

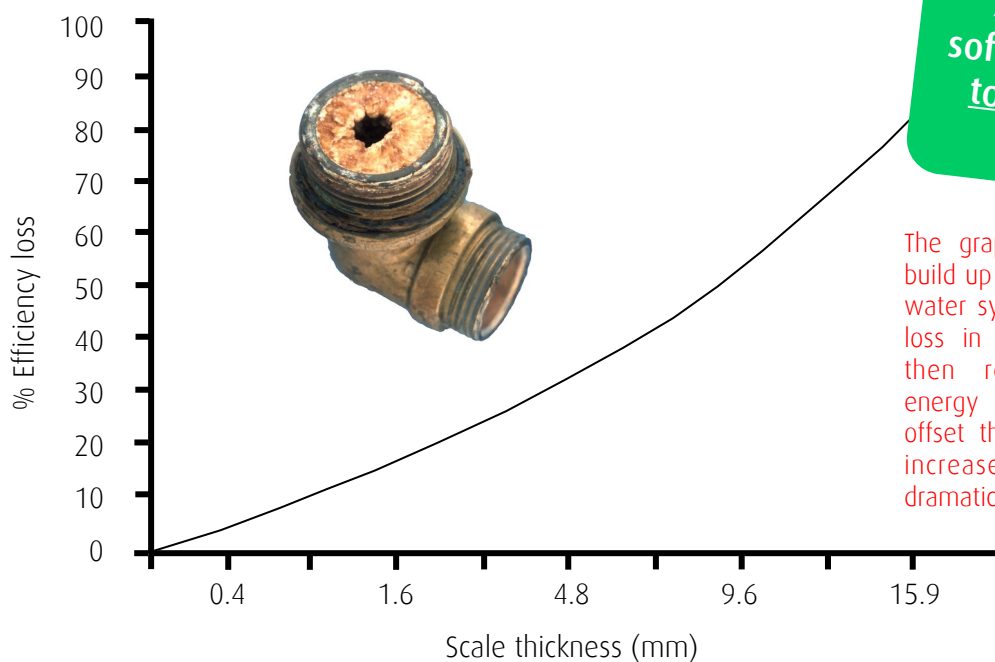
Aquafacts No.14

THE HIGH COST OF LIVING WITH HARD WATER

The detrimental effect of scale in hot water systems

Scale thickness (mm)	0.5	1	2	3	4	8	10	12.7
Decrease in Condensing Capacity	5%	9%	17%	23%	29%	34%	50%	56%
Average Increase in Condensing Temp. (0°C)	0.4	0.8	1.6	3.2	4.8	6.4	8	10
Increase in Energy Required	5.8%	10.6%	20.2%	29.4%	35.6%	46.8%	66%	76%

Average efficiency loss



A domestic water softener is guaranteed to remove 100% of existing scale

SCALE - The hidden household cost

Heat hard water and the result is scale. The chalk and lime (calcium and magnesium) in water precipitates out as 'fur' (seen in kettles) and blocks pipes and deposits in hot water cylinders. **Scale can form at a rate of 1.5mm a year in most homes** and research data shows that deposits of around **4.5mm can increase heating costs by as much as 25%**. It is therefore hardly surprising that government has now prioritised water treatment as a

major consideration in household heating systems. The view is that hard water is a major contributor to energy wastage. As of April 2007 all new boilers fitted into new and existing homes must have water treatment protection as outlined in BS7593. The new regulations are set out in the 'Domestic Heating Compliance Guide' (published May 2006). Further details are available on our web site: www.aqua-nouveau.co.uk