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# Smythe Contractors

A story of innovation & success

Smythe contractors have been in the directional drilling industry since its inception. In fact Mike Smythe (company founder & director) bought the first directional drill into NZ in 1992. At that time he was warned, this type of machine would never pay for itself and would send him bankrupt. He jokes now that directional drilling machines are carried around on the back of vehicles like lawn mowers.

Directional drilling technology has come along way from those humble beginnings and Mike has recognised the need to embrace this technology, sometimes even before the manufacturers have put it into production.

Mike now boasts 7 directional drills, a competent staff of 15 including a project Engineer, around 50 pieces of plant and the undertaking of the most interesting and challenging projects in the country awarded by reputation.

Smythe Contractors began to be known as the company that could push the boundaries of their industry and always achieve the objective. This was the case in one of their most recent projects.

In order to stabilise a motorway fill in Auckland, a 27m deep casing needed to be dewatered by installing a drainpipe 180m long from the casing to the tow of the fill. Limitations of the site would not allow vehicle access to the tow. To achieve this drill it was proposed by Smythe that the drill rig be set up on the other side of the motorway drilling down and under the motorway to the bottom of the casing and then out to the tow. To undertake the proposal additional electronic equipment needed to be acquired from the U.S to locate the drill head at this depth. Mikes Engineer laughs now when he recalls the Americans response after explaining the job over the phone, "You wanna do whaaat ?".

Transit would not allow access onto the motorway lanes to locate the head as it progressed, this adding another aspect of difficulty to the job.

Bore path software was a necessity to calculate the depth and grade at every rod. The exact grade of each rod was critical and any variance from the plan would result in a cumulative depth error. Too high and the drill would hit the steel casing, too low and the drill would pass under the floor of the casing. A laptop was connected to the on-board computer so that the real-time as-built information could be down loaded and plotted against the bore plan. This gave a good visual indication of the drill head location in reference to the casing. It took two attempts to drill to and locate the narrow allowable window at the bottom of the 1mØ casing and the rest of the job followed as a standard drill.

After the award of this job, Smythe Contractors were informed that many drilling contractors had looked at the job but no one considered the brief achievable.

As a result of this job and many others like it, clients and consultants in the design phase approach Smythe Contractors on a regular bases with the question "***Is this possible?***".

Smythe Contractors have towed the directional drilling industry a long way in only 8 years. From installing gravity sewer and stormwater pipelines at less than 1% grade, drilling and installing pipe up to 500m in a single operation or drilling over 30m deep, with their can do attitude any thing is possible.