

HEATSAVR IS PUT TO THE TEST

Heatsavr, the original liquid pool cover, was first introduced to the UK leisure industry almost 10 years ago. During this time, a number of commercial pool operators and domestic owners have adopted the technology and enjoyed considerable energy savings, as well as the benefit of a simple pool cover system that works 24 hours a day. However, for pool managers and council heads who are in control of expenditure where the pool itself has limited controls, using Heatsavr may feel like a leap of faith as the energy savings may not be easily extracted. Furthermore the product is odourless, tasteless and completely invisible, tempting pool managers to wonder if it is working at all. It is unsurprising that some pool managers seek credible analysis to prove that Heatsavr really can save energy. However carrying out product trials can be expensive and time consuming.



Brenntag decided to approach EEVS, the UK's leading provider of independent performance measurement and verification (M&V) services for energy, water and waste efficiency products and services, to carry out analysis on a client's energy data. The objective was to determine if, through independent verification, Heatsavr could be proven to offer customers a level of energy saving worth investing in. Pool boiler readings were supplied to EEVS by Brenntag's client, Hoburne Holiday Parks in Torbay. The readings related to weekly gas consumption for the pool for a 13 week period between April and July in 2010 and 1 year later, in 2011, when Heatsavr was in use. Taking into consideration the external air temperature during these 2 time periods, Heating Degree Days were used to determine a base temperature on which to compare Heatsavr's ability.

The Hoburne site in question was a deck level pool that had VSDs linked to humidity. There were no changes to the fabric of the building during the 2 time periods so no known external factors affecting the results. EEVS was able to determine from the data provided that the site had benefitted from a reduction in gas usage during the 13-week period in 2011 of 56,509kwh. Using a commercial gas price of 2p per kwh, this equated to a financial saving of £1130, equivalent to an impressive 21.7% reduction in gas usage. On a cumulative basis the reduction in gas consumption would be equivalent to approximately £4500 per annum.

The Hoburne site could have enjoyed even greater savings by reducing the air heating system at night when the pool was closed. The report does not evaluate the associated savings on water consumption either as this data was not available for analysis.

Based on a saving of 56,509kwh, the Hoburne site also produced the equivalent of 10.5 tonnes less CO₂ during this time period, or 42 tonnes on an annualised basis.

Heatsavr works by slowing evaporation from the pool's surface. The Heatsavr monolayer spreads across the water and traps energy and moisture within the pool. In an indoor pool, energy savings relate not

only to pool water heating but also to the ability to turn down the dehumidification system due to the reduced evaporation. Heatsavr has to be added to the pool on a daily basis to maintain its effectiveness. This is because Heatsavr biodegrades – it has what is called a 2 day half life – which means that in 2 days 50% of it has biodegraded.

The EEVS report is available from Brenntag to anyone who is genuinely interested in saving energy and CO2 output from within their pool. Brenntag chose to work with EEVS due to their credibility within the M&V sector. EEVS was the first UK adopter of the International Performance Measurement and Verification Protocol (IPMVP), the leading global standard. EEVS is also certified by BSI to ISO 9001:2008.

In providing customers with the independent analysis that they have been seeking, Brenntag hopes to be able to deliver energy saving benefits and ultimately, peace of mind, to a greater number of commercial operators across the UK. Pool managers should have confidence in the findings and recognise that whilst invisible, Heatsavr continues to work throughout the day and night, saving energy and enabling them to focus on other cost saving initiatives within their site.

For further information on EEVS and the services offered, please visit www.eevs.co.uk
Please contact Peter Marshall of Brenntag UK Ltd for advice on energy, water and CO2 savings with Heatsavr. Tel: 0113 3879200 or 07920 589488.