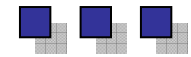


Why do air-conditioning systems have to be cleaned regularly...??



Answer....

To reduce operating costs...!!



There is an alternative solution . . !!

The need to clean can be eliminated . . !!



OR



OR



After 3 months using chemical
"scale inhibitors"

After 8 months using magnetic
fluid conditioners

*Scale-X Magnetic Fluid Conditioners (MFCs)
Have a Proven Performance . .
Scale-X Totally Eliminated this Chronic Scale Problem . . !!*



After 3 months using chemical
"scale inhibitors"

Verses



After 8 months using Scale-X
magnetic fluid conditioners

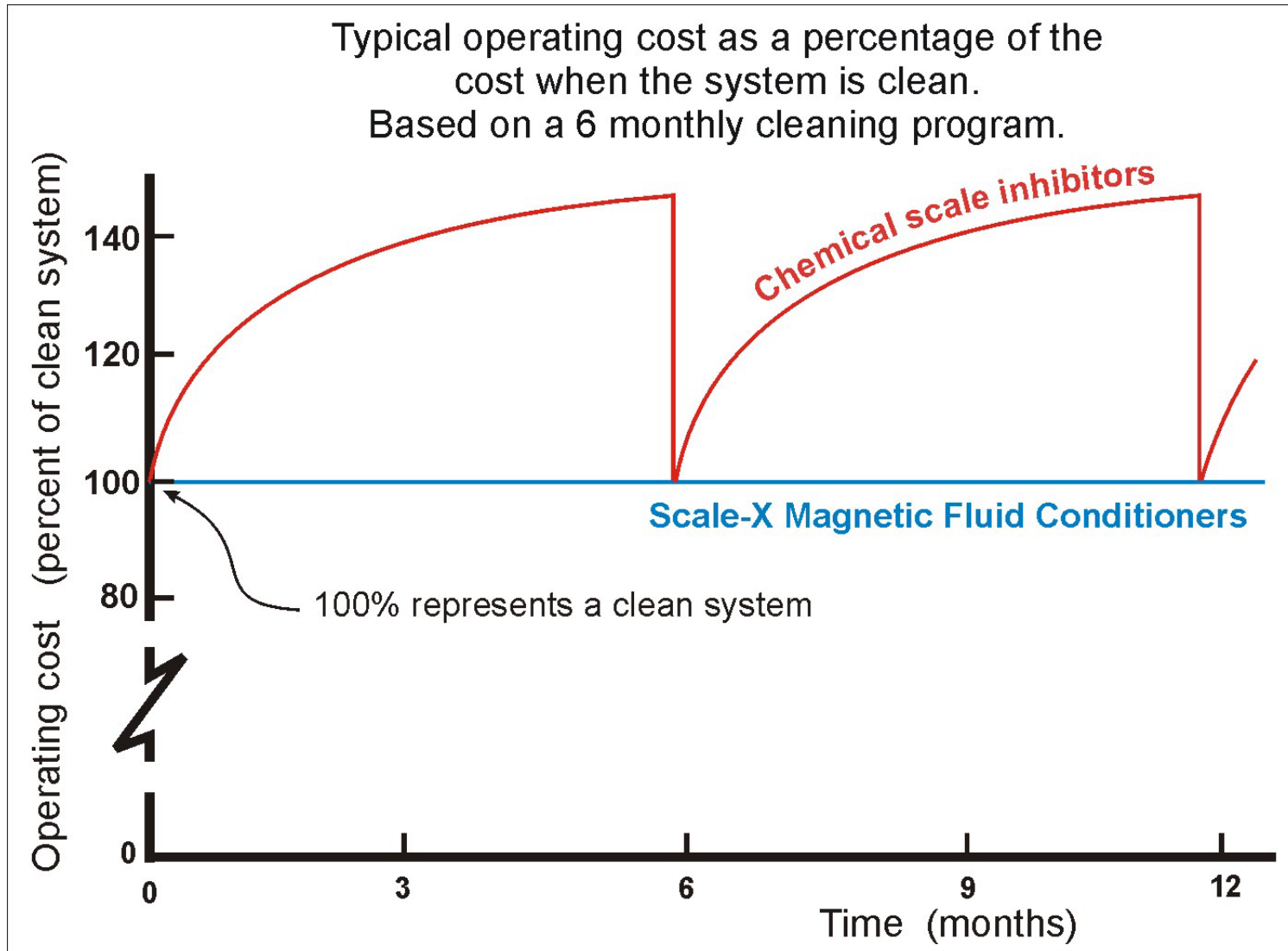
"Scale-X Magnetic Fluid Conditioners:-

- completely stopped scale build up
- removed pre-existing scale, and
- showed that chemical scale inhibitors can be eliminated."

Petronas Carigali Maintenance Engineer
Zulkifli Abdul Rahim
Shell Fluid Chemistry Forum
Miri, East Malaysia - October 2002

Typical Air Conditioning Operating Costs

Scale-X MFCs versus Chemical Scale Inhibitors

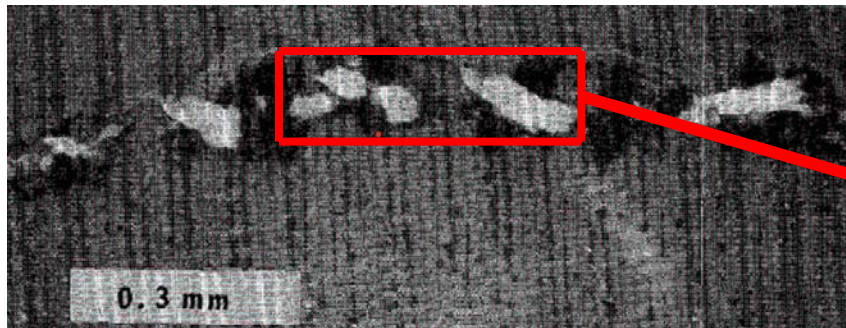


The Principal of How Magnetic Fluid Conditioning Works

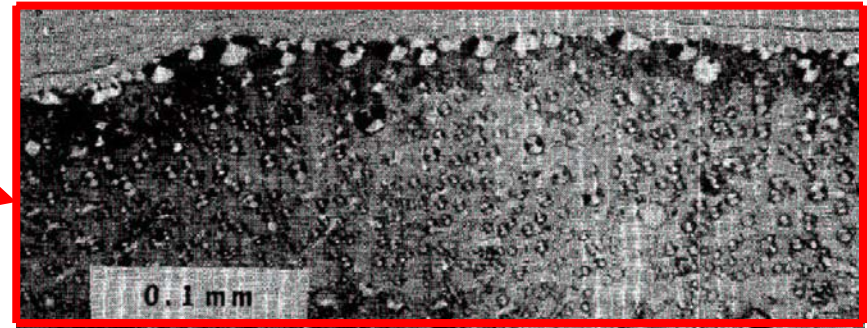
Experimental Evidence of Effects of Magnetic Fields on Moving Water

IEEE Transactions on Magnetics, Vol Mag-21, No 5, Sept 1985 and lecture notes.

By Dr. Klaus L Kronenberg, California State Polytechnic University



Surface of droplet of untreated water
- 670ppm TDS

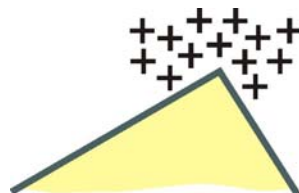
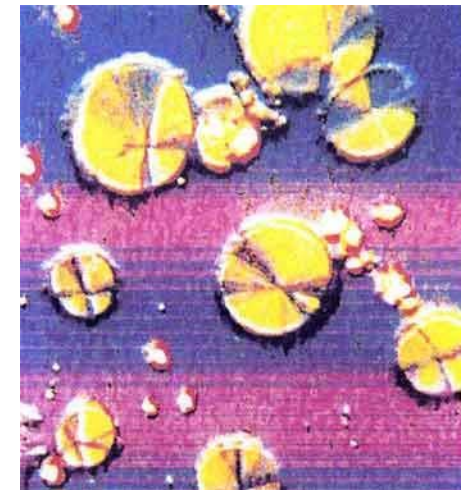


Surface of droplet of magnetically treated
water - 670ppm TDS

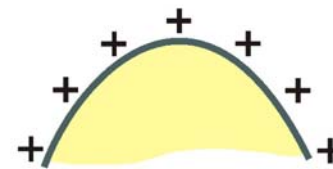


Observable Effects of Magnetic Fluid Conditioning on Water

Magnification of 1100 times reveals that calcium carbonate of magnetically treated water forms small circular, disc-shaped crystals as compared with the large prism-shaped crystals formed in untreated water.



The sharp edges of prism-shaped crystals have strong bonding and forms scale on pipes and vessel surfaces.



The rounded crystals have tendency against adhesion and does NOT form scale on pipes and vessel surfaces.



Scale-X MFCs eliminated the chronic scale, biofilm and slime problem in the “Yallourn W Power Station” brown coal open cut mine administration building air conditioning system.

Scale-X[®]
Magnetic Fluid Conditioners



The climatic conditions in Victoria are such that air-conditioning systems typically operate for only 3 to 4 months during summer each year. This building cooling tower was located adjacent to an open cut brown coal mine and suffered from air born contamination from the mine.

The system had a chronic scale and sludge (biofilm and slime) problem. Both the condenser and cooling tower required cleaning at least every 1 to 2 months otherwise it would trip out on high head pressure. The condenser tubes required mechanical cleaning in addition to chemical cleaning.

The Scale-X MFC system was in place on 12th August 1988 and regularly inspected and photographed up to June 1990. During this period of two years (two summers) the condenser has not required cleaning - scaling and sludging have been non-existent.

During operation with the MFCs the corrosion pattern on the cast iron end plate of the condenser was unchanged. This was not the case pre MFC treatment when chemical treatment was applied.

The Magnetic Treatment of Water for Scaling, Corrosion and Biological Control
J M Loble, Air Conditioning Engineer, State Electricity Commission of Victoria
The 1990 International Maintenance Management Conference
Melbourne & Sydney Australia, August 1990



Typical Scale-X
Insert Type MFC
being installed.

Following the Scale-X MFCs eliminating the chronic scale and sludge (biofilm and slime) problem detailed above, the State Electricity Commission of Victoria, operator of Yallourn W Power Station, installed MFCs on 4 other building air conditioning systems.

End ...