

CASE STUDY



SolRnett brings solar system back to life

Background: Griffiths Air Conditioning has been in business since 1999 focusing on Air Conditioning and heat pumps. In more recent years they have specialised in the renewables market, installing Solar panels (PV and Thermal) and Heat Pumps (Air and Ground Source).

The Customer: Sir Robert McAlpine, an existing commercial customer for air conditioning, spoke to one of the Griffiths engineers about a Solar Thermal system on a private house which had been experiencing some problems. Griffiths were asked to have a look at the problem.



The System: Upon investigation the engineer found that there had been degradation to the fluid originally used in the system (MPG based), which appeared like a sticky tar like residue. This type of problem can sometimes occur when a building is left empty and the system continues to receive energy from the sun. With no outlet for the heat, the system shuts the pump down and slowly heat builds up in the fluid to a point where it degrades. In this particular system it was later found that the purge pump used on installing this equipment had been insufficient and the fluid had stagnated due to air pockets. This had caused the pump to be ineffective. Until recently the only solution to systems with this type of problem has been to completely replace the panels and other system parts – a costly exercise.

The Solution: Griffiths Air Conditioning used the SolRnett product from Climalife, which had a dramatic effect, cleaning the system and enabling them to re-charge with fresh fluid using a suitable purge pump to ensure that no air locks were contained in the system.

SolRnett has been formulated by Climalife to clean Solar Thermal systems where the fluid used has degraded or caramelised. It can remove tarry deposits and return a system to use, quickly and very cost effectively. The product is readily available from Climalife in the UK.



Matt Young, Technical Manager at Griffiths Air Conditioning, provided the following comments:

'We had been pointed in the direction of SolRnett a while ago, by Climalife. We have confidence in them to know that SolRnett would be a viable solution to this problem'.

'We left the solution circulating for approximately 1 hour and when the system was drained we found that SolRnett had completely neutralized the degraded glycol, it wasn't even sticky to touch!.

'SolRnett was very easy to use, we first flushed with water, which came back clear, not moving any of the residue, we then followed the SolRnett product data sheet and as soon as it was added to the water the solution turned black, so we knew it was working really well'.

'We would definitely use SolRnett again in similar circumstances. We would also use the Greenway Fluid as it can operate to higher temperatures, with less likelihood of degradation on this scale, it wasn't used on this occasion as the end user had already purchased other product.'

Conclusion

SolRnett is quickly establishing itself as a proven way to quickly, easily and effectively clean a Solar Thermal system that has overheated or where the thermal fluid has undergone degradation or caramelisation.

Renewables specialist, John Westerman at Climalife UK commented: "Solar Thermal systems are becoming increasingly popular but can sometimes suffer from blockages caused by the premature degradation of a heat transfer fluid. This case study demonstrates the excellent performance capability of Climalife's SolRnett cleaner that can create a sound basis on which to load the system with a good quality heat transfer fluid."

For further information please contact: Mel Summers, Marketing Co-ordinator for Climalife in the UK.

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