

## Application: Fire Tube Steam Boiler

User: Cathay Murni Garment Factory, Indonesia

### *The Site:*

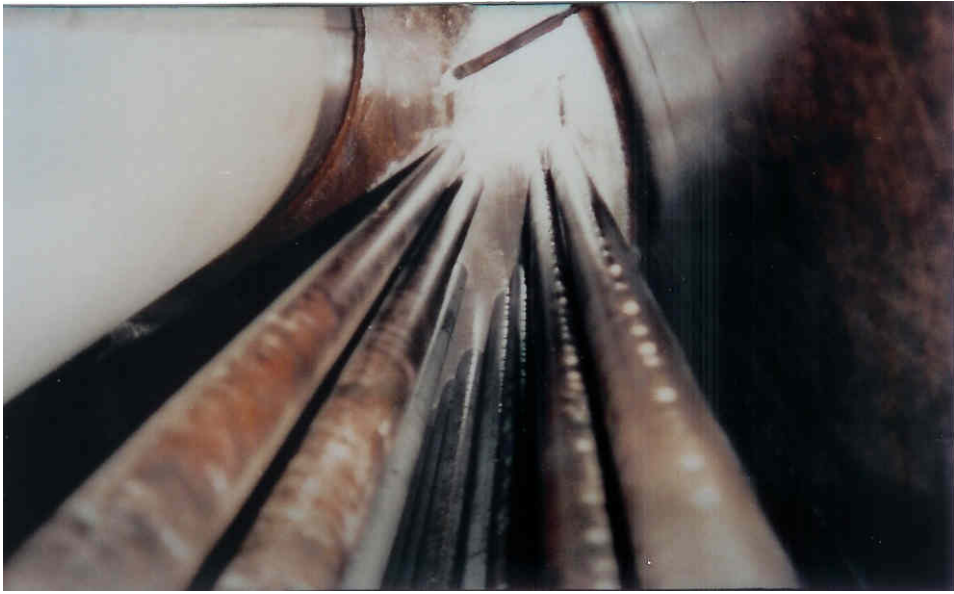
Hot water supply for washing and steam for ironing were supplied by a 20-year-old steam boiler. The boiler was kept in good condition by adding water softener chemicals every other day. The boiler was cleaned annually. Underground water with hardness 200ppm was used for the boiler. Blow down was done once a day for 20 seconds.

### *Result:*

A C-100 was installed at the inlet water pipe as shown in picture A. Water softener was eliminated. For the first three weeks, blow down frequency was increased to 10 seconds per hour to eliminate/clean existing scale within the boiler. After three weeks, it was noticed that TDS at blow down dropped to below 1500ppm. In order to save fuel, blow down frequency was increased to once a day. It was estimated that fuel consumption was reduced by 30%. The boiler was then opened for inspection and it was free from hard scale as shown in picture B & C.



Picture (A)



Picture (B)



Picture (C)