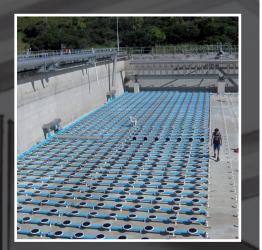
Waste Water and Potable Water Treatment Plants

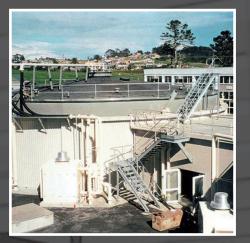




Army Bay WWTP - mechanical plant Fabricate, supply and install Rodney District Council



Warkworth WTP - mechanical plant Fabricate, supply and install Rodney District Council



North Shore WWTP upgrade Balance of plant contract North Shore City Council

Service Engineers Limited is an established heavy engineering contractor founded 29 years ago. Over the last 15 years Service Engineers' involvement within the Water and Waste Water Treatment sectors has increased to the point where we are now regarded as one of the top mechanical contractors in the industry with ongoing contracts in potable, waste water and associated fields, for both the public and private sectors, nationally and internationally.

Service Engineers' strong project management and design capability, workshops and facilities, enable us to provide efficient, accurate production backed-up with experienced in the field site operation. Our experience in sourcing critical material and plant items, installation and commissioning ensure that projects meet program and budget requirements.

Examples of projects include;

- all mechanical work, including earthworks and relocating of existing services, civil works for odour system inclusive of fan building, PST covers, & ducting, utility and wash water system, channels, pista grit traps and splitter box, sedimentation tanks, electrical supply including motor control centre, commissioning
- sundry piping, valves, valve chamber, meter pit pipework, couplers, aluminium hatch covers and frames, stainless steel ladder and cage for the supply discharge and scour lines. Also, supply and installation of ductile iron pipework (underground).
- walkway and support steel, pump base, mount motor & pump, pipework, pipework testing, modify existing pipework, riser thrust blocks, valves, etc
- supply and installation of gas flaring equipment, electrical controls and all associated pipework
- all mechanical and structural installation. pipe work fabrication in both stainless steel and carbon steel. machinery installation, pump sets, drains, filters, blowers
- upgrade of biogas handling plant, stainless piping, decommissioning of redundant gas compressors, supply and installation of new blowers
- upgrading of generator engine supply line
- · upgrade to low pressure digester gas pipework system
- supply and fitting of new large bore digester gas reliefs, associated piping, supply, fabrication and fitting of discharge diffusers

From As Built Information, Q.A. Documentation and Operating/ Maintenance Manuals to working in Zone 1 Hazardous Areas, Service Engineers will deliver your project. Speak to us first...

> 50-52 Porana Road, Takapuna, Auckland Telephone (64 9) 441 7790 Facsimile (64 9) 441 7799

www.serviceeng.co.nz

Resources and Project Management



Service Engineers' workshops are fully equipped to handle all fabrication, machining and fitting. Excluding specialist subcontractors we would handle all aspects of the project "inhouse", including;

- Project control and planning using Microsoft project and job cost management systems
- Design and detailing of ancillary equipment, e.g. tanks, vessels, pipe-work, supports, etc
- Development of weld procedures if not already held and QA plans
- Fabrication, machining, assembly
- Site installation
- OSH plans documentation and implementation

Company Equipment & Facilities

Norkshop Floor Space		
Fabrication Workshop	(75x16)	1,200 sq.m
Machine Workshop	(30x16)	480 sq.m
Stainless Workshop	(30x7)	210 sq.m

Other Facilities

Laydown Yard

Workshop Equipment

- Material Handling
- 2 5T Crane Fabrication bay 1 10T Crane Fabrication bay
- 1 10T Crane Fabrication bay 1 3T Crane Machine Shop bo
- 3T Crane Machine Shop bay
 5T Stainless Steel Workshop

Gas Cutting

Various

Plasma processing – plasma and	
multiple flame heads	13m x 4m

Welding Equipment

- TIG welding units to 350 AMP
- MIG semi-automatic welders up to 650 AMP

2,000 sq.m

- Manual arc welders to 450 AMP
- Mobile 400 AMP welders
- Mobile 200 AMP welders
- Sub arc

Fabrication Equipment

Plate rolls 12mm x 3.0m wide with separate flat and angle roll attachment Plate rolls 6mm x 1.8m wide Punch and shear (150 x 150 x12 angle or 30mm holes x 25mm thick) Edge beveling Various magnetic, hand drills and rotabroach equipment

Cut-off saw – high speed

- Cut-off saw horizontal band to 900 diameter Various vessel rotators – 30T capacity
- 150 tonne hydraulic press

Portable press and jacking equipment

Welding manipulator

Machine Shop Equipment

4 x centre lathes up to 800 diameter x 3000 long x 2T 1 x CNC lathe 600 diameter x 2m capacity 1 x Machining Centre 440mm diameter job max capacity, with hydraulic clamping, Hydraulic copy facility and programmable. Mills - vertical - horizontal - universal 1 x Radial arm drill No.5MT x 1500 Surface grinder 150 x 460 Full range of key seating and broaching equipment Mechanical hacksaw

Site Equipment

Full range of lifting and rigging gear and site storage, including portacoms, workshop equipped container, site storage containers. Concrete core drilling

Disciplines

Service Engineers Limited have a broad base of engineering staff including specialist toolmakers and machinists, coded welders and formally qualified project managers and design engineers. An after hours call-out system operates with skilled staff to meet emergency and breakdown needs.

Subcontractors

Service Engineers Limited try to use the same group of subcontractors on their projects. We prefer to rely on known companies with whom we have a track record, however, from time to time this is not possible or practicable.

We have developed a good relationship with key subcontractors, the most important being electrical, and as our work is spread over New Zealand and the Pacific, we do have subcontractors outside Auckland with whom we have worked successfully.

Management Skills

Service Engineers has a permanent staff of around 50 people including engineering/technical trades and administration. This gives us flexibility in providing people to meet the need for short-term increases in site numbers during special situations – changeovers etc. Service Engineers has a strong reputation as being a competent and professional project management & contracting company.

Health and Safety

Service Engineers endeavors to take a pro-active role in health and safety, staff have completed Site Safe Training programs and are encouraged at all levels to raise health and safety issues. A copy of our Health and Safety Policy and Manual available on request.

Quality Systems

Service Engineers Limited operate an internal Quality Assurance System in line with ISO9000 – copy available on request.

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