



Enerfacts Technical Bulletin 101

How the Enercon Water Treatment Program Can Reduce Boiler Operation Costs

1. Scale

Scale translates directly into wasted fuel dollars! Just 1/8" of scale on the boiler tubes will increase the fuel bill nearly 25%. This would amount to \$12,500 on an annual fuel bill of \$50,000. A proper water treatment program will keep the boiler tubes free of these deposits which rob fuel efficiency.

2. Corrosion Costs

The destructive effects of corrosion are obvious on the internal parts of the boiler as well as condensate pipes and other steam and condensate related equipment. The replacement cost is usually in the thousands of dollars, and not necessarily considered in the budget.

As well as the cost of replacement, there is also the cost of "down time" which can be far greater than the cost of repairs. There is also the increased cost of energy due to the loss of heat transfer that results from corrosion products migrating from the corrosion site to the boiler where they can form insulating deposits.

3. Excessive Blow Down

When our customers blow their boilers down too much, they are simply blowing money down the drain. Water in boilers can be concentrated many times according to boiler manufacturers, and is maintained at a predetermined level by blowing down the boiler. In the field we frequently find boilers which are being blown-down far too much. This needless waste of hot water translates directly into a waste of fuel, water and chemicals. Reducing the blowdown rate of a 100 psi boiler producing 20,000 lbs. of steam per hour by just 10%, results in a fuel saving of over \$8,000 per year.

Energy Loss From Scale Deposit In Boilers

Thickness of Scale	Extra Fuel Cost
1/32 "	8.5%
1/25 "	9.3%
1/20 "	11.1%
1/16 "	12.4%
1/8 "	25.0%
1/4 "	40.0%
3/8 "	55.0%
1/4 "	70.0%

It is easy to see the advantages of an **ENERCON WATER TREATMENT PROGRAM** and how it will save both money and time.

Contact ENERCON WATER TREATMENT LTD. for information on how to protect your particular system.

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