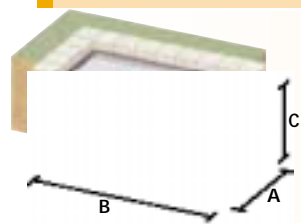




clearwater systems

We have been guaranteeing clearwater for over 21 years

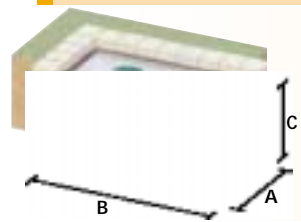
Calculate how much water a rectangular shaped pond will hold



$$A \text{ metres} \times B \text{ metres} \times C \text{ metres} = \text{Volume m}^3$$

$$\text{Volume m}^3 \times 1000 = \text{Litres Capacity}$$

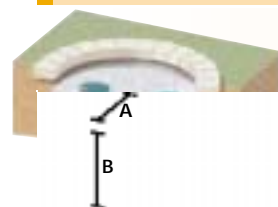
Calculate how much water a triangular shaped pond will hold



$$(A \text{ metres} \times B \text{ metres} \times C \text{ metres}) \div 2 = \text{Volume m}^3$$

$$\text{Volume m}^3 \times 1000 = \text{Litres Capacity}$$

Calculate how much water a circular shaped pond will hold



$$A \text{ metres} \times A \text{ metres} \times 3.14 = \text{Surface Area in m}^2$$

$$\text{Surface Area in m}^2 \times B \text{ metres} = \text{Volume m}^3$$

$$\text{Volume m}^3 \times 1000 = \text{Litres Capacity}$$

Why Filtration?

The typical garden pond easily becomes polluted because:

- Fish waste and decaying vegetation pollute the water.
- It has little water movement.
- It is shallow and therefore warm, encouraging algae blooms.

A lack of water movement, plus the presence of algae, can reduce oxygen to dangerously low levels. A Hozelock Cyprio filtration system will help create and maintain a natural balance in a garden pond - using our advanced technology to provide natural processes with a helping hand.

Sizing a pond and the system required

Achieving clear water and qualifying for the Clearwater Guarantee depend on having the correctly sized filtration system.

The products you need are dependent on :

- **The size of your pond**
- **The number of fish**
- **The temperature of the water** - warmer water encourages algae to grow, increases pollutants and reduces oxygen. If in warm climate add 15% to actual pond volume. If in hot climate add 35% to actual pond volume
- **Pond Depth** - average pond water depth less than 0.75m (2'6") Add 25% to actual pond volume
- **Pond Location** - if in full sun add 25% to actual pond volume

Selecting the right equipment 'on-line'

Visit the interactive pond selector on our website;

www.hozelock.com

Simply enter your pond details and it will give you a detailed recommendation covering all the factors above.



compact filtration systems

Biological pond filters with built-in ultra violet clarifier for clear and healthy pond water

A compact filtration system is for people who want a convenient filtration system, which will not detract from the beauty of their pond design. Two products - the Bioforce UVC pressurised filter and the Titan solids handling pump, will look after ponds up to 18000 litres (4000 gallons), and form the basis of our compact filtration philosophy.

ecoclear™
The Compact Filtration System for clear and healthy pond water

1 Solids Handling Pump

The range of specially developed Titan solids handling pumps move polluting solids out of the pond into the filter where they can easily be removed.

2 Biological Pond Filter with integral UVC

The Bioforce UVC is small and can be hidden in the ground. It is very easy to install and simple to maintain.

Being pressurised by the pond pump, water can be pumped up from the Bioforce to the top of a waterfall.

The Ecopower and Ecomax gravity pond filters combine mechanical, biological and UV-filtration in one compact unit to guarantee clear and healthy pond water. Unlike the Bioforce, the Ecopower and Ecomax, are not pressurised from the filter and water returns to the pond by gravity.

The EasyClear™ Clearwater and Fountain Pump is the easy way to have a clear and healthy pond with a fountain. This fully integrated unit has a 2 in 1 action:

1 Clear and healthy water

- The filter sieves out solids that make the water cloudy and makes the water healthy for fish and plants.
- The ultra violet clarifier eliminates green water.

2 Fountain

- The fountain creates a decorative display with a choice of three fountain heads.

The correctly sized compact filtration package will qualify for our unique Clearwater Guarantee.



Part number	Description	Product Bar Code	Pack Qty
1326	Ecoclear 2200	50 10646 03282 7	1
1327	Ecoclear 4500	50 10646 03491 3	1
1328	Ecoclear 9000	50 10646 03493 7	1
1329	Ecoclear 18000	50 10646 03679 5	1

Model	Filter	Pump
Ecoclear 2200	Bioforce 2200uvc	Titan 2000
Ecoclear 4500	Bioforce 4500uvc	Titan 3000
Ecoclear 9000	Bioforce 9000uvc	Titan 5500
Ecoclear 18000	Bioforce 18000uvc	Titan 12000



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P e r f e c t P o n d s M a d e S i m p l e



ecopower™

Combined filter and UVC

The affordable answer for clear and healthy water in garden ponds



Ecopower 2200
Ecopower 4500



The Ecopower is suitable for ponds up to 9000 litres (2000 gallons) and it is easy to disguise when positioned near the pond.

- 1 Water enters the unit and passes close to a UV-lamp, separated from it by a quartz sleeve. UV light makes algae clump together so it can be caught by the foam.
- 2 Water leaves the UV chamber via a spray head, which aerates the water for a high oxygen content.
- 3 Solid particles in the water are trapped on a foam sheet.
- 4 Almost solids free, the water passes through plastic biomedica where beneficial bacteria cleanse pollutants. The amount of biomedica contained in the filter increases in proportion to the size of filter/pond.
- 5 Clear healthy water then passes up an outlet tube and back into the pond.
- 6 Integral carry handles are positioned on the side of the filter to make the filter easy to lift if maintenance is required.
- 7 Viewing hatch to observe the internal operation of the filter, in particular whether any maintenance is needed.



ecomax™

Combined filter and UVC

A technologically advanced and highly efficient mechanical and biological filter for garden fish ponds



Ecomax 2200
Ecomax 4500

The Ecomax has been designed with advanced filtration technology for the pondkeeper who wants a crystal clear pollutant free pond.

- 1 Water enters the unit and passes close to a UV lamp, separated from it by a quartz sleeve. The UV light makes algae clump together so it can be caught by the foam.
- 2 In-built 'turbulator' - the flow of the water through the UVC, created by the product design, increases the unit's efficiency by even exposure of the water to the UV light and eliminates the possibility of air locks.
- 3 Water leaves the UV chamber via a venturi, which aerates the water for a high oxygen content. The venturi's position in the filter is very important - the water is oxygenated before it enters the biomedica, which significantly increases the effectiveness and activity of beneficial bacteria. This results in a highly efficient breakdown of harmful pollutants in the water.
- 4 The water passes through plastic biomedica where beneficial bacteria cleanse pollutants. The amount of biomedica contained in the filter has been scientifically measured and tested to ensure optimum biological filtration performance and increases in proportion to the size of filter/pond to support a greater number of fish.
- 5 A fine layer of foam traps any remaining solid particles.
- 6 Clear healthy water then passes back into the pond (via two outlets on the Ecomax 9000).
- 7 A drain is built in to flush out sludge, which collects at the bottom of the filter. The floor of the filter is sloped so sludge collects around the drain for easy removal.
- 8 Integral carry handles are positioned on the side of the filter to make the filter easy to lift if maintenance is required.
- 9 Viewing hatch to observe the internal operation of the filter, in particular whether any maintenance is needed.



Combination Filters Performance Data

Model	Max Litres (Max Gallons)	Max Fish CM (Inches)	LPH (GPH)	UVC	
Ecopower 2200uvc	2200LTR (500GALS)	79 cm (2' 08")	1100LPH (250GPH)	6w	20 - 25 mm
Ecomax 2200uvc	2200LTR (500GALS)	107 cm (3' 06")	1100LPH (250GPH)	6w	20 - 25 mm
Ecopower 4500uvc	4500LTR (1000GALS)	157 cm (5' 05")	2250LPH (500GPH)	8w	20 - 25 mm
Ecomax 4500uvc	4500LTR (1000GALS)	212 cm (6' 10")	2250LPH (500GPH)	8w	20 - 25 mm
Ecopower 9000uvc	9000LTR (2000GALS)	322 cm (10' 10")	4500LPH (1000GPH)	16w	40 mm
Ecomax 9000uvc	9000LTR (2000GALS)	435 cm (14' 03")	4500LPH (1000GPH)	16w	40 mm

Part number	Description	Product Bar Code	Pack Qty
1347	Ecopower 2200uvc	50 10646 03680 1	1
1348	Ecopower 4500uvc	50 10646 03681 8	1
1349	Ecopower 9000uvc	50 10646 03754 9	1
1363	Ecopower 2200 & 4500 Foam	50 10646 03828 7	2
1371	Ecopower 9000 Foam	50 10646 03830 0	2

Part number	Description	Product Bar Code	Pack Qty
1357	Ecomax 2200	50 10646 03682 5	1
1358	Ecomax 4500	50 10646 03683 2	1
1359	Ecomax 9000	50 10646 03684 9	1
1364	Ecomax Foam	50 10646 03829 4	2
1515	UV-lamp Combi Filter 6w	50 10646 04001 3	10
1516	UV-lamp Combi Filter 8w	50 10646 04002 0	10
1517	UV-lamp Combi Filter 16w	50 10646 04003 7	10





conventional filtration systems

Hozelock Cyprio was the originator of the three part conventional system for guaranteed clearwater. A simple trio of products, accurately sized for every pond up to 27,000 litres (6,000 gallons), perform a natural process to clear and purify pond water without chemicals.

Solids Handling Pump 1

The Titan or Prima XL solids handling pumps move polluting solids out of the pond into the filter where they can easily be removed.

Ultra Violet Clarifiers 2

Exceptionally effective Hozelock Cyprio Vorton Ultra Violet Clarifiers cause algae to clump together into groups too large to float. They either sink to the bottom of the pond and die or pass through the system to be removed by the biological filter foams.



3 Biological Filters

Hozelock Cyprio Biological Filters serve two main purposes. Firstly they act as a mechanical strainer for debris and clumps of algae, removing these from the pond. Secondly they create a home for billions of beneficial bacteria which digest pollutants as the water passes over them. The biological filter contains media of very high surface area to create a habitat for very high concentrations of bacteria.

The whole pond volume should pass through the filter every two hours. The system should be run 24 hours a day to keep the bacteria supplied with pollutants.

Important too, is the quality design and engineering of these products based on the Hozelock Cyprio formula comparing pond size with water flow and amounts of biomedica used.

Conventional Filters Performance Data

Model	Max Litres (Max Gallons)	Max Fish CM (Inches)	LPH (GPH)	UVC	
Ecocel 2200	2200 LTR (500 GALS)	79 cm (2' 08")	1100 LPH (250 GPH)	Vorton 2200	20 - 25 mm
Ecocel 4500	4500 LTR (1000 GALS)	157 cm (5' 05")	2250 LPH (500 GPH)	Vorton 4500	20 - 25 mm
Ecocel 9000	9000 LTR (2000 GALS)	322 cm (10' 09")	4500 LPH (1000 GPH)	Vorton 9000	20 - 40 mm
GM 6500	6500 LTR (1500 GALS)	358 cm (12' 06")	3250 LPH (750 GPH)	Vorton 9000	12 - 25 mm
GM 11500	11500 LTR (2500 GALS)	633 cm (20' 10")	5750 LPH (1250 GPH)	Vorton 14000	20 - 40 mm
GM 18000	18000 LTR (4000 GALS)	990 cm (33' 04")	9000 LPH (2000 GPH)	Vorton 18000	20 - 40 mm
GM 27000	27000 LTR (6000 GALS)	1485 cm (50' 00")	13500 LPH (3000 GPH)	Vorton 27000	20 - 40 mm



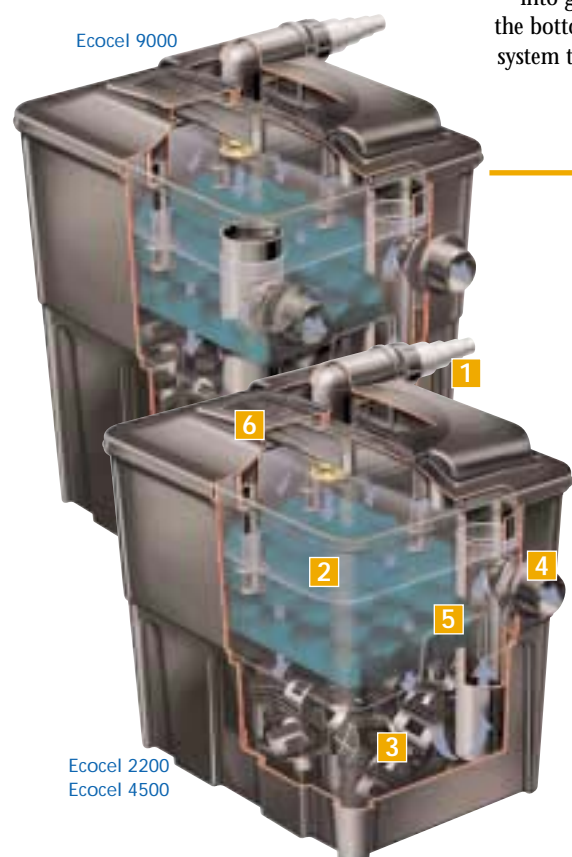
Green Machines pack three filtration techniques into a compact box, brushes, foam cartridges and plastic biomedica

So Green Machines give ideal water for healthy fish and, with a Hozelock Cyprio UVC (positioned on the lid) guaranteed clear water too

How Green Machines are so effective

- 1 Pond water enters through an aerating spray bar.
- 2 Brushes separate out larger solids.
- 3 The foam cartridges are the first biological medium. Because they are only taking small solids they don't block easily.
- 4 Water passes down the centre of the foam cartridges, through plastic Biomedica in the lower compartment and back into the pond.

Ecocel 9000



Ecocel 2200
Ecocel 4500

ecocel™

Biological pond filters

For ponds up to 9000 litres

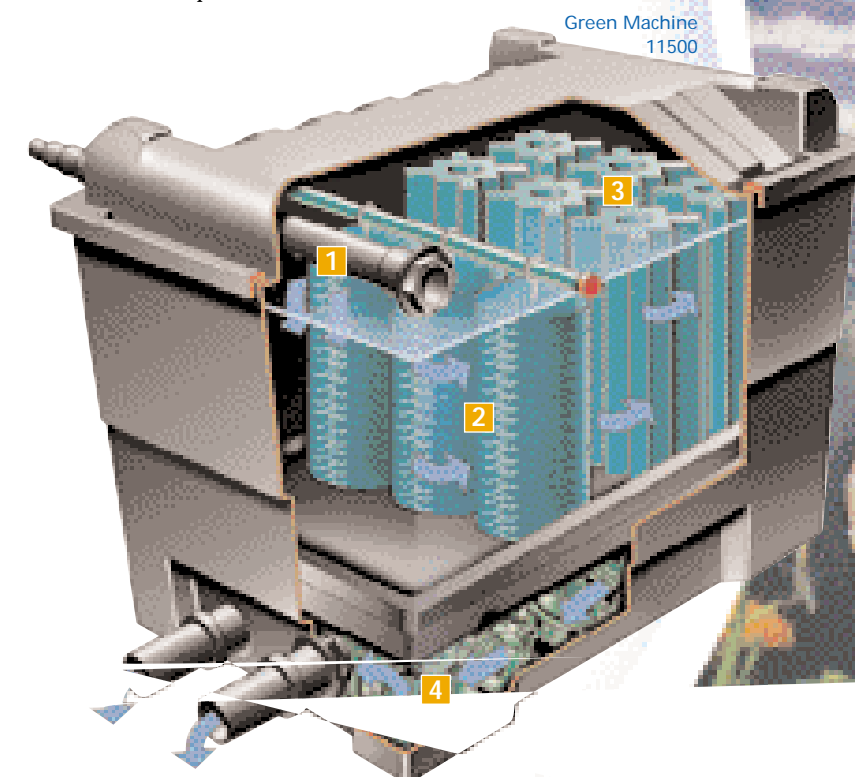
When used with a Hozelock Cyprio UVC (see pages 20-21) the Ecocel carries the Clearwater Guarantee

- 1 Water enters the unit via a spray head, which aerates the water for a high oxygen content.
- 2 Solid particles in the water are trapped in a foam sheet.
- 3 Almost solids free, the water passes through plastic biomedica where beneficial bacteria cleanse pollutants. The amount of biomedica contained in the filter increases in direct proportion to the size of the filter/pond to support a greater number of fish.
- 4 Purified water then passes up an outlet tube and back into the pond.
- 5 Integral carry handles are positioned on the side of the filter. To make the filter easy to lift if maintenance is required
- 6 Viewing hatch to observe the internal operation of the filter, in particular whether any maintenance is needed.

Part number	Description	Product Bar Code	Pack Qty
3921	Ecocel 2200	50 10646 03685 6	1
3922	Ecocel 4500	50 10646 03686 3	1
3923	Ecocel 9000	50 10646 03687 0	1
1363	Ecocel 2200/4500 Foam	50 10646 03828 7	2
1371	Ecocel 9000 Foam	50 10646 03830 0	2

green machine®

The proven filtration systems for enthusiasts



Green Machine 11500

Part number	Description	Product Bar Code	Pack Qty
1350	Green Machine 6500	50 10646 03123 3	1
1351	Green Machine 11500	50 10646 03122 6	1
1352	Green Machine 18000	50 10646 03113 4	1
1353	Green Machine 27000	50 10646 03115 8	1



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P e r f e c t P o n d s M a d e S i m p l e