

Presentation: Prevention is better than Cure

Statutory Inspection and Examination Regimes

Phil Wright, Chief Engineer, Allianz Engineering

Phil started by saying that he had been an Engineering Surveyor since 1973 and had undertaken several roles since then. He then described the background to his company, which is one of the biggest insurers in the UK. Allianz Engineering is the UK's largest engineering insurance/ Inspection body, with 580+ Engineering Surveyors nationwide! Quality standards are guaranteed by being UKAS accredited to ISO/IEC 17020, as a category 'A' 3rd Party inspection body. They also have an integrated special services arm, he added, providing value adding special needs and a truly independent consultancy.



Phil said that the first examination schemes were set up in **Phil Wright, Allianz Engineering** Manchester, in 1873, by the Manchester Steam Users Association for the inspection of steam boilers that had a nasty habit of exploding. In modern times, statutory inspections come under rigorous standards accredited by **United Kingdom Accreditation Service (UKAS)**, which is the sole national accreditation body recognised by government to assess, against internationally agreed standards.

Phil explained that legislation under the HASAW Act relating to equipment was split into two basic types, 'Supplier' Regulations or 'User' Regulations, in which Allianz's work was most involved. As far as the responsibilities were concerned, there is a requirement for Inspection (as in PUWER or EAW), or Examinations (LOLER, PSSR and COSHH), which are distinguished by their fixed periodicity.

Strict requirements for statutory inspections are placed on all employers to manage their risks in connection with hazardous work equipment generally and in particular with lifting equipment, pressure plant, electrical systems and hazardous substances. These obligations come under the following 'user regulations': -

- Provision and Use of Work Equipment Regulations 1998 (PUWER 98)
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- Pressure Systems Safety Regulations 2000 (PSSR)
- Electricity at Work Regulations 1989 (EAWR)
- Control of Substances Hazardous to Health 2002 (COSHH)

As an employer or occupier of premises, the dutyholders are responsible for: -

- Having inspection undertaken
- Making plant available
- Providing safe access and safe working environment (e.g. allowing to cool)
- Preparing plant (e.g. cleaning)
- Taking out of service until imminent danger repairs are undertaken

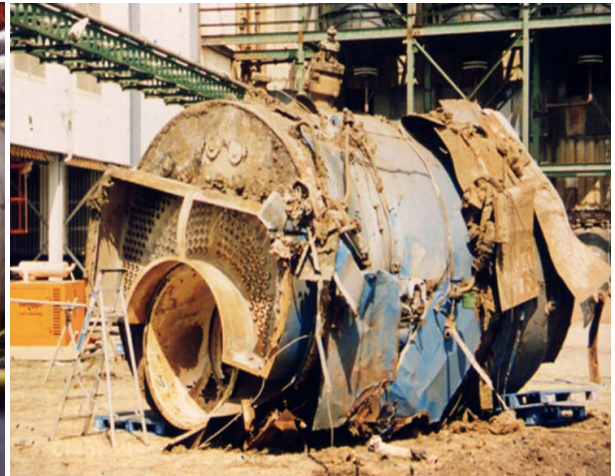
The Inspection body, or competent person, is responsible for: -

- Inspecting in accordance with legal requirements
- Inspecting competently
- Reporting as the law requires
- Ensuring that the inspection activities do not put others at risk
- Working in accordance with the Inspection contract
- Working to Client's safety rules

As an example of a typical work range, Phil quoted the items requiring inspection in a Hospital: -

- Lifts (passenger, goods, service)
- Disabled access platforms
- Window cleaning structures, cradles and attachments
- Fork Lift Trucks
- Runway monorails
- Miscellaneous Lifting Machines and Tackle
- Mobile Elevating Work Platforms
- Steam boilers
- Heating boilers
- Pressurisation Units
- Air receivers
- Autoclaves/Sterilisation Units
- Café boilers/Microwave Ovens
- Non-domestic Electric Ovens/Furnaces
- Local Exhaust Ventilation systems
- Portable electric appliances
- Air conditioning plant

As an example of the risks involved, Phil showed us a typical 'before' and 'after' the explosion scene: -



And sometimes, more exploding, a boiler



often than collapses!

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At the lower end of the boiler range, Phil mentioned café boilers that require examinations and commented that only about 50% of these were ever completed, purely out of ignorance of the law.



Café Boiler

The danger here, he added, was that very often they were sold on the second hand market after about three years from new and were lost to any examination system!

Another significant portion of their work was on Fork Lift trucks, with 110,000 examinations completed per annum, revealing 5,400 serious defects. There was also a noticeable change in the complication of safety systems on Mobile Elevating Work Platforms, since the introduction of the work at Height Regulations that altered their approach to examinations. He added that there was a need to treat Disabled access platforms with caution because of the difficulties with enclosure and he went on to say that users needed to know that they were not suitable for conventional passenger use!

Phil went on to say that, where serious defects were discovered, they were required to issue an Imminent Danger Defect Report (IDDR) and to send a copy to the HSE. This did not convey any right to the Examiner, however, to order the client to take the plant out of service. Phil added the comment that, with the imminence of the new 'fee for intervention' as a result of a "material breach" of the law, the IDDR might be used as evidence. In that case, he said, he thought that it might alter the Client/Insurer/HSE relationship!

Another important aspect of the work, Phil said, was the need to monitor the inventory of plant to be examined and deleting/adding items accurately was crucial. Changes might occur because: -

- Our Engineer Surveyor may spot something
- A Site contact may mention an addition or deletion
- Client communication revision
- A New Business Instruction
- Setting up a protocol
- End of year adjustments (plus or minus)

These changes might also affect the contract price because of the number of items inspected/examined and it was customary, he added, to agree the alterations at the end of the year.

As an example of a Regulation requiring examination, Phil cited the Pressure Systems Safety Regulations and the Written Schemes of Examination (PSSR WSEs) they specified. Under these Regulations, a WSE must be drawn up, or certified as suitable, by a competent person. A pressure system cannot be operated without a WSE and an examination cannot be undertaken unless the competent person has sight of the WSE. The WSE describes what has to be examined and at what periodicity.

In parallel with this goes the requirement for the WSE to be carried out by a Competent Person, so that the Client has some guarantee that he can rely on the outcome. This has historically been someone who: -

- Holds an HNC in a relevant engineering subject
- Has served a recognised apprenticeship in a related field.
- Has post-apprenticeship relevant experience
- Holds a SAFed H&S Passport, AND
- Holds a company authorisation certificate

Alternatively an HSE definition of a competent person is: -

“Should have enough practical and theoretical knowledge and experience of the equipment being inspected so that they can detect defects and weaknesses and assess how important they are in relation to the safety and continued use of the equipment.”

Other relevant qualities are: -

- Should *not be the same person who performs the routine maintenance*, as they would be responsible for assessing their own work.
- Should be sufficiently *independent and impartial* to make objective decisions.
- May be employed by a separate company or selected by an employer from a member of his own staff.
- Holds accreditation by the United Kingdom Accreditation Service (UKAS) to the *Standard ISO/IEC 17020*, which is an indication of the competence of an inspection body. Most insurance companies can recommend *accredited* inspection organisations.

Competent Persons are accredited as *individuals* and are subject to periodic external and internal performance reviews. About $\frac{2}{3}$ of Engineers, he commented, were engaged on LOLER work! As to the \$64,000 dollar question “What do Engineering Surveyors do?” most clients had this in mind: -



But, in reality they

- Make appointments
- Identify the plant
- Arrange for safe access

- Remove covers and guards
- Examine
- Leave the plant in the condition in which it was found!
- Produce a report

Phil ended his presentation with a résumé of Allianz special services.

Members' Questions

David Hughes of Hughes Business Services asked whether an outsourced Maintenance Contractor could provide an independent Inspection or Examination. Phil said it was not practical, as the contractor might recommend an increase in maintenance frequency to alleviate a problem! He explained that a maintenance Engineer was not the same as an Engineering Surveyor, so that there might be reasons of competence why such a dual role could not be undertaken.

Ed Friend asked what action would the examiner take if a defect highlighted on the last examination was still there? Phil said that the examiner did not have any obligation to demand remedial action and that the handwritten Imminent Danger Defect Report (IDDR) was copied to HSE, which did have the authority to take enforcement action. He added that the examiner could endorse the second IDDR with “second time reported” but, even then, was not required to approach the HSE. Phil went on to say that an examiner might talk informally to a broker, in order to mitigate exposure to undue risk, before approaching the HSE. In future, he commented, the “Fee for Fault” action might alter this scenario! He commented that the IDDR was qualified with 1month/2 month action periods.

George Allcock asked if there was any guidance on appropriate User Check regimes. Phil referred him to HSE guidance and the Safety Assessment Federation (SAFed) guidance, where there is a wealth of freely downloadable information.

Chris Peck asked if there was any minimum size limitation on what might be subject to examination. Phil stated that even shackles had to be examined, if they were part of lifting equipment! George Allcock commented that these small items should have Identity Tags and be inspected according to a strict schedule. He also advised that ‘lifting eyebolts’ were different to eyebolts used for plant restraints!

As there were no further questions, the Chairman closed the meeting by asking the members to show their thanks for a very useful presentation, in the time-honoured manner!