Boiler maintenance

Boilers use heat and water to produce steam. Other pressure equipment may be used in conjunction with a boiler, or separately. Best practice safety must be established for all operators, designers, manufacturers and suppliers of facility pressure equipment.

Boilers and other pressure equipment can be hazardous, particularly those used in industrial settings. Approved maintenance contractors should be used to deal with high-powered pressure equipment to manage these particular hazards. The now old Approved code of practice of the design, safe operation, maintenance and servicing of boilers is still the relevant document applicable in New Zealand.

Worksafe recognised inspection parties for pressure vessels is listed here.

Successful plant operation requires that plant be professionally optimised and maintained. Plant optimisation is best done by specialists in wood fuelled plant operation as wood fuelled plant have quite different performance characteristics than coal plant. You should ensure that anyone optimising your plant has wood fuel combustion experience and understands how to get the best from wood fuelled plant according to the fuel being used.

The most common reason for poor wood fuelled plant performance is where the wood fuel being used is not the fuel the equipment was designed for or has been set up to combust.

All types of boilers benefit from regular servicing. The benefits include maintaining boiler efficiency though good cleaning, checking adjustment of assuring the correct functioning of all safety devices.

All wood fuels are not equal and you should work with your fuel supplier and maintenance engineers to ensure that you have optimised the equipment and the fuel. Ensuring that you have the correct fuel for the boiler can assist ensure reliable heat supply at the lowest appropriate price.

Heat plant should only be operated by people who have been trained into their safety features. This includes relief operators.

Confined space work in New Zealand and Australia is covered by *AS 2865 Confined spaces*. Anyone who carries out confined space work needs to be familiar with the standard and should have specialist training as well. A guide providing a brief overview of the requirements and procedures in the standard is Confined spaces: planning entry and working safely in a confined space

- Orewa College explosion lessons learnt
- Plant optimisation 101
- TNSB25 Safe operation of wood fuelled heat plant
- TNSB37 Biomass fuelled combustion technology
- TNSB46 Best practice for confined space entry
- TNSB52 Explosion flap isolation valves

Other best practice maintenance guidance is available from Information Sheet 11b

Boiler maintenance experts

The following can provide all your boiler maintenance requirements:

- Lyttelton Engineering www.lytteng.co.nz
- Windsor Engineering www.windsor.co.nz/energy
- Taymac: www.taymac.co.nz
- Nu-way Energy: www.nuwayenergy.co.nz
- Advanced Boiler Services NZ