

industrial & commercial

the benefits of DELTA technology



Industrial and commercial enterprises need high quality water and efficient water-delivery systems to guarantee high productivity and to minimise time and effort. Industrial and commercial water treatment is a necessity in the current climate due to poor quality water and the associated problems caused by scale build-up, salinity, iron and corrosion.

We have developed the DELTA industrial and commercial water treatment technology to treat water problems in industries ranging from abattoirs and piggeries to wine processing plants, factories and manufacturing plants.

Reducing maintenance and improving water quality are the key benefits of our industrial strength DELTA products. In industries that use water for heating, cooling, sterilisation and washing-down, DELTA minimises the impact of scale build-up and increase efficiency by reducing time and costs spent on maintenance. The DELTA industrial water technology also improves performance of systems involving heat exchange.

CASE STUDY

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

The chief engineer learnt of the DELTA technology 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' water treatment 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."



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 water treatment technology excels.

> GOLD MINE, WA

The installation of the DELTA water treatment technology 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 joints. This didn't always work so the pipes 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 water treatment technology 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 the dewatering increased.

> NURSING HOME, QLD

Proven success has prompted maintenance staff at a Queensland aged care centre to expand their use of the DELTA water treatment technology. Improvements in water quality since Broddrib Home in Toowoomba installed their DELTA in 2008 have been so dramatic, they've installed more.

Brett Sendal, maintenance worker at the centre, said the fundamental benefit was reduced maintenance on crucial water-based machines.

"The proof's in the pudding and I've told everyone who comes here to see what we've done. There's no scale build-up in the pan steriliser hot-water tanks and all I have to do now is preventative maintenance such as a clean and flush through of the steriliser cavity – no chipping away at scale."

"Now we don't have to pull the pads out of the evaporative coolers or clean the brackets with a wire brush. I'm rapt and as far as we're concerned the DELTA is magnificent."



Before & after DELTA treatment

> 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

