SWIG AWARDS 2015 Sept 2015

Aquality - Product Category entry

Define What - Describe the innovative water saving product developed. It may also be an improvement to an existing product which delivers further water savings.

Define Why - Explain why the product is novel in comparison with similar generic products currently on the UK market. Specify how the product contributes to sustainable water use by stating water and energy consumption. Where possible, provide independent verification, case studies and other evidence of performance.

Define How - Clarify the application(s) of the product and set out its limitations of application (please supply full installation, maintenance and user instructions in the English language).

How Much? - Please provide information regarding both unit price and typical fully installed costs, along with any running or maintenance costs.

Date of Launch in UK - Please provide the actual or proposed launch date.

Water or Building Regulations - Are you aware of any issues with your product regarding Water or Building Regulations? Please justify your response.

Approval - Has your product been approved and/or certified by any independent authorities? If so, please provide details and references.

What:

ASC (Aqua Storm Control) powered by Opti is a system based on a cloud technology platform that uses sensor data, forecast information, & modeling to actively control, maintain, and monitor, water infrastructure.

Why:

The UK suffers two extremes – flood and drought

On the one hand we get too much of it. Flooding causes severe disruption and significant cost almost every year.

On the other hand we do not have enough water. Droughts are not uncommon and the Environment Agency predicts more severe water shortages until 2050 (**Water for People and the Environment" EA report 2013)**

Tanks play a vital role

In the case of flooding the tanks installed should be empty to take the run-off in periods of heavy rain. In the case of drought the tanks should be full to provide stored water for general use. In the past these have been treated as quite separate issues and two tanks have been installed to manage the rainwater in different ways with serious cost implications.

Storm water control is obligatory in the UK

The flood prevention regulations require that all new buildings deal with storm water run-off on site – so large attenuation tanks are often a necessity. These tanks are designed to take a 100 year storm event or more – a high cost for a rare event.

Now with intelligent water management that same attenuation tank can be used as a rainwater storage tank providing a natural water supply for the whole period between 100 year storm events.

One tank, not two and much better use of resources at a significant lower cost.
Aqua-Storm-Control gives you the combined benefits of better water management.

The benefits of ASC to property Designers, Installers, Property Owners and the greater Community are:

- One tank not two so an immediate saving on tanks, construction and digging
- Less space required and the dormant attenuation tank becomes live and useful
- A rainwater harvesting system added at very low cost and in use and making savings from day one
- Online performance monitoring of the rainwater harvesting system shows the savings made
- *Existing* attenuation tanks could be adapted to manage rainwater profitably

How:
The ASC internet platform collects information from the local tank system e.g. water level and hardware status as well as weather data. It computes the demand for storage for an storm event and activates the drain valves or pump sets accordingly making sure the tank volume is used for rainwater harvesting storage (non-potable supply) when possible or flood protection (attenuation) when needed.

How much:
The price depends on how many hardware elements are needed and how many data streams are used to operate the system. Usually the hardware for a single tank system is around £3,000. £1,000 are a one off fee for programming the software and set-up user account etc. A yearly licence fee of £1,800 for up to 100m3 tank is also applicable.

Date of launch in the UK: May 2015

Water Regulations & Building Regulations:
We are not aware of any issues regarding the above regulations but we are currently approach City of London (Building Control Office) in order to get a feed-back, if there could be any issue.

Approval: No

Attachments:
ASC leaflet
Power Point presentation