

Physical Water Conditioners



- * Value Engineering at its Best
- * Prevents Limescale Forming
- * Removes Existing Scale, Reducing Energy Costs
- * Uniquely Proven to Partially Soften Hot Water
- * Suitable for all Pipe Sizes up to DN150

Continued Professional Development

Lifescience Products are the specialists in physical water treatment and have conducted a considerable amount of original research in the field. Some of this is published but much of it unpublished. Our face to face presentation gives us the opportunity to talk frankly about the best (and worst) of this technology and where it can be used effectively. It provides all the information a consultant or RSL needs to specify with confidence and contractors to install correctly.

Lifescience is the only CIBSE and CIPHE accredited provider of CPD in the field of physical water conditioning. For further information and to arrange a date, please contact Jonny Seccombe or Darren Stacey on 01608 811707 or sales@lifescience.co.uk

WATER-KING THE SOFTENER

ALTERNATIVE AT RADISSON SAS.



Simon Pearson is Chief Engineer of two Radisson SAS Hotels, one at London Stansted Airport and the other in London's Portman Square. The Portman has a conventional ion exchange water softener; Stansted Airport relies on Water-King physical water conditioners. Simon is particularly well placed to judge the merits of the two methods of treating hard water.

The Portman has 272 bedrooms and uses about 40 tonnes of salt per annum for softening, at a cost of £6,800. Servicing adds a further £1,800 bringing the annual cost to £8,600. For cleaning and sterilising the shower heads, there is a rolling three monthly programme of removal, soaking in Sulphamic Acid and replacement.

The Stansted Airport hotel has 500 rooms and uses 48,000 cubic metres of water per annum with a hardness of 315 ppm calcium carbonate equivalent. It has two Water-King WK4 units installed on the 108mm boosted cold water service and a Water-King WK3 on each of the 54mm returns to the Hoval plate and frame heat exchangers. The total cost of these units when installed was £5,100. The annual running costs total £40.

Simon opens the heat exchangers annually for inspection and describes them as "spotless - the Water-King keeps them completely scale free".

The only scale related issue is with the shower heads. The Portman uses the same cleaning regime, so the costs at Stansted are compara-

ble. However, occasionally towards the end of a cycle, some shower heads show a slight marking from scale encrustation. Simon describes the problem as purely "aesthetic". The showers work normally, the scaling is very light but it is visible so it cannot be described as perfect. Given the cost and inconvenience of installing conventional water softeners in Stansted (an estimate of £45,000 has been received and the projected salt and maintenance costs total £15,600), Simon is content to live with the minor aesthetic problem of the shower heads. He is extremely impressed by the cleanliness of the heat exchangers and grateful for the reduced environmental impact of the Water-Kings.

What is the main chemical constituent of Hard Water? Is it:-

- A. Calcium
- B. Calcium Carbonate
- C. Calcium Bicarbonate
- D. Calcium Chloride



Can you answer this question, the first slide of the CPD? Most people get it wrong! To check the correct answer, call our technical hotline.