

in the industrial world - the benefits of DELTA technology



Deltawater
solutions

fact sheet 9

Large mining companies, agricultural enterprises, local government and sport and recreation organisations need good water and good water-delivery systems to guarantee a minimal waste in time and effort. We have developed DELTA Magnetic Water Conditioners for everything from large-scale irrigators to wineries, fruit and vegetable farms, mines, sporting grounds, nursing homes, swimming pools, drip irrigation systems and abattoirs.

Reducing maintenance and improving water quality are key benefits of our industrial strength DELTA Magnetic Water Conditioners. In industries using water for heating, cooling, sterilization and wash-down systems DELTA minimises the impact of scale build-up and increases efficiency through reducing time and costs spent on maintenance. The treatment also improves performance of systems involving heat exchange.

CASE STUDY

Greg Williams of Northern Co-operative Meat Company knows the DELTA magnetic touch has turned water woes into a winning business story at its livestock processing plant at Casino in NSW.

The chief engineer learnt of DELTA Magnetic Water Conditioners during a fact-finding mission in 1997 as he battled the effects that Richmond River supply, with its high mineral content, was having on the high-tech abattoir's crucial shell and tube heat exchange system.

"It was very high-maintenance equipment and had to be pulled apart, managed and cleaned regularly," Greg says. "It was so labour intensive. Every fortnight we had two guys working on it for six hours and we had to use chemicals that were very aggressive."

But regular internal cleaning to remove scale from the heat exchangers, which must maintain a certain temperature to continue the plant's processes and meet national standards, is now a thing of the past. The company is using the Hunter Valley-based company DELTAwater solutions' magnetic technology on their piped hot-water supply and got near-instantaneous results.

"In three months we got away from having to do any internal cleaning at all," Greg says. "It was very quick payback. Then it took about two years for the scale to clear away entirely."

The company, a major water user in the district, also found mineral content in its supply was seasonal and exceptionally hard on equipment, especially when using hot water.

"Thanks to the DELTA technology, we've definitely got efficiency gains due to better heat exchange," Greg says. "We're now implementing DELTA technology in other areas which aren't as critical and we'll definitely get savings on the equipment again."



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Efficiencies and bottom-line accountability underpin industry and business ability to provide quality service and products for customers and clients. Mineral build-up in pipes, plumbing and equipment and salt and mineral-laced water are a constant headache for many businesses and industries across Australia and overseas. And it's in this sector that our DELTA magnetic water technology excels.

> NURSING HOME, QLD

Proven success has prompted maintenance staff at a Queensland aged-care centre to expand their use of DELTA Magnetic Water Conditioners. Improvements in water quality at Broddrib Home in Toowoomba since installing a conditioner from DELTAwater solutions in 2008 have been so dramatic, they have installed more.

Brett Sendall, maintenance worker at the centre, said the fundamental benefit of magnetic water treatment at Broddrib Home was reduced maintenance on crucial water-based machines. These included sterilizers, dishwashers, air-conditioners and various plumbing appliances. "There has also been considerably less need to use cleaning chemicals which means less cost and a better working environment."

Broddrib Home staff initially approached DELTAwater solutions to help combat a weekly build-up of scale throughout plumbing systems and machines. After installing a DELTA Magnetic Water Conditioner on the centre's main water supply, there was an improvement in water quality and a dramatic reduction in costly and time-consuming maintenance.

DELTA Magnetic Water Conditioners, including a CU50-G4, are now treating water supply to Broddrib Home's retirement village, separate to the main centre, and the home's new 'Gardenia' wing. The conditioners are also helping remove the hardness from a bore supply running into toilets.

> GOLD MINE, WA

The installation of a DELTA Magnetic Water Conditioner has proven a major bonus for a gold mine in Western Australia. After only three days of dewatering the mine there was a considerable build-up of salt in a poly pipe. To clear blockages, maintenance crews needed to use sledge hammers on the outside of the pipes to break up salt build-up at joins. This didn't always work so the pipe had to be cut to clear the line and then re-welded.

The mine had also used chemicals to help but they only made the salt softer and failed to reduce build-up. The DELTA Magnetic Water Conditioner slowed down the salt formation and the eventual blockage of piping used for dewatering the mine site. As a result, the amount of time spent on maintenance was reduced and dewatering increased.

> ABATTOIR, NSW

Southern Meats' Scott Newton reckons the proof is in the pipelines. And a spotless pipe two months after installing a DELTA Magnetic Water Conditioner was all the evidence the maintenance manager needed.

The technology brought to an end a costly labour-intensive headache that had plagued the Goulburn abattoir-processing plant for years, and now he couldn't be happier. "We were having to manually flush out our effluent-irrigation pipes every six months because they were blocking up with scale and mineral deposits. It was at least a week-long job and it meant we couldn't irrigate during the time we had the contractor on site with his jet-water cleaner."

So he turned the problem over to DELTAwater solutions to see whether magnetic water technology could save the day. "We were desperate because it was becoming a pain in the neck. So we fitted a magnet to the suction of the waste-water pump at an effluent dam, ran it for probably a couple of months and then dug the pipe up, did an inspection and it was as clean as a whistle. I've been sold on DELTAwater solutions ever since."

That was about a decade ago and now Southern Meats has added another two magnetic water conditioners to its Goulburn plant in NSW; a SU100G3 on a waste-water pump and a SU150G3 to the mains supply. The mains unit has increased efficiency of the plant's boilers by softening the water significantly.

"Magnets don't wear out and they don't need maintenance. You know, I had a break in that first pipe last week and we had to get an excavator in and dig it out to fit a coupling. We hadn't touched that pipe in more than 10 years and I had a good look at it and it was spotless."

Scott Newton, Southern Meats

