



## Case History

### **Aries Chemical Helps Hospital Solve Boiler Water Treatment Problems**

A hospital's annual boiler inspection showed a worsening scale problem on its boiler tubes. The scale was a safety and energy concern. Boiler tube scale can cause boiler tube failure. Moreover, boiler tube scale reduces heat transfer thus increases fuel demand and energy costs. See the below table showing the cost of boiler scale.

The hospital contacted Aries Chemical to review the boiler water chemical treatment program. Aries conducted a full audit that included a physical survey, water and scale analysis. Aries audit found several issues that needed to be addressed. Those issues included a defective water softener, an inadequate treatment program and poor oversight of the boiler water treatment program.



Aries made several recommendations to address the hospital's boiler water treatment problems.

- A new softener control head as a low-cost solution to the softener problem
- A best in class Walchem conductivity controller to provide automatic boiler water blow-down for conductivity control
- An improved antiscalant and on-line scale removal program
- An on-site service program provided by an Aries Technician to oversee the water treatment program

Aries Chemical Incorporated

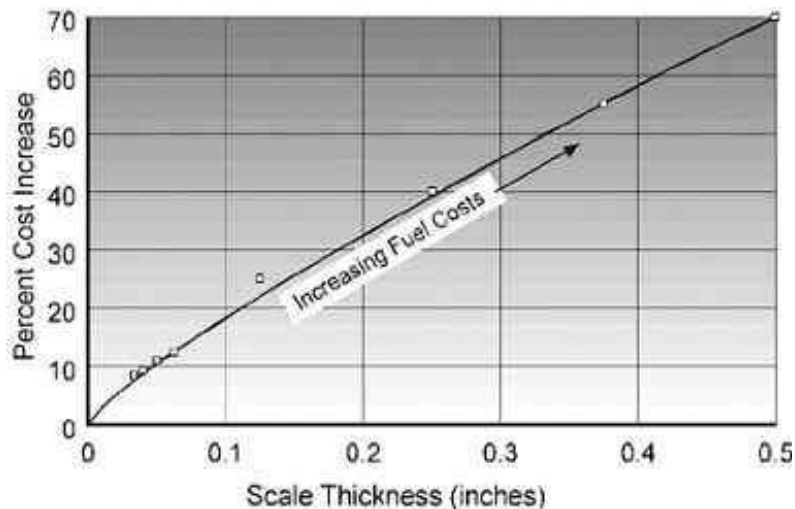
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The hospital implemented Aries recommendations. The new softener head produced consistent softened water for boiler make up. Aries' recommended on-line scale clean-up program removed the boiler tube scale without the need for an expensive off-line cleaning. Finally, Aries' on-site service program provided the oversight that allowed the Hospital to maintain good boiler water treatment quality. Aries' service program allowed the Hospital's overloaded maintenance staff to focus on other pressing demands.

### Effects of Scale Deposits in Boilers

#### Fuel Cost Increases Due to Boiler Scale



Results of tests made by University of Illinois and the U.S. Bureau of Standards.

For further product and technical assistance, contact your Aries Chemical Representative, [aries@arieschem.com](mailto:aries@arieschem.com) or call Aries @ 315 346 – 1489.

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