



RX Plastics Ltd is a New Zealand owned manufacturer operating for 27 years specialising in plastics for agriculture and municipal uses. RX manufactures and distributes:

- Piping Systems - Low, Medium and High Density Polyethylene and Polypropylene Risers
- Compression, Threaded and Lateral Fittings for connections to the pipe ranges manufactured
- Tanks 500 - 30,000 litres, Troughs 200 - 500 litres as well as the popular KLine irrigation system.

We are also proud to be distributors of the:

- Plassim Range of Fittings for the Metric Polythene Pipe
- Itap Valves Range of Nickel Coated Brass and Brass valves and pressure reducers
- Anka fittings for the Low Density Pipe Range

RX Plastics is also able to custom manufacture - using injection, rotation, and extrusion technologies.

Our Objective: To take cold water from an in-ground bore and use the cold water state for plant cooling.

Cost:

Costs:

1, 300mm bore drilled and commissioned.	\$30,000.00
2, Install 1 submersible pump, 2 Factory delivery pumps, associated variable drives, consents and pipe work	\$35,000.00
Total Approximate project invest	\$65,000.00

Savings:

1, Having not to upgrade our existing compressor water chiller	\$85,000.00
2, Power savings from the differential	\$20,000.00 - \$35,000.00pa depending on demand.

Project Description: We were faced with a situation due to growth within our company to increase our plant cooling water facility, different scenarios were investigated including increasing the output of our existing water chiller but with it's relatively high maintenance and running costs and with the knowledge of local ground water availability and also its optimal temperature for our processing needs we decided to go for a water take and discharge system, the operation basically works by taking water from a bore on our site and using it once through the factory for cooling our extrusion lines from there we then discharge it back into the ground, obviously we have to maintain the purity of the water and prevent any contamination, we do this through a series of containment tanks and the water is closely monitored, the whole system runs on variable speed pumps and only delivers the amount of water required.

How we implemented the project: We had to convince the local authority that what we were proposing to do would not harm the environment and also apply for consents to take and discharge water.

Results: The complete system has been in operation for 10 months and has been operating perfectly, the savings on energy alone are very pleasing and also the water quality volume, and temperature consistency we are achieving is ideal for our type of operation.

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