

CASE STUDY | Boiler Hardness



CHALLENGE

A lumber drying plant operated its boiler on untreated well water containing high levels of hardness and iron. To maintain boiler alkalinity, caustic was added to the feedwater, causing hardness minerals to precipitate as sludge. The resulting buildup coated boiler tubes, reducing efficiency and requiring 8–10 bottom blowdowns per day. During each shutdown, operators spent approximately four hours manually scraping sludge from the tubes.

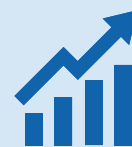


SOLUTION

A twin alternating water softener was installed to pretreat the incoming well water, removing the hardness from the boiler feedwater.



**More than a
water treatment solution.**



RESULTS

ELIMINATED CAUSTIC SODA

Improving safety and removing hazardous chemical from daily operations.

REDUCED BOILER BLOWDOWNS

Lowering water, energy, and labor costs while improving boiler efficiency.

ELIMINATED SLUDGE BUILDUP ON BOILER TUBES

Ending the need for manual tube scraping after every shutdown and reducing maintenance downtime.



TOTAL SAVINGS

\$10K Annually