

Safety Lines

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Recognition of Overseas Inspection Bodies

As a result of promulgation of the draft Pressure Equipment, Cranes and Passenger Ropeways (PECPR) Regulations, Engineering Safety have received many queries about recognition of overseas inspection bodies. These have come from consultants, controllers, manufacturers and local inspection bodies wishing to arrange for overseas inspection of equipment to be imported into New Zealand.

The draft (PECPR) Regulations have provision for the Secretary of Labour to recognise overseas inspection bodies. This recognition process will progressively replace existing schedules of approved overseas inspection bodies. It will ensure that these organisations have in place accreditation and quality management systems equivalent to those of their New Zealand counterparts.

The pending regulations require that an overseas inspection body, in order to be recognised by the Secretary of Labour, must have the status of an inspection body under the law of the country in which it operates and must satisfy various requirements for accreditation, management systems and competencies.

In practice this will mean that any review of an application for recognition as an overseas inspection body will include consideration of the following criteria:

1. Is the inspection body recognised nationally?

2. What accreditation does the inspection body hold and what sort of quality management system environment does it operate within?

(It will be expected that any accreditation and quality management system must be equivalent to: BS EN 45004: 1995 *General criteria for the operation of various types of bodies performing inspection* and, ISO Guide 39:1988 *General Requirements for the Acceptance of Inspection Bodies*.)

3. What procedures does the organisation have in place to ensure that every person employed or engaged by it as a design verifier or equipment inspector has appropriate experience and training and is the holder of a relevant qualification?

4. What procedures does the organisation have in place to ensure that design verification is carried out only by a design verifier qualified to verify equipment of the relevant type?

5. What procedures does the organisation have in place to ensure that equipment inspection is carried out only by an inspector qualified to inspect equipment of the relevant type?

When considering these criteria, the actual process will vary depending on the country in which the inspection body operates.

(Continued on page 2 ...)



Relocation of Boilers

Engineering Safety have received an enquiry about the upgrade and certification of boilers that have been relocated to another site. This was concerned with an interpretation of clause 1.7.3 of the *Approved Code of Practice for the Design, Safe Operation, Maintenance and Servicing of Boilers*.

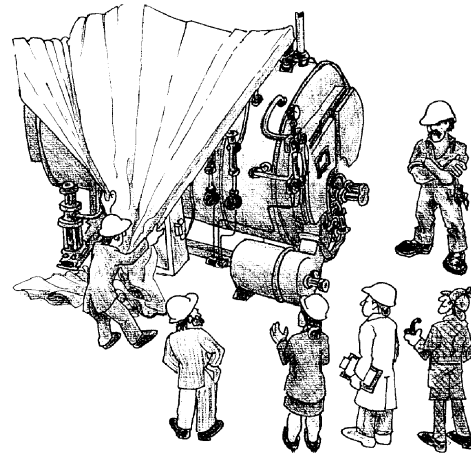
We advise that the intent of clause 1.7.3 is that boilers which are:

- Relocated; or,
- Structurally damaged; or,
- Taken back into service, after a shutdown period of 24 months or longer, without having been regularly inspected and certified by an inspection body or prepared for long term storage,

must be upgraded in accordance with the requirements of the code of practice for the relevant category of boiler.

That is, attended or limited attendance boilers that do not meet the current requirements of the code of practice for boiler controls but, had been certified and operating prior to any of the changes noted above, must be upgraded prior to re-entering service.

The boiler code of practice is currently being revised and clause 1.7 will be amended to clarify these upgrade requirements.



Recognition of Overseas Inspection Bodies *(... Continued from page 1)*

Inspection bodies operating in those EU countries which enter into the *Mutual Recognition Agreement of Conformity Assessment, Certificates and Markings* and which conform with the *Sectoral Annexe for Pressure Equipment* would be recognised as inspection bodies. It would not be necessary for them to undergo the recognition process set out in the draft regulations. Depending on the scope of their accreditation, they would be able to provide design verification and inspection services for equipment destined for New Zealand. Negotiations on mutual recognition are currently in progress between New Zealand and the EU countries.

A mutual recognition agreement is close to finalisation with Australia however, coverage of pressure equipment under this agreement may be delayed awaiting clarification of the requirements of the various state authorities.

It is also expected that other countries with which New Zealand already has mutual recognition for laboratory testing and calibration, may agree to an informal arrangement on mutual recognition covering equipment inspection. International Accreditations New Zealand (IANZ) will be pursuing any opportunity to conclude mutual recognition arrangements at appropriate times.

Discussions on recognition are under way with the US but, in the interim, recognition of inspection bodies based in US (and other North American countries) would be on the basis of ASME accreditation. However, until such time as a mutual recognition agreement is in place, any such arrangement is likely to be for fabrication inspection only.

Until an agreement is in place, any ASME accredited organisation wishing to provide design verification services, would be required to have their design verifiers complete the certification process administered by the Institution of Professional Engineers, New Zealand.

Inspection bodies, operating in countries other than those noted above, will be assessed by Engineering Safety in accordance with the preceding criteria. Where necessary, assistance will be sought from organisations such as IPENZ, IANZ, CBIP etc. to establish or confirm equivalence of accreditation processes, quality management systems and competencies.

New Service from Standards New Zealand

The following article was prepared by Standards New Zealand for *Safety Lines*. It describes a service which could be of particular benefit to organisations that must maintain technical libraries. This would include inspection bodies and ISO certified manufacturers of equipment covered by the pending Pressure Equipment, Cranes and Passenger Ropeways Regulations.

We asked Standards New Zealand to include pricing data so that interested organisations can compare this service with the cost of maintaining their existing libraries. This data could also be used when considering the economics of upgrading access to any technical standards required by processes such as EN 45004 accreditation or ISO 9000 certification.

A feature of this service, which could be of interest to organisations with several offices requiring standards, is that the purchase contract allows multiple hard copies to be produced. *Ed.*

‘Standards on CD-ROM

Regular users of standards are these days turning in large numbers to the convenience of accessing the standards they need from CD-ROMS. The advantages over the traditional hard copy are many and varied but for most users they are: firstly, the convenience and confidence of knowing that standards are kept up to date by the arrival of new discs at regular intervals. Secondly, there is the very real benefit of the entitlement to print copies of standards from the disc as and when they are required without any breach of copyright, provided certain rules are followed.

Standards New Zealand supplies an increasing number of its customers with standards on CD-ROM. The full library of over 2000 New Zealand Standards can be supplied in this way, with updating every sixty days, for \$8,380 plus GST per annum. There are alternative subscriptions that deliver subscriptions in subject groups. For the set of mechanical and transportation standards (300 documents) the annual CD-ROM subscription is \$2,195 plus GST; for building and civil engineering standards (625 documents) the subscription is \$2,945 plus GST.

Other options available are electrical and electronic, information technology which includes telecommunications and radio, and general and materials. Lists are available on request from Standards New Zealand so that customers can

compare the titles and numbers of standards they need with what is actually included in each subscription. For example, standards for boilers and pressure vessels, including NZS/BS 5500, are included in the mechanical and transportation group.

The set of New Zealand Standards on CD-ROM includes all New Zealand Standards as well as Joint Australian/New Zealand Standards (AS/NZS) and adopted overseas standards such as NZS/BS, NZS/ISO, etc. The documents are captured on the CD-ROMs as scanned images of the original printed version so as to guarantee to users that the document they print off the disc will be absolutely identical to the base standard.

As the New Zealand Standards on CD-ROM are part of the Worldwide Standards Service produced by the American company Information Handling Services, there are subscriptions available for any standard, from any source. More details are available from:

Keverne Trevelyan
Standards New Zealand
ph: (04) 495 0931
fax: (04) 498 5994
or email: keverne@standards.synet.net.nz

Safety Issues for *Safety Lines*

An important function of *Safety Lines* is to bring to the attention of readers various safety issues affecting equipment covered by the draft Pressure Equipment, Cranes and Passenger Ropeways Regulations.

Over the years, we have included a wide range of articles dealing with hazards associated with PECPR equipment. These have come from many different sources.

We do this to promote safety and often to draw attention to specific hazards associated with particular equipment or practice.

If you have a question for Engineering Safety or, some other matter which you think should be more widely promulgated in the interests of PECPR equipment safety, then please contact us and we may be able to include a relevant article in *Safety Lines*.

Where required, the source of such information would be kept confidential and we would clear articles with the parties involved prior to publication.

Update for Crane Operators

Further to the report in *Safety Lines* No. 32 of June 1997, Engineering Safety advises that there are now over 30 unit standards registered on the New Zealand Qualifications Authority (NZQA) framework covering the supervision, operation and servicing of cranes.

These standards have been prepared by the Power Crane Association in conjunction with members of their industry group.

A list of the unit standards is available from:

Power Crane Association

PO Box 30-074

Lower Hutt

Tel: (04) 569 9799 Fax: (04) 569 6969

Email: pca@pctra.co.nz

The Power Crane Association will also answer queries on these standards and provide guidance on their applicability to any particular situation.

Update of AS 3920.1

Engineering Safety advises readers that there is a revision of AS 3920.1 currently being carried out by the Joint Standards Australia/Standards New Zealand Committee ME/1.

The latest draft of this revision proposes some significant changes to the form of the standard with the document being split into two sections. These are:

1. Pressure Equipment—Hazard Levels
2. Pressure Equipment—Conformity Assurance'

Among other things, changes have been proposed for the tables specifying design verification and fabrication inspection requirements and hazard levels of equipment. A major section has also been added on fluid types and classes.

When this standard has been reissued it will be reviewed and any changes required to the existing guidelines on design verification and fabrication inspection requirements will be promulgated.

If readers have any proposals for revision of AS 3920.1 we would be interested in hearing them.

Under 15 HP Boilers

Engineering Safety wishes to remind readers of the requirements in the *Approved Code of Practice for the Design, Safe Operation, Maintenance and Servicing of Boilers* for operating under 15 HP boilers. (The 15 HP rating is based on heated surface area but these boilers may also be defined in terms of energy output as under 1.2 MW or, in terms of steam generation, as not exceeding 1814 kg of steam per hour from and at 100 degrees centigrade).

These boilers are sometimes mistakenly operated as unattended boilers. This is not permitted unless the boiler has been upgraded to unattended status in accordance with the code of practice. However, under 15 HP boilers do not require to be operated by a qualified boiler operator. A 'responsible person', in the terms of the boiler code of practice, may undertake this duty.

When two or more boilers, which are not classed as unattended boilers, are coupled together and their aggregate horsepower exceeds 15 HP or, they have a combined steam generating capacity greater than 1814 kg from and at 100 degrees C or, energy output exceeding 1.2 MW then they shall be operated as attended boilers by an appropriately qualified operator.

As required by the boiler(s) output, boiler operators must hold one of the following qualifications:

National Certificates in Energy and Chemical Plant

(Process operation)

Boilers' Combined Output	Qualification Level
≤1.2 MW	None required
>1.2 MW & ≤20 MW	Level 2
>20 MW	Level 4

Engine Driver's Certificate*

Boilers' Combined Output	Qualification Level
≤15 HP	None required
>15 HP & ≤200 HP	Boiler attendant
>200 HP & ≤500 HP	Second class certificate
>500 HP	First class certificate

* The Engine Driver's Certificate is now superseded by the National Certificate but is still a valid qualification for boiler operation.

New Standard: AS/NZS 1891.3:1997 *Industrial Fall-Arrest Systems and Devices, Part 3: Fall-Arrest Devices*

The following is an extract from a recent Standards New Zealand newsletter.

‘Stop the Fall

Standards New Zealand and Standards Australia have just published a new standard, AS/NZS 1891.3:1997 *Industrial Fall-Arrest Systems and Devices, Part 3: Fall Arrest Devices*, which has been developed with considerable input from relevant industry sectors and is therefore based on the best industry practice.

The standard sets out the requirements for the design and performance of fall-arrest devices which travel along either a fixed or flexible anchorage line, and those which pay out an anchorage line.

The following topics are covered in the standard:

- Selection, use and maintenance.
- Design, including components, anchorage lines and lanyards for fall-arrest devices.
- Performance and testing for the fall-arrest systems and the additional equipment.
- Instructions and marking for fall-arrest devices.

The standard is part of a group which includes Part 1 of AS/NZS 1891, covering safety belts and harnesses. This earlier part sets requirements for materials, design, manufacture and testing of industrial safety belts and harnesses and additional equipment including energy absorbers, lanyards and pole straps.’

Further information on these standards is available from:

**Customer Services Section
Standards New Zealand
ph: (04) 498 5991**

Confined Space Safety

Working in a confined space is potentially one of the most dangerous of all workplace hazards. It has been calculated that working in a confined space is 150 times more dangerous than doing the same job outside.

Over the years many workers, in a range of occupations, have lost their lives or suffered serious harm while working in tanks, vats, sumps, sewers, pits, traps and other types of confined space. All of these deaths and injuries could be averted by following the established procedures for such work and using proper personal protective equipment.

Engineering Safety brings to readers’ attention the availability of a series of information sheets available from OSH on confined space safety.

These will assist with management of safety in confined spaces and are available from your local OSH office.

They are:

1. Introduction to confined space safety
2. Essential facts on confined space safety
3. Summary of confined space entry procedures
4. Confined space safety in construction work
5. Confined space safety in ship building and repair
6. Accidents in confined spaces
7. Paint fumes ignite in fishing vessel maintenance
8. Entry into septic and sewage holding tanks
9. Fire hazard in enriched oxygen atmospheres
10. Worker in confined space overcome by toxic fumes
11. Test yourself on confined space safety

The key document to be used in conjunction with these information sheets is Australian Standard AS 2865: 1995 *Safe Working in a Confined Space*. This standard was prepared to meet the need for requirements and procedures for the prevention of occupational illness, injuries and fatalities associated with persons entering and working in a confined space. It is designed not only to ensure that confined spaces are made safe for those entering them, but also to highlight the likely hazards associated with such work areas and the relevant safe work processes necessary to deal with those hazards.

AS 2865 conforms with the hierarchy of controls set out in the Health and Safety in Employment Act 1992 and its use is endorsed by the Occupational Safety and Health Service. It is recommended that this standard form the basis of procedures adopted in all industries where work is performed in confined spaces.

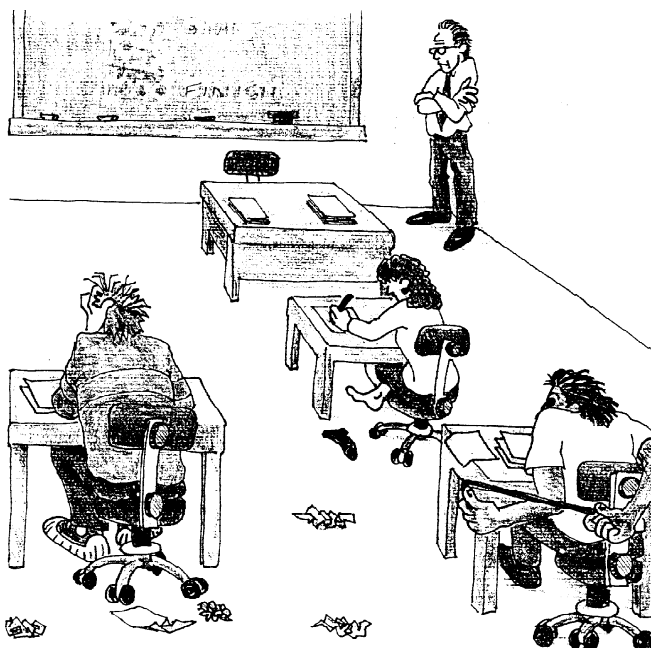
HERA—1998 Training Programme

HERA have supplied the following information on their 1998 training programme.

Activity	Dates
Welding Inspection	23-27 March
	22 -26 June
	7- 11 September
	16 - 20 November
Radiographic theory and interpretation of weld radiographs	4-8 May
	21-25 September
Surface methods	6-9 April
	3-6 August
Ultrasonic testing theory and ultrasonic weld testing	8-12 June
	5-9 October
Ultrasonic wall thickness	21-22 May
Management appreciation in non-destructive testing	27 May
	23 October
Coatings inspection	
Home study	All year
Introduction	20 March
Block courses	20-21 August

Further information on these courses is available from:

Peter Hayward
17-19 Gladding Place
PO Box 76-134
Manukau City
Ph: (09) 262 2885
Fax: (09) 262 2856



Merry Christmas



We wish all our readers a merry Christmas and a happy New Year.

The Engineering Safety office will be closed between 24 December and 5 January.

It is likely that staffing levels in early January will be minimal. If you anticipate requiring any assistance during this period we recommend that you contact us before 24 December.

The first issue of *Safety Lines* in the new year is due out at the end of February. *Ed.*

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