



Safety Lines

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Approved Code of Practice for Cranes

The *Approved Code of Practice for Cranes* was approved by the Minister of Labour on 19 April 2007. A notice to that effect was published in the New Zealand Gazette on 3 May 2007 and the code will come into force twenty eight days later, on 31 May 2007. It is available on our [website](#).

There has been considerable discussion involving the Department, industry, and other interested parties over various points in the code. In particular, matters relating to design life, including more in-depth inspections and when they would be applied to various cranes, are still being considered separately by a working party. The output from this working party will be subjected to the approval process including industry consultation, and when agreement and approval are achieved, will then be incorporated into an appendix to the code. If you wish to make submissions to assist the working group please contact [Geoff Edwards](#).

Late Publication

Engineering Safety regrets the late publication of the March 2007 issue of Safety Lines, which was held back in order to incorporate news of recent events. We apologise for any inconvenience this has caused.

Forklift Training Transferring to ITO

On 19 April 2007 the Department of Labour issued the following media release:

Registration of forklift operator trainers transferring to ITO

From May 1, Competenz will become responsible for auditing and registering forklift operator trainers under the Approved Code of Practice for Training Operators and Instructors of Powered Industrial Lift Trucks (Forklifts).

Until that date, this activity will continue to be the Department of Labour's area of responsibility. The Code of Practice outlines a minimum standard of training that should be provided to forklift operators. The Department has been overseeing the registration and auditing of forklift trainers since the introduction of the Code of Practice in 1995.

Competenz is the trading name of New Zealand Engineering, Food and Manufacturing Industry Training Organisation.

"We recently sought expressions of interest from suitable parties who could be considered to take over this activity," said Bob Hill, Chief Adviser Safe and Healthy Workplaces.

"Competenz was selected to take over the auditing and registering functions of the Code, and transitional arrangements have now been completed including the selection, training and assessment of auditors."

"It makes sense for an industry body that is also an externally recognised qualification agency to take over this function."

Mr Hill said the change will be a 'seamless' process for forklift trainers.

"The requirements will remain the same. The only noticeable change will be the transfer of the registration and auditing function from Department of Labour to Competenz."

The Approved Code of Practice for Training Operators and Instructors of Powered Industrial Lift Trucks (Forklifts) is being revised to incorporate these and other changes and the amended issue will be available in due course.

Used Import Pressure Equipment

When any item of pressure equipment, new or used, is imported to New Zealand, and prior to being put into service, it must be given a unique identifier and a certificate of inspection by a recognised New Zealand inspection body. That inspection body has a responsibility to ensure that the equipment is safe for use, and consequently needs to conduct a thorough inspection and careful examination of documentation.

Sometimes there are difficulties with used import equipment in relation to documentation, and this can lead to extra inspection activities (and possible remedial work), or even refusal to issue certification. There may be occasions when retrospective design verification may be required. This article is intended to provide an insight into the type of activities expected to be performed by an inspection body when confronted by used import pressure equipment. The two cases considered are when there is overseas documentation from a recognised (by the Department of Labour) inspection body and when there is not (or it is regarded as inadequate). In the latter case there has been a failure on the part of the supplier to meet the requirements of PECPR Regulation 20.

It must be stressed that full documentation be sought prior to importing pressure equipment. It is also recommended that a recognised New Zealand inspection body be consulted early in the procurement process, as it is ultimately the inspection body that will issue or decline a certificate of inspection, without which the equipment cannot be used.

Overseas documentation available:

1. The full overseas design verification documentation set, including stamped drawings, would be assessed, paying attention to seismic, wind, and snow requirements (to the extent required for the equipment under consideration).
2. The full QA package, stamped and endorsed by a recognised inspection body, would be examined.
3. The in-service inspection reports undertaken by the overseas inspection body from commissioning would be examined. It is expected that the equipment would have been under overseas certification immediately prior to export to New Zealand.

4. The inspection body may make supplementary enquiries of an overseas inspection body concerning the usage and maintenance history of the equipment. Information may also be sought relating to such factors as:
Repairs;
 - a. Damage or degradation which had occurred;
 - b. Damage mechanisms which were known to exist from the process or operating conditions; and
 - c. Operation under cyclic loading.
5. If all documents are satisfactory an inspection would be carried out in accordance with AS/NZS 3788, the relevant design standard, and the relevant code of practice. If this highlighted any problems these would need to be rectified before certification could be completed. Also in the light of information resulting from of any overseas enquiries made (as per 4 above) the inspection body may decide to carry out additional testing.
6. On successful completion of the inspection, a unique identifier would be provided and a certificate of inspection issued.

No (or inadequate) overseas documentation:

1. Retrospective design verification would be carried out and, to facilitate this, original fabrication drawings would be required. If design verification proves to be impracticable, the inspection body would likely consider discontinuing the certification process.
2. A full internal and external inspection would be carried out in accordance with AS/NZS 3788, the design standard, and the relevant code of practice, including required radiography or ultrasonic inspection.
3. If any defects were discovered further NDT would be carried out. Any remedial work would need to be completed and re-examined before the certification process could continue.
4. A hydraulic pressure test would be carried out if considered appropriate by the inspection body.
5. If the inspection revealed anything inconsistent with what was known from documentation or might be expected of such equipment, a satisfactory explanation would be necessary prior to certification.
6. On successful completion of the above, a unique identifier would be provided and a certificate of inspection issued.

Note that it is not possible in an article such as this to provide fully comprehensive or detailed procedures appropriate to all of the wide range of pressure equipment, nor for that reason does it mandate policy. The principle involved is that, for used equipment, documentation is required to be as near as possible to that expected for new equipment, and the service history should be known. When a document is missing, extra measures should be taken to compensate. There will be times when equipment is just not fit to be certified safe for use. Suppliers of equipment should ensure that all necessary information is made available to the controller, so that information retention legal requirements (PECP Regulation 8) can be met, and for subsequent use by the inspection body.

Steam Pipe Failure

There have been reports of a serious accident on 31st October 2006 at the Huadian Datong power plant near Xining in Qinghai Province, roughly 1,200 km west of the Chinese capital, Beijing.

There were two deaths and other injuries (at least one very serious) when the HP (design pressure 175 bar) main steam line from a 300 MW coal fired unit at Station Unit 2 ruptured about 6 weeks into commissioning. The pipe, of P91 material and dimensions 455 mm OD x 43 mm thick, failed in a vertical run, the rupture being about 900 mm x 50 mm (variable). Actual pressure at failure may have been about 134 bar.

The pipe is strongly suspected of being counterfeit P91, and instead of being seamless may have had a seam. The failure looks as if it could have followed a seam (or pre-existing flaw). The pipe looked like genuine P91 and was appropriately stamped, raising no suspicions until it was too late.

The pipe, after manufacture in China, passed through other Chinese companies including one which performed heat treatment and another of which finished the product before it went to the United States where it was incorrectly certified as made there. Later it was supplied to the power station project back in China. Among a number of suspicions regarding this material is the possibility that the heat treatment, which is particularly important to this grade of steel, was inadequately carried out.

The Chinese Government is investigating the matter and is reported to have prohibited the use of Chinese manufactured steel in critical power plant applications. Some of this pipe is believed to have sold in the United States and some may possibly also have been exported to other regions. Great care must be exercised in ensuring the authenticity of such pipe for every stage of production.

Other information including pictures is available in AIES Gazette Volume 17 Issue 3 article 'Quality Alert Notice No. 2006-001', Alert No. 2007NB01 (HSE) by Shell Global Solutions International B.V., and the Internet (e.g. search on 'P91 pipe failure in China').

Concrete Pumping

A concrete pumping safety working group was recently established to consider the safe operation of the pumping of concrete on construction sites. Prompted by a desire to reduce accidents with concrete pumping plant, interested parties formed the group which has met several times in Auckland, the meetings hosted by Site Safe New Zealand. The Department of Labour was represented in these early meetings.

The group has decided to create the 'Concrete Pumping Association of New Zealand» (CPANZ) and has sufficient member interest to produce a constitution and an ethics paper which are required for submission to the Companies Office in support of the application to register CPANZ as an Incorporated Association.

It is recognised that a code of practice is needed by the industry, and initially its preparation will be the primary focus for CPANZ. It is proposed that this will be an industry code of practice, and it may be based on an existing New South Wales code.

Crane Code Clarification

Part 16 of the new Approved Code of Practice for Cranes covers the fitting of hooks to excavators and similar equipment when acting as a crane.

In 16.1(2) the code states that 'The SWL is to be marked on the boom or where it can be easily seen.' It is important to note that such a marking does not convey the safe load at any particular radius. The lack of this marking on the boom is acceptable but the ratings chart in the cab is essential.

CBIP EWP Certifier Process

In Safety Lines issue 67, a new Certification Board for Inspection Personnel (CBIP) qualification was announced for elevating work platform (EWP) assessors. An implementation timetable was also provided.

An unexpected increase in the size of the October 2006 exam intake, and a delayed practical assessment, resulted in some equipment assessments having been completed by personnel who did not at the time have final results. Subsequently, questions were asked about the status of some assessors, and the validity of inspections undertaken by them.

Although it is not mandatory under current HSE legislation for those carrying out EWP inspections to be CBIP-certified, it is the policy of the Department of Labour (from January 1st 2007) to show a strong preference for EWP inspection certificates issued by CBIP-certified inspectors. If an EWP does not have such a certificate, the controller may be required to demonstrate further detailed evidence of compliance.

Since the Department was aware of the aforementioned processing delays, assessment personnel who were awaiting CBIP EWP certifier certification due to the delays continued to be accepted "as of right" until verification of their CBIP qualifications. Certificates of Inspection for Elevating Work Platforms issued by those affected assessors prior to obtaining their final results are accepted by the Department as evidence that the EWP has been examined and tested as set out in Part 11 of The Approved Code of Practice for Power-Operated Elevating Work Platforms. This applies to the single instance arising from the October 2006 exam delays.

Truck Loader Cranes – Note on Insurance

Owners of truck loader cranes should be aware that they need to check that their insurance policy covers the mounted crane as well as the truck. Apparently this is not automatically the case.

Announcements

The following organisation has been recognised as an Inspection Body under the PECPR Regulations:

Alfa Group Limited

P O Box 805
Cambridge 3450

A full list of recognised inspection bodies and qualification issuing agencies along with known contact details can be viewed at the [Engineering Safety website](#).

Farewell Mike Cosman

Many of our readers will have heard of, or had dealings with, Mike Cosman, who has had several roles in his three years with the Department of Labour, most recently as Establishment Manager Technical Support Services. Mike has moved on to a commercial health and safety position as General Manager of Impac Solutions Ltd in Wellington. His contribution and leadership will be missed and our best wishes go out to him.

HERA Courses and Seminars

HERA Training Centre is offering the following courses and seminars to the end of 2007:

Activity	Dates
EWP inspection	12 April 4 October
Refresher welding inspection	10 – 11 April 25 – 26 September
Welding inspection	16 – 20 April 13 – 17 August
Ultrasonic testing theory and Ultrasonic weld testing	7 – 11 May
Radiographic theory and interpretation of weld radiographs	14 – 18 May
Ultrasonic wall thickness	29 – 31 May
Pressure equipment inspection	21 – 25 May 6 – 10 August
Surface methods	18 – 22 June 5 – 9 November
Management Appreciation in Non-Destructive Testing	19 July
Welding defects – Causes, remedies and inspection	25 October

The venue for the above courses and seminars in Auckland is:

HERA House

17 - 19 Gladding Place
Manukau City (South Auckland)

For seminars outside Auckland the venue is bracketed.

Note: Enrolment closes 7 days before start of course or seminar.

To enrol contact:

HERA Training Centre

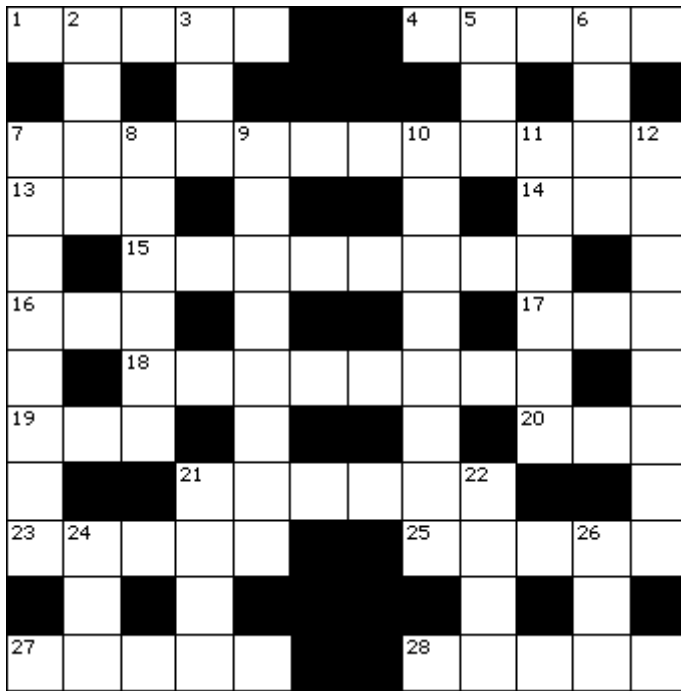
P O Box 76134
Manukau City
Phone: 09 262 2885
Fax: 09 262 2856
Email: admin@hera.org.nz

For further information about courses and seminars visit www.hera.org.nz and click training centre or contact:

Peter Hayward

Phone: 09 262 4847
Email: peter.hayward@hera.org.nz

Puzzle Place



Answers include abbreviations and acronyms.

Across

1. Unit of radioactivity
4. Cereal plant
7. Confuse
13. And so on
14. Old scrap of material
15. Short unit of length
16. Lubricate
17. – and buts
18. Empty
19. Independent
20. Engineering society
21. Ship
23. Mentions
25. Design produced by decalcomania
27. Drug addicts
28. Something of value

Down

2. Smallest part of a complex whole
3. Standards body
4. Insect
5. Greek letter
6. Reduction in rank
7. Sized to suit
8. Fits glass again
10. Provided a commentary
11. Military forces
12. Thin and fragile
21. Change direction
22. Focusing device
24. Donkey
26. 100 square metres

Answers can be obtained by email from robin.bain@dol.govt.nz.

Answers to Safety Lines Issue 72 Crossword

Across

1. Grand
4. Fired
7. Unhyphenated
8. Adhering
12. Badlands
16. Resubmitting
19. Drips
20. Docks

Down

1. Gaunt
2. Ash
3. Depth
4. Fungi
5. Rot
6. Daddy
9. Diva
10. Need
11. Farad
13. Debts
14. Noted
15. Sighs
17. Ski
18. Inc

Disclaimer

Every care is taken in the provision of information in Safety Lines but it is the reader's responsibility to confirm the accuracy of such information against relevant current legislation and approved codes of practice prior to placing reliance on it. The earlier the issue of Safety Lines, the more obviously important this becomes, as legislation and approved codes of practice may change over time.

Nothing in any issue of Safety Lines that contradicts any current legislation or approved code of practice may be relied upon. The Editor would appreciate being notified of any instance of such contradiction in an issue of Safety Lines, which was published after the publication of the current legislation or approved code of practice being contradicted.

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