## tanker irrigation

The Tanker sub soil irrigation system is the natural choice for cost-effective watering of planters, planting beds and tree pits in both exterior and interior schemes. Incredibly simple to use, all Tanker systems consist of a tank or reservoir positioned under the rootball of the plants and linked to the surface by a flexible or rigid filler pipe. Water is then transported from the tank to the soil as required via a specially designed Geotextile wick which works with any reasonably good soil or compost. Depending upon the size of the area to be irrigated, the tanks can be linked together to form a network, replicating the Earth's natural water table and providing ideal conditions for root growth.

## Arrosage par réserve d'eau

La traduction en français de 'Tanker'-réserve d'eau, est téléchargeable en format PDF sur notre site www.livingreendesign.net


## tanker irrigation

There are many proven advantages of using Tanker:

- Less frequent watering: independent research by the University of Reading has conclusively proved that plants in containers, hanging baskets or planting beds and irrigated using Tanker systems require watering only half as frequently as those planted without. Councils and landscapers have been able to slash maintenance labour budgets by using special Tanker hanging baskets, pillar and railings planters and also by retro fitting Tanker units to existing planters. For private gardens, home owners halve the burden of keeping their planters watered and can go on holiday in the summer with less worry about what they will find on their return.
- Water conservation: As water is delivered straight to the rootball only as required by the plant, Tanker systems greatly reduce the amount of water required to irrigate any plant display. Even in a sealed system, such as a planter, the documented saving is at least $30 \%$ - for exterior beds, hanging baskets and drained planters, the savings will be much greater. With water restrictions a regular feature in many areas, this aspect of the system is becoming increasingly important to our customers.
- Healthier, better looking plants: Tanker only delivers water to the roots as needed, eliminating the flood/drought cycle experienced by manually watered plants. Soil moisture is optimised and the plant does not experience water stress. The result is a denser, larger rooting system and more compact, healthier growth above
ground. Councils using the system report that the displays produced using bedding plants are the best they have ever experienced with more and larger flowers and growth so vigorous that in some cases it had to be cut back and all achieved with less than half the watering visits previously required.
- Pays for itself in 3-6 months: Depending upon the frequency of watering previously required, the labour saving alone will pay for these incredibly cost-effective units within 6 months. When you take into account that plants establish faster and are healthier longterm when watered using the system then other savings are guaranteed in plant replacement costs.



There are Tanker systems to fit almost every possible situation.

## OOATCR-CGLL

- Tanker Water Cell: sealed reservoirs for irrigating individual planters. Available in sizes from $21-12$ I. Suitable for planters up to 900 mm diameter.


## AMODULAR

- Tanker Modular: Available in both Solo (for individual planters) and Network (for larger planters and large beds). Modular units are just 50 mm thick and 120 mm wide making them ideal for trough planting, window boxes and containers where planting depth is limited. Modular Network is popular for planting beds where very large links can be constructed. Special units up to 4 m long can be specified to irrigate lawns, bowling greens, golf greens etc.


Water Cell

| Code | Litres | $Q$ |
| :--- | :---: | :--- |
| TWC2 | 2 | 220 <br> TW |
| TWC3 | 3 | $220 \times 75 \mathrm{~mm}$ |
| TWC4 | 4 | $220 \times 113 \mathrm{~mm}$ |
| TWC6 | 6 | $343 \times 80 \mathrm{~mm}$ |
| TWC8 | 8 | $343 \times 100 \mathrm{~mm}$ |
| TWC10 | 10 | $343 \times 125 \mathrm{~mm}$ |
| TWC12 | 12 | $343 \times 150 \mathrm{~mm}$ |

## Tanker Modular

| Code | Litres | $\square$ |
| :--- | :---: | :---: |
| TMS1 | 0.75 | $125 \times 120 \times 55 \mathrm{~mm}$ |
| TMS1.5 | 1.0 | $150 \times 120 \times 55 \mathrm{~mm}$ |
| TMS2 | 1.2 | $200 \times 120 \times 55 \mathrm{~mm}$ |
| TMS2.5 | 1.5 | $250 \times 120 \times 55 \mathrm{~mm}$ |
| TMS3 | 1.8 | $300 \times 120 \times 55 \mathrm{~mm}$ |
| TMS4 | 2.4 | $400 \times 120 \times 55 \mathrm{~mm}$ |
| TMS5 | 3.0 | $500 \times 120 \times 55 \mathrm{~mm}$ |
| TMS6 | 3.6 | $600 \times 120 \times 55 \mathrm{~mm}$ |
| TMS7 | 4.2 | $700 \times 120 \times 55 \mathrm{~mm}$ |
| TMS8 | 4.4 | $800 \times 120 \times 55 \mathrm{~mm}$ |
| TMS10 | 6.0 | $1000 \times 120 \times 55 \mathrm{~mm}$ |
| TMS12 | 7.2 | $1200 \times 120 \times 55 \mathrm{~mm}$ |
| TMS15 | 9.0 | $1500 \times 120 \times 55 \mathrm{~mm}$ |
| TMS20 | 12.0 | $2000 \times 120 \times 55 \mathrm{~mm}$ |
|  |  |  |
| Network |  |  |
| TMN1 | 0.75 | $125 \times 120 \times 55 \mathrm{~mm}$ |
| TMN2 | 1.2 | $200 \times 120 \times 55 \mathrm{~mm}$ |
| TMN3 | 1.8 | $300 \times 120 \times 55 \mathrm{~mm}$ |
| TMN4 | 2.4 | $400 \times 120 \times 55 \mathrm{~mm}$ |
| TMN5 | 3.0 | $500 \times 120 \times 55 \mathrm{~mm}$ |
| TMN6 | 3.6 | $600 \times 120 \times 55 \mathrm{~mm}$ |
| TMN7 | 4.2 | $700 \times 120 \times 55 \mathrm{~mm}$ |
| TMN8 | 4.4 | $800 \times 120 \times 55 \mathrm{~mm}$ |
| TMN10 | 6.0 | $1000 \times 120 \times 55 \mathrm{~mm}$ |
| TMN12 | 7.2 | $1200 \times 120 \times 55 \mathrm{~mm}$ |
| TMN15 | 9.0 | $1500 \times 120 \times 55 \mathrm{~mm}$ |
| TMN20 | 12.0 | $2000 \times 120 \times 55 \mathrm{~mm}$ |
| Additional modular sizes up to 4 metres long available |  |  |
| on request. |  |  |

## tanker irrigation

## CYLINDCR

- Tanker Cylinder: Like Modular, Cylinder is available in Solo and Network forms but its larger, circular calliper lends its use to very large tree planters, tree pits, car park beds, roundabouts etc.


Tanker Cylinder

| Code | Litres | $\square$ |
| :--- | :---: | :---: |
| TCS3 | 3 | $330 \times 110 \mathrm{~mm}$ <br> TCS6 |
| TCS8 | 8 | $660 \times 110 \mathrm{~mm}$ |
| TCS9 | 8 | $800 \times 110 \mathrm{~mm}$ |
| TCS12 | 12 | $900 \times 110 \mathrm{~mm}$ |
| TCS15 | 15 | $1500 \times 110 \mathrm{~mm}$ |
| TCS20 | 20 | $2000 \times 110 \mathrm{~mm}$ |

Network

| Network |  |  |
| :--- | :--- | :--- |
| TCN3 | 3 | $330 \times 110 \mathrm{~mm}$ |


| TCN6 | 6 | $660 \times 110 \mathrm{~mm}$ |
| :--- | :---: | :--- |
| TCN8 | 8 | $800 \times 110 \mathrm{~mm}$ |
| TCN9 | 9 | $900 \times 110 \mathrm{~mm}$ |
| TCN12 | 12 | $1300 \times 110 \mathrm{~mm}$ |
| TCN15 | 15 | $1500 \times 110 \mathrm{~mm}$ |
| TCN20 | 20 | $2000 \times 110 \mathrm{~mm}$ |

Water Level
Indicator

- Tanker Water Level Indicator: For use in interior landscaping, the indicators are variable straight tubes fitted with a ball float and rod that provide an excellent indication of the depth of water at the base of any planter - perfect for Hydroculture and halfhydroculture growing systems. They are also useful in large sealed tree planters to indicate if there is excess water in the planter. Also available as a filler pipe with a removable lid and no indicator mechanism.


Each system can be specified with a number of accessories to fit different requirements.

- Filler pipes: A no cost choice of flexible or rigid filler pipe is available on both Water Cell and Modular Tanker systems. The flexible pipe is supplied in lengths up to 50 m and can be cut to any size (see page 266). As it can also be bent around corners, it is the perfect choice for larger tree planters, for most exterior applications and for unusual size planters. The flexible pipe can be fitted with a water level indicator which is manually cut to size. Rigid pipes are prefitted with a ball float indicator, can be purchased in 5 cm incremental lengths and are simply pushed into the tanks for fitting, making this the best and simplest solution for the majority of interior planters. Tanker Cylinder can only be fitted with flexible pipe and cannot be fitted with a water level indicator - however levels can still be read using a Dip Stick (see page 266).
- Caps: A choice of caps is available including Freeflow, Standard and Funnel. The Freeflow cap was designed specifically for use by interior landscapers. Open to the air for maximum soil aeration it is tamper proof and attaches securely to either the rigid or flexible pipe. The cap does not open and instead water is poured through a gate of specially shaped fins which are profiled to guide the water freely down the filler pipe without splash back from either bowser or watering can. The cap also features space to add a full colour bespoke advertising message - usually a company logo plus telephone number and web address. Freeflow caps also contain the water level indicator rod which is viewed through the fins and must be used with both rigid and flexible filler pipe where a water level indicator mechanism is fitted. Standard caps are the usual choice for exterior use or where a water level indicato is not required. The cap simply pushes over the end of the filler pipe making a very discrete closure. The Funne is essentially an open version of the Freeflow cap and is fitted as standard to hanging baskets and pillar planters. A cover cap is available for the funnel making it a suitable alternative to the standard cap.

Rigid Filler Pipe

| Code | $\square$ | $\square$ |
| :--- | :---: | :---: |
| RFP25 | 32 mm | 250 mm |
| RFP30 | 32 mm | 300 mm |
| RFP35 | 32 mm | 350 mm |
| RFP40 | 32 mm | 400 mm |
| RFP45 | 32 mm | 450 mm |
| RFP50 | 32 mm | 500 mm |
| RFP60 | 32 mm | 600 mm |
| RFP70 | 32 mm | 700 mm |
| RFP100 | 32 mm | 1000 mm |

Accessories



## tanker irrigation

Wick: Tanker Wick are geotextile strips fitted to every Tank and are the heart of the system. As they are manufactured from a special combination of woven plastics, they will never deteriorate when left undisturbed. However where frequent replanting of planters is necessary, for example, hanging baskets and containers planted with bedding plants, it may become necessary to replace the wicks after a number of years. This can easily be carried out for all the Water Cell systems and wicks are supplied for each unit size precut to length. Modular systems, due to their design, are much less likely to require new wicks but if eventually this does become necessary then the units can be returned to us for refurbishment.

- Dip Sticks: Tanker Dip sticks are flexible capillary rods tha can be put down the filler tube and pulled out to show the exact depth of water in that tank or planter. For use where water level indicators cannot be used and particularly suitable for large tree planters. Custom sizes available.
- Floats: Polystyrene floats suitable for use with the flexible filler pipe only. Cut to size. Supplied FOC with new flexible filler pipe installations where requested.
- Stoppers: These are used to seal the ends of Network units at the end of a run or to convert a network unit into a Solo tank. Supplied FOC with every new Network installation.
- Flexible pipe: Available in up to 50 m lengths, this is both the connecting pipe between Network Tanks and also an optional filler tube instead of the rigid pipe system. Appropriate lengths are supplied FOC with new Solo and Network systems where required.


## Accessories




Flexible filler
or Connecting pipe
per metre
" In summary, planters containing Tanker systems will save you half your costs of watering while providing a more attractive, healthier plant with a much stronger and better developed root system."

Tanker was invented some 25 years ago and at least two installations from that period survive and are still functioning perfectly today. However, to further prove the effectiveness of the system, and in particular its potential to dramatically cut the costs of watering seasonal exterior displays, Tanker has recently been the subject of intensive research at the world renowned University of Reading Horticultural Technology Unit.

The trials were carried out on typically planted interior office plant displays and also on contractor style hanging baskets, window boxes and exterior planters. In every case identical control units were set up without Tanker being fitted. All the units were watered whenever the soil moisture content fell below a predetermined point as measured by use of a Theta probe. The exterior planters were assessed for 70 days and the interior for 5 months before a destructive analysis was carried out to look at the root systems and the fresh weights of the plant material in each. The results are shown in the panel opposite and conclusively prove that fitting Tankers will both save money on maintenance and improve plant quality.


## Proof Positive

A summary of results of trials conducted at the University of Reading summer 2004 on hanging baskets, window boxes, patio planters \& interior displays.

- The use of Tanker systems in all situations tested halved the number of watering visits required to maintain the plants.
- The amount of moisture in the soil was always more controlled with Tanker systems present - they were less likely to be either very wet or very dry promoting better plant development
- The plants in the Tanker watered units looked visually more pleasing than those in the control units having a better, more compact growth pattern.
- The root systems of the Tanker grown plants were far better developed than those that were top watered only. In exterior trials, the roots reached the bottom of the planters and formed dense masses while also being thicker and fleshier.
- Interior trials using Tanker or top watering alone proved that Tanker watered units required at least $30 \%$ less water and still produced a better display.

