

Aqua Unique
Overholmvej 8 B
DK-8722 Hedensted
Att.: Per Henriksen

26th August 1996

Re: Installation of magnetic water treatment to the factory water supply.

Van den Bergh Foods in Soenderborg specialises in the production of margarine and refining salad oil. The factory has 3 ground water bores from which water is pumped up for the purpose of process cooling, cleaning and steam production.

Prior to the installation of magnetic water treatment, we experienced high expenses related to the acid-cleaning in cooling coils, pipe systems and heat exchangers within the process system.

A specific example:

Once every third month (due to limescale build-up) it was necessary to acid clean the cold coils in our two hardening boilers, two drop tanks, two steel heat exchangers, plus the associated piping systems.

Expenses related to this acid release included (quarter):

- 1) chemicals: USD 2,615.00
- 2) labour costs (incl. overtime/weekends): USD 1,150.00

Total per quarter: USD 3,765.00
Annual expenses: USD 15,060.00

Following the installation of 3 magnetic water treatment units, the acid cleaning has been reduced to twice a year, resulting in a saving of USD 7,700.00 per year.

Installation costs were as follows:


3 units (Type WA 454 FL - 4"): USD 23,570.00
Installation costs: USD 1,180.00

Total: USD USD 24,750.00

Associated process systems, experiencing similar limescale problems, have also improved considerably. Following the installation, the lime has not been hard binding, and can easily be brushed/swept away.

All things considered, we estimate that the investment in the magnetic water treatment system will pay for itself in a period of less than 24 months.

Best regards



Peter Mouritsen
Engineer