ORP Electrode 6) Free Chlorine probe \*

M5 Dosing System

3) Flow sensor 4) pH Electrode

1) Controller

2) Pre-filter

7) Total Chlorine probe \* \* Closed Amperometric type

### Carbon Dioxide (CO<sub>2</sub>) Dosing

Carbon Dioxide (CO2) is increasingly being used for pH control within the swimming pool industry. When injected or diffused into the pool water, the  $CO_2$  forms a mild carbonic acid for pH control as well as forming natural bicarbonate which assists in the stabilisation of the pH level.



CO <sub>2</sub> Flow Controller		Price	
٥	CDECO2FC	$\ensuremath{\text{CO}_2}$ Flow Controller - 240VAC	£414.00

### CO<sub>2</sub> Flow Controller

An IP rated enclosure which allows adjustment of  $CO_2$  flow to the injection point. Supply can be connected to CertiDos controllers for automatic control based on pH water parameters.

CO <sub>2</sub> I	njector Diffuser		Price
۵	CDEC02LIN	CO2 Injection valve - stainless steel quill	£280.00

### CO<sub>2</sub> Injector / Diffuser

An essential part of any  $\rm CO_2$  system - the injector. The injector has been specifically designed so that the injection quill / diffuser can easily be removed for cleaning without the need to isolate the circulation line.

Acc	essories		Price
-	CDEMC1	Manual changeover valve assembly 1x1 cylinder configuration	POA
-	CDEMC2	Manual changeover valve assembly 2x2 cylinder configuration	POA
-	CDESC1	Cylinder safety chain - 1 metre	POA
-	CDESCH	Cylinder safety chain wall hook M6	POA
-	CDECOD	CO <sub>2</sub> Leak detection spray 500ml	POA
-	CDEBRE	Bottle regulator 230V/Bar	POA
-	CDEAD8	Adaptor 3/8" cone x 1/4" cone	POA
-	CEDAD4	Adaptor 1/4" cone x 8mm OD hose	POA

### Why CO<sub>2</sub>?

 $\rm CO_2$  offers a number of advantages over the mineral acids such as sodium bisulphate and hydrochloric acid:

- CO<sub>2</sub> is colourless, odourless and a nonflammable gas. It is easy to handle and dose and is dangerous only if released into a confined area. It requires no special protective equipment
- Under COSHH regulations a pool operator must carry out a risk assessment in selecting the chemicals to use in a pool. The first step is to ascertain whether using an alternative process or chemical can eliminate the risk - CO<sub>2</sub> scores on this count
- Deliveries are unlikely to result in emergencies because of spillages and, where ventilation is good, CO<sub>2</sub> does not demand any special safety monitoring for leakage
- Unlike mineral acids, it is not possible to mix CO<sub>2</sub> with sodium or calcium hypochlorite (in liquid form) through spillage in bunds or operator error. This means there is no possibility of accidental production of chlorine gas - a significant hazard in swimming pool installations
- Due to its natural buffering action, CO<sub>2</sub> provides improved process control. pH reduction is more gradual than with mineral acids making accurate control inherently easier but sometimes slower.



# FLOC Dosing Set

A complete FLOC or PAC dosing solution. Ideally suited for chemicals supplied in 25L carboys reducing chemical handling by the end user.

FLOC or Flocculant, is a liquid that is metered into a pool improving the filter efficiency and in turn, the water quality. FLOC works by bonding together small particles in the water making them much larger and easier to trap in the filtration system.

### Installation Tips

When installing a Certikin FLOC set we would generally recommend that it is:

- · As far away as possible from other dosing equipment
- · Away from all sources of chlorine to reduce the risk of chlorine gas generation
- · Injected as far upstream as possible

#### Also:

- · Acid/chlorine injection points should be located POST filter
- · FLOC cannot be used with DE (Diatomaceous Earth) or high rate sand filters

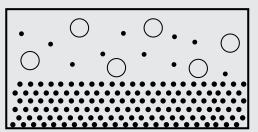
#### Calculating the addition rate

- Minimum dose rate (gr/24hrs) = Filter flow rate (m3/h) x 5.8\*
- E.g. 100m3/h flow =  $100 \times 5.8 = 580 \text{gr}/24 \text{hrs}$

### \*Assumes the following:

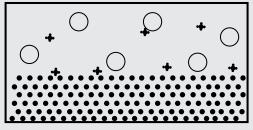
Minimum addition rate of 0.2ml/m3/hr SG of 1.2 CDEVCLG pumps are rated 300 or 3000 gr/24hrs max (twin scale)

### **How FLOC works**



#### Without FLOC

The larger particles are trapped by the sand filter (towards the bottom) as normal. The smaller particles are too small for the filter to trap and so, freely circulate.



### With FLOC

After FLOC is introduced to the line, it binds itself and other particles together. This forms much larger particles which can be trapped easily by the sand filter for later removal as part of the backwashing process



Cert	iFloc - Supplied	Price	
۵	CDEFLOC1	Floc dosing set (as pictured)	£830.00
٥	CDEFLOC2	Twin Pump Floc dosing set *	£1375.00
_		ng from one carboy	11373.0

Individual Components - Supplied Loose			Price
۵	CDEVCLG	VCLG Floc dosing pumps gr/24hr	£433.00
۵	CDELASP/V40	Carboy suction lance with level switch (4-6mm connections)	£145.00
۵	CDEW75U	Carboy bund with support plinth	£183.00
٥	CDESTVN	Pump mounting bracket	£21.50

For twin Floc set, 2 x VCLG pumps and 2 x pump mounting brackets are required.



### **Connectivity - ERMES**

All current CertiDos controllers can be remotely accessed from any compatible web browser via our dedicated remote connectivity suite 'ERMES.'



### **Real Time Monitoring**

All controller parameters can be viewed, in real time, through ERMES server. Information that can be viewed includes probe readings; outputs; alarms and set points.

### Alarms

Controllers can be programmed to text (SMS) or e-mail preset users a list of current parameters on request or in the event of an alarm being triggered such as low level in the chemical tanks; high/out of range parameters and sample line no flow.

### 24/7 History and Logs

All parameters on the controller such as pH, sanitiser and flow etc are automatically logged. The stored data can be used for identifying trends or in problem solving making it invaluable.

The logs can be viewed and exported using the online web interface. The data can be displayed on an interactive graph or in text form.

For controllers that don't have access to the internet, an optional USB port can be fitted so that the logs can be downloaded onto a USB drive. The data stored on the drive can be uploaded to ERMES and viewed as outlined above.

### Multiple Pools/Spas? Multiple Sites?

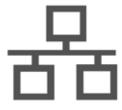
Multiple controllers on the same site can be linked throught the same connectivity device. Similarly, multiple connectivity devices across multiple sites can be linked to the same ERMES account.

ERMES can display all controllers linked to the account in an easy to read overview screen. Each controller can also be individually interegated for further, more in depth, information.









Local USB

Ethernet







Mobile Data (GPRS)

# Wall Mount Dosing Pumps

Solenoid driven dosing pumps with various features ranging from manual, automatic and pulse proportional control. All Certikin dosing pumps are designed to integrate with Certikin controllers or can be used independently.

Certikin dosing pumps can also be purchased as part of tank and bund sets. Please see page 322 for more information.



Lertikin FLE Economy Dosing Pumps		Price	
۵	CDEFCE1022	FCE Dosing pump 2.2 Ltr / hr @ 10 BAR	£230.00
٥	CDEFCE505	FCE Dosing pump 5 Ltr / hr @ 5 BAR	£199.00
٥	CDEFCE3065	FCE Dosing pump 6.5 Ltr / hr @ 3 BAR	£230.00
٥	CDEFCE0311	FCE Dosing pump 11 Ltr / hr @ 3 BAR	£250.00

Super economy pump with manual stroke frequency adjustment - PP/FPM

Certikin FCO Series Dosing Pumps			Price
۵	CDEFC01022	FCO Dosing pump 2.2 Ltr / hr @ 10 BAR	£285.00
۵	CDEFC00505	FCO Dosing pump 5 Ltr / hr @ 5 BAR	£285.00
۵	CDEFC003065	FCO Dosing pump 6.5 Ltr / hr @ 3 BAR	£285.00
۵	CDEFC00311	FCO Dosing pump 11 Ltr / hr @ 3 BAR	£345.00

Economy pump with manual stroke frequency adjustment - PVDF/FPM

All dosing pumps supplied with metric connections. Imperial connections available on request.







2m each suction, discharge and bleed tubing

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### Foot Mount Dosing Pumps



Certikin HTA Series - Manual Pumps			Price
۵	CDEHTA1006	HTA Dosing pump 0.6 Ltr / hr @ 10 BAR	£350.00
Q	CDEHTA1002	HTA Dosing pump 2 Ltr / hr @ 10 BAR	£350.00
۵	CDEHTA0704	HTA Dosing pump 4 Ltr / hr @ 7 BAR	£350.00
Q	CDEHTA0705	HTA Dosing pump 5 Ltr / hr @ 7 BAR	£350.00

Economy pump with manual stroke length and frequency adjustment - PVDF/FPM

Certikin HTS Series - Proportional Pumps			Price
۵	CDEHTS1006	HTS Dosing pump 0.6 Ltr / hr @ 10 BAR	£440.00
Q	CDEHTS1002	HTS Dosing pump 2 Ltr / hr @ 10 BAR	£440.00
٥	CDEHTS0704	HTS Dosing pump 4 Ltr / hr @ 7 BAR	£440.00
Q	CDEHTS0705	HTS Dosing pump 5 Ltr / hr @ 7 BAR	£450.00

Economy pulse proportional pump wth manual stroke length adjustment - PVDF / FPM

Certikin AMS CL Series - Manual Pumps			Price
۵	CDEAMS0720	AMS Dosing pump 20 Ltr / hr @ 7 BAR	£895.00
Q	CDEAMS0340	AMS Dosing pump 40 Ltr / hr @ 3 BAR	£915.00

High capacity pump with manual stroke length and frequency adjustment with low level probe - PVDF / FPM

Certikin KMS MF Series -	- Proportional Pumps
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۵	CDEKMF2001	KMS MF Dosing pump 1 Ltr / hr @ 20 BAR	£765.00
Q	CDEKMF0808	KMS MF Dosing pump 8 Ltr / hr @ 8 BAR	£765.00
۵	CDEKMF0510	KMS MF Dosing pump 10 Ltr / hr @ 5 BAR	£765.00
Q	CDEKMF0218	KMS MF Dosing pump 18 Ltr / hr @ 2 BAR	£765.00

Price

### Multifunction pump with manual stroke length adjustment - PVDF / FPM Modes: Constant, Pulse Divide, Pulse Multiply, PPM,

Batch, Volt, % and ml/q

Solenoid driven dosing pumps with various features ranging from manual to automatic proportional control. All Certikin dosing pumps are designed to integrate with Certikin controllers or can be used independently.

Certikin dosing pumps can also be purchased as part of tank and bund sets. Please see page 322 for more information.





What's in the box





2m each suction, discharge and bleed tubing



#### **Recommended Accessories**

Alarm output cable (MF pump only)



Chemical storage tank and bund - page 323



Withdrawable injection valve page 325





Pump mounting bracket - page 325



## Pump, Tank & Bund Sets

### Pump & Carboy Bund Sets

Ideally suited to plant rooms where tank space is of a premium. This set allows the end user to simply place chemical carboys into the bund, reinsert the pump suction lance and continue operation. This reduces significantly the amount of chemical handling by the end user.

As the bund is square, this gives greater flexibility in positioning the equipment inside the plant room and an overall reduced footprint.

Certikin Pump and Carboy Bund Sets are suitable for use with most standard 20L and 25L Chemical Carboys.



Wall mounted dosing pumps can be found on page 320\* Foot mounted dosing pumps can be found on page 321

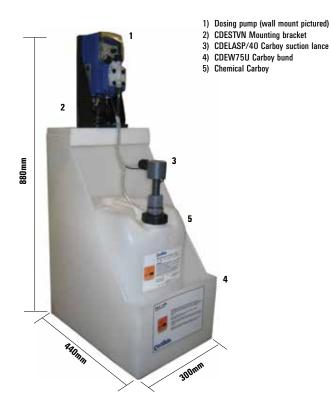
### Pump & Carboy Bund Sets

Comprising of a dosing pump, day tank and matching bund, components which are commonly found in the majority of commercial pool/spa plant rooms.

Tank sizes range from 25Ltr to 530Ltr as standard with larger sizes available upon request. All tanks can be supplied with suitable bunds that provide a minimum of 110% ullage of the tank volume.

Other accessories, such as electric or manual mixers, are available upon request.





### Package Components

	<b>o</b> 1		11100
۵	CDELASP/V40	Carboy suction lance with level switch	£145.00
٥	CDEW75U	27 Ltr Carboy bund with support plinth	£183.00
Q	CDESTVN	Mounting bracket for wall mounted pumps	£21.50

Price

\*Don't forget a mounting bracket (CDESTVN) when using a wall mount dosing pump (as pictured)

Putting it all together	- Why not let us preassemble them for you?	Price
- CDEPTC	Pump, tank and bund set construction	POA





Dosina

### Tanks & Bunds



Chemical Holding Tanks - Cylindrical - White MPDE		Price	
۵	ETCHT25	25Ltr Holding tank - 340mm dia x 425mm h	£97.25
Q	ETCHT050	60Ltr Holding tank - 380mm dia x 635mm h	£115.45
Q	ETCHT108	108Ltr Holding tank - 470mm dia x 680mm h	£160.00
٥	ETCHT230	230Ltr Holding tank - 610mm dia x 870mm h	£219.00
٥	ETCHT530	530Ltr Holding tank - 830mm dia x 1065mm h	£411.00

Larger sizes available on request

Che	Chemical Bund Tanks - Cylindrical - White MPDE		
۵	ETCBT30	To suit ETCHT25 - 470mm x 173mm h	£158.00
٥	CDEDB05	To suit ETCHT25 - 380mm x 343mm h	£113.40
Q	ETCBT060	To suit ETCHT50 - 470mm x 430mm h	£158.10
۵	ETCBT130	To suit ETCHT108 - 610mm x 480mm h	£225.00
٥	ETCBT260	To suit ETCHT230 - 680mm x 800mm h	£260.00
Q	ETCBT583	To suit ETCHT530 - 1005mm x 735mm h	£769.00

Che	Chemical Holding Tanks - Rectangular - White MDPE				
۵	CDE25U	25Ltr Holding tank - 370mm x 270mm x 350mm	£73.85		
Q	CDE50U	50Ltr Holding tank - 370mm x 300mm x 500mm	£109.50		
Q	CDE75U	75Ltr Holding tank - 440mm x 300mm x 600mm	£160.00		
Q	CDE125U	125Ltr Holding tank - 460mm x 290mm x 1100mm	£186.00		
Q	CDE175U	175Ltr Holding tank - 620mm x 290mm x 1100mm	£216.50		
Q	CDE250U	250Ltr Holding tank - 825mm x 325mm x 1100mm	£266.50		
Lar	Larger sizes available on request				

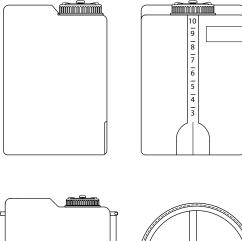
Che	mical Bund	Tanks - Rectangular - White MDPE	Price
۵	CDE50B	To suit CDE25U - 210mm h x 300mm x 500mm	£102.25
Q	CDE85B	To suit CDE50U - 300mm h x 310mm x 600mm	£130.50

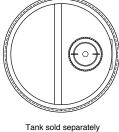
Chemical Carboy Bunds - White MDPE Pri			
٥	CDEW75U	To suit 25Ltr Carboys - 600mm h x 440mm x 300mm	£183.00

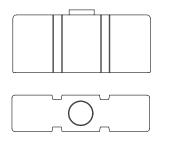
### Tank & Bund Sets

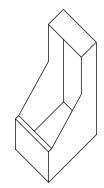
Certikin tanks and bunds can be supplied as prefabricated sets to suit your requirements.

Please see page 322 for more information or call CertiChem on 01993 778855.





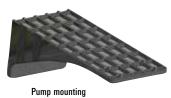






**Recommended Accessories** 

bracket - page 325





Chemical dosing pump - page 321

# **Dosing Accessories**



וח		A .	
Proi	bes, Sensors &	Accessories	Price
٥	SPETPP	pH probe - no cable	£97.7
Q	CDEERHSN6	ORP (Redox) probe - no cable	£212.2
٥	CDEEPHS	pH probe - 0.8m cable	£145.6
٥	CDEEPHM	pH probe - 4.5m cable	£153.5
Q	CDEEPHL	pH probe - 15m cable	£189.0
Q	CDEERHS	ORP (Redox) probe - 0.8m cable	£153.5
Q	CDEERHM	ORP (Redox) probe - 4.5m cable	£164.0
٥	CDEERHL	ORP (Redox) probe - 15m cable	£191.0
Q	CDEELE/PRLD	Copper/Platinum ECL6 Electrode for LD controller	s £570.0
٥	CDEELE/PRWD	Copper/Platinum ECL6 Electrode for WD controlle	rs <b>£570.0</b>
٥	CDEECL3S/10	Free chlorine amperometric probe - 0-10ppm	£1812.0
Q	CDEMC	Membrane cap & cleaning cloth to suit CDEECL3S/10	£180.0
Q	CDEES	Electrolyte solution to suit CDEECL3S/10	£110.0
Q	CDEECL6	Free Chlorine / Bromine amperometric cell - 0-10ppm	£1515.0
Q	CDEECL4	Free Chlorine / Bromine amperometric cell - 0-10ppm	£840.0
Q	CDEPEF22	5 probe holder - Free, Total, pH and temperature probes	£835.0
٥	CDEPEF1	4 probe holder - Free, pH, ORP and temperature probes	£675.0
Q	CDENFILCA	Carbon filter - 5" filter with cartridge - 6 x 8 connections	£92.0
Q	CDENFIL/60	5" Standard Pre filter with cartridge - 60 micron - 6 x 8 connections	£56.0
Q	CDENPED4	2 probe holder - pH & Redox - 6 x 8 connections	£215.0
Q	CDEPELC	In-line saddle single probe holder - pH or ORP 0.5" or 0.75"	£16.1
٥	CDEPEL	In-line tee single probe holder - pH or ORP - 0.5" or 0.75"	£17.0
٥	CDESEFLS/V	Flow sensors for pumps up to 4 Ltr / hr - includes brackets	£185.0
٥	CDESEFLS/V+	Flow sensors for pumps above 4 Ltr / hr - includes brackets	£185.0

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Eleo	ctrovalves - For	Use With Feeders	Price
۵	CDEEVLA14	Electrovalve 1/4" connections	£260.00
Q	CDEBSA38	Electrovalve 3/8" connections	£265.00
٥	CDEBSB12	Electrovalve 1/2" connections	£281.50
Q	CDEBSC34	Electrovalve 3/4" connections	£552.00

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Tubing			
۵	FT4222LD/30	4mm ID x 6mm OD LDPE tubing - 30m coil	£39.00
Q	FT4222/30	4mm ID x 6mm OD PVC tubing - 30m coil	£37.40
Q	FT4223LD/30	6mm ID x 8mm OD LDPE tubing - 30m coil	£43.70
۵	FT4223/30	6mm ID x 8mm OD PVC tubing - 30m coil	£53.50
۵	ETCHH03LD/50	10mm ID x 14mm 0D LDPE tubing - 50m coil	£285.00
٥	ETCHH03/50	10mm ID x 14mm OD PVC tubing - 50m coil	£205.00



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G	PEEWF	500ml Steripack eyewash fluid - bottle	£8.20
Q	CDEPPE	Basic PPE pack - gloves, goggles, full face mask	£87.00
Q	CDEPPEDLX	Deluxe PPE pack - gloves, goggles, full face respirator including canister	£325.00
Q	PEGL	18" long arm gauntlets - pair	£7.50
G	PEGS	Pair of 11" gloves	£5.85
G	PEGG	Goggles - chemical resistant / fog free	£9.80
G	PEES	Emergency eyewash station	£38.85
G	PEAPR	Polypropylene apron, bib with ties	£10.70
G	PERSP	3M Respirator, Ref 4277 includes Pre-filter & retainers	£50.00
G	PEFFM	Full face mask with canister respirator	£240.00
G	PEFFMC	Refill canister for PEFFM respirator	£45.00
E	PE069	Shoe covers (disposable) 50 pairs per bag	£7.50

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Q	LBL01	Sodium hypochlorite label	£8.60
۵	LBL02	Sodium carbonate (soda ash) label	£8.60
٥	LBL03	Sodium bisulphate label	£8.60
٥	LBL05	Hydrochloric acid label	£8.60
٥	LBL08	Calcium hypochlorite label	£8.60
G	SPILL01	Spill kit - small - includes 25 pads, 4 socks, 2 cushions, 1 slab, disposable bag & tie, gloves and goggles	£89.00
G	SPILL02	Spill kit - large - as above with 50 pads	£120.00

# **Dosing Accessories**

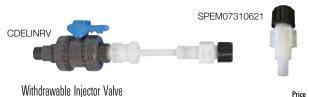


### Suction Lance & Level Control

Suction Lance & Level Control			Price
۵	CDELASP/V40	Carboy lance & level control - 45cm - 4 x 6 connections	£145.00
Q	CDELASP/V6	Suction lance & level control - 63cm - 4 x 6 connections	£131.00
Q	CDELASP/V7	Suction lance & level control - 72cm - 4 x 6 connections	£131.00
٥	CDELASP/V9	Suction lance & level control - 90cm - 4 x 6 connections	£152.00
٥	CDELASP/V10	Suction lance & level control - 115cm - 4 x 6 connections	£152.00



Multifunction Pressure Valve			Price
۵	CDEMFKV	Multifunction pressure valve pump mount - 4 x 6 conns	£116.00
Q	CDEMFKSV	Multifunction pressure valve wall mount - 4 x 6 conns	£116.00



	,		11100
۵	SPEM07311631	Double Junction injection valves - 1/2" 4 x 6 connections	£47.10
Q	SPEM07310621	Standard injection valve - 1/2" 4 x 6 connections	£33.55
Q	SPEM07310841	Floc injection valve - 1/2" 4 x 6 (5 bar)	£37.80
Q	CDELINRV	Withdrawable injection valve - 1/2" 4 x 6 connections	£140.00
Q	SPEMDROD	Rodable injection valve - 1/2" 4 x 6 connections	£399.50



Mo	unting Bracket		Price
۵	CDESTVN	Wall / foot mounted pump mounting bracket	£21.50



۵	CDE07601471	Level probe 4 x 6 - with filter and BNC connector	£51.55
٥	CDE07602001	Level probe 6 x 8 - with filter and BNC connector	£51.55

Level Probes



But	fer Solutions		Price
۵	CDEBSD	Buffer Solution ORP Redox 650mV - 55ml	£12.85
٥	CDEBSA	Buffer Solution pH 4 - 55ml	£6.95
۵	CDEBSB	Buffer Solution pH 7 - 55ml	£6.95
٥	CDEBSC	Buffer Solution pH9 - 55ml	£6.95



Price

Electric Mixers - Single Phase	
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۵	CDEMIXV8MON630	High speed mixer (1400rpm) 630mm shaft	£590.00
۵	CDEMIXV8MON830	High speed mixer (1400rpm) 830mm shaft	£590.00
Q	CDEMIXV8MON980	High speed mixer (1400rpm) 980mm shaft	£642.00
٥	CDEMIX8MON630	Low speed mixer (65 or 200rpm) 630mm shaft	£810.00
Q	CDEMIX8MON830	Low speed mixer (65 or 200rpm) 830mm shaft	£810.00
Q	CDEMIX8MON1100	Low speed mixer (65 or 200rpm) 1100mm shaft	£950.00

Please specify rpm required at the point of ordering low speed mixers. High speed recommended for use with Cal Hypo.



Ele	Electric Mixers - Three Phase		Price
۵	CDEMIXV8TRI630	High speed mixer (1400rpm) 630mm shaft	£624.00
Q	CDEMIXV8TRI830	High speed mixer (1400rpm) 830mm shaft	£640.00
Q	CDEMIXV8TRI980	High speed mixer (1400rpm) 980mm shaft	£640.00
٥	CDEMIX8TRI630	Low speed mixer (65 or 200rpm) 630mm shaft	£857.00
Q	CDEMIX8TRI830	Low speed mixer (65 or 200rpm) 830mm shaft	£857.00
Q	CDEMIX8TRI1100	Low speed mixer (65 or 200rpm) 1100mm shaft	£950.00

Please specify rpm required at the point of ordering low speed mixers. High speed recommended for use with Cal Hypo.



Price

# Safety & Containment

Every site, regardless of type and size, should give consideration to the safety of its operators and users. This is especially important within the plant room. There is a wide variety of Personal Protective Equipment (PPE) available. Risk assessments should be generated to cover every aspect of chemical dosing equipment operation. Guidance notes are available from a number of sources such as SPATA, BISHTA and HSE.





гu	sonal Protectiv		Price
G	PEEWF	500ml Eyewash fluid bottle	£8.20
Q	CDEPPE	Basic PPE Pack- gloves, goggle and full facemask	£87.00
Q	CDEPPEDLX	Deluxe PPE Pack- gloves, full face respirator & canister	£325.00
Q	PEGL	18" Long arm gauntlets - pair	£7.50
G	PEGS	11" Gloves - pair	£5.85
G	PEGG	Goggles - Chemically resistant / fog free	£9.80
G	PEES	Emergency Eyewash Station	£38.85
G	PEAPR	Polypropylene apron with ties	£10.70
G	PERSP	3m Respirator including pre-filter	£50.00
G	PEFFM	Full face Respirator - includes canister	£240.00
G	PEFFMC	Refill canister for full face respirator	£45.00
E	PE069	Disposable shoe covers - 150 pairs	£7.50

Spi	II Kits		Price
G	SPILL01	Spill Kit - Small - Includes 25 pads, 4 socks, 2 cushions, 1 slab, disposable bag and tie, gloves and goggles	£89.00
G	SPILL02	Spill Kit - Large - as above with 50 pads	£120.00

### **GRP Enclosures**

For ultimate containment, chemical dosing equipment can be housed within GRP enclosures. Featuring a clear window, operating status can be viewed without exposure. Power and hydraulic isolators are external to the cabinet enabling control without ingress.

LED status lights can also be provided - green/red indicating status.

GRP enclosures are available in a range of sizes to house standalone chemical pumps to every aspect of a monitoring and dosing system.

GRF	<sup>o</sup> Enclosure		Price
-	GRPMO	800mm X 600mm x 300mm GRP enclosure to suit monitoring panel	POA
-	GRPPU	600mm x 500mm x 230mm GRP enclosure to suit single chemical dosing pump	POA
-	GRPLED	LED status lights - monitoring panels only	POA

Use of GRP enclosures will require on site pipe work modification - please speak with the CertiChem team for more information.

### **Chemical Dosing Questionnaire**



Basic Details
Pool: Spa: Hydrotherapy: Indoor: Outdoor: Domestic:
Capacity (m3) Turnover rate (hours) Commercial:
Max Daily Max peak bat Heavy
Any other relevant information (water features, flumes, hydro- therapy, paddling pool etc)
Total Alkalinity (ppm)   Total dissolved so dids TDS (ppm)   Calcium hardness (ppm)   pH
Chemical Requirements: (please specify)Currently In UseRequested
Sanitiser: (Sodium Hypochlorite, Calcium Hypochlorite etc)
pH Correction: (Sodium Bisulphate, Hydrochloric Acid, CO2 etc)
Ozone:
Additional Chemicals / Equipment: (Cyanuric Acid, UV plant etc)
Flocculant Dosing: (PWTAG guidance recommended against floc dosing with high rate filters)
Plant Room:
Plant room is ABOVE the pool / spa level Plant room is BELOW the pool / spa level
Space limitations or Audible alarm (buzzer etc) Remote alarm (SMS,Email)
access issues? Visual alarm (flashing lights) Remote Connectivity (PC/MAC)
On Site Support Site Address:
Pre-site visit required (recommended)
Installation, commissioning & training rqd
Other comments / information

**Finished?** You can either Fax to 01993 778869 or Email: certichem@certikin.co.uk, the completed form to the CertiChem team. If you have any questions contact the team on 01993 777200.



# The UK's leading supplier of equipment for professional therapists

Affinity is synonymous with quality. Therapy Essentials have been providing couches and associated equipment to the therapy industry for over 15 years.

Our range has been carefully created to offer professional products that span the spa and beauty, holistic and sports and medical markets.

With client comfort and therapist wellbeing our prime consideration, our ergonomic designs have been manufactured to the highest quality, using only the best raw materials to produce a large range of couches that are enjoyed in leading spas, hotels, salons, sports clubs, hospices and wellness centres both in the UK and across the globe.

The range can be viewed on pages 386 to 395 in the price list.

Call Maxine or Bridget on 01993 777770 or E: Therapy-essentials@certikin.co.uk for more details.



