

# Standardised testing for tagging

A new Standard is set to redefine your approach to electrical safety. Sarah Allen looks at the changes to AS/NZS 3760.

Over the past 12 months, a group of passionate representatives from various industry groups and associations (including a number of electrical safety experts) have met to review AS/NZS 3760 *In-service safety inspection and testing of electrical equipment*. Recommendations were put forward, and lively debate ensued as to the impact the proposed changes would make not only to industry, but to the safety of employees in Australia and New Zealand.

Following the comprehensive review, Derek Johns, the chairman of EL-036 *In-service safety inspection and testing of electrical equipment* - the group charged with the review of the Standard - stated he was confident that, "The revisions to AS/NZS 3760 will help to assure users that electrical equipment is safe when it has been tested and marked in accordance with this Standard."

While the Standard has been completely revised, there are a few key areas worth noting as they may affect the way your test and tag program is implemented.

## Responsible person

The new Standard makes specific references to the responsibilities of 'the responsible person' to ensure the competency of technicians undertaking a test and tag program. The responsible person is the owner of the premises, equipment or under the relevant OH&S Act is deemed to be responsible for the safety of the workplace.

One of the most important areas of competency is the understanding of the Standard, and I encourage all 'responsible persons' to ensure their

test and tag provider owns a current copy of the Standard and understands the changes.

## Medical equipment

Requirements for medical electrical equipment have been clarified to reduce confusion between the use of AS/NZS 3760 and AS/NZS 3551:2004 *Technical management programs for medical devices*.

All items that are defined as a medical system are now to be tested under AS/NZS 3551:2004 regardless of whether the individual appliance is deemed to be bio-medical equipment. For example, a standard printer located on a crash cart in a hospital and connected to bio-medical equipment on the cart will no longer be tested under AS/NZS 3760:2010 but under AS/NZS 3551:2004.

## Retesting frequencies (Table 4)

Table 4 of AS/NZS 3760:2010 has been reviewed and now aligns more closely with the *NZ Electricity (Safety) Regulations 2010*. There are three changes to Table 4 worth highlighting.

In order to reduce confusion within manufacturing environments, no longer are there different retesting time frames for Class I and Class II equipment. Therefore all portable electrical equipment located in a manufacturing environment is now subject to retesting every six months.

The 'Cord extension sets and EPODs'

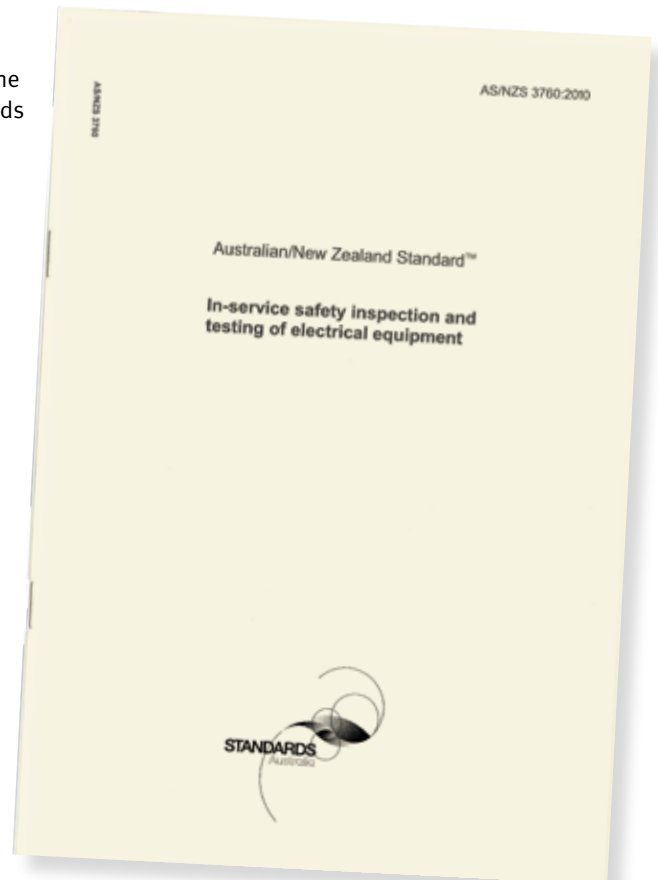
column has been removed, and is now incorporated in to one column along with Class I and Class II items.

Portable RCDs used in commercial cleaning are now required to be tested by the 'push button' daily, or prior to use (whichever is the longer), and an operating time test conducted every 12 months.

It is important to note that as the QLD Electrical Safety Regulations specify retesting time frames based on 'Classes of Work', QLD-based test and tag technicians should continue to refer to the QLD Electrical Safety Regulations for detail on retesting time frames.

## Items with functional earthing

The new Standard makes reference to equipment with functional earthing. Care



should be taken when conducting an earth bond test to ensure the functional earth is not being tested. A functional earth is not designed for safety, but the internal operation of the equipment and may give an incorrect test result. In addition, the completion of an earth bond test on a functional earth may place the equipment in danger.

#### **Leakage current testing**

The Standard now includes additional information for leakage current tests on Class II single-phase and three-phase equipment. It also includes leakage current test methodology for equipment that is normally immersed in water.

#### **3 Phase RCDs**

New guidance information has been added to the Standard for the testing of three phase residual current devices (RCDs) and electrical equipment. This has been added to improve technician safety.

#### **Information on tag**

AS/NZS 3760:2010 now specifies that the retest date must be added to the durable, non-reusable, non-metallic tag placed on the item after testing.

This is in addition to the requirement for Technician/Company Name, Test or Inspection Date, and whether the item passed or failed testing.

This addition has been made to assist workplaces in easily identifying when their appliances are due for retesting.

#### **Leased equipment**

While the 2003 standard made many references to the requirements for hired equipment, there was no reference to the requirements for the testing and tagging of leased equipment.

In order to clarify, AS/NZS 3760:2010 now states that the hiree or the leasee is responsible for the inspection testing and tagging of hired and leased equipment while the equipment is in their possession. The equipment should be inspected tested and tagged by the hiree or leasee in accordance with the retest frequencies detailed in Table 4 of AS/NZS 3760:2010.

For example, traditionally leased appliances such as Vending Machines, Water Coolers, Computers, Photocopiers and the like must now be inspected tested and tagged in accordance with Table 4 of AS/NZS 3760:2010 by the lease while the

equipment is in their possession.

#### **Appliances with removable cord sets**

AS/NZS 3760:2010 notes specifically that for equipment supplied by a cord set, the intention of the Standard is for the cord set and the equipment to be tested and tagged separately.

For example, a kettle with a removable IEC lead would consist of two tests. One test for the kettle, with a tag applied to the kettle. And one test for the IEC lead, with the tag applied to the plug end of the IEC lead.

The newly revised standard, AS/NZS 3760:2010 was launched in Australia in October 2010 and is available for download or hard copy purchase from SAI Global in Australia or in New Zealand, Standards NZ. Should you engage a test and tag service provider I highly recommend you confirm the technician owns a copy of the new Standard and completely understands the impact of the revisions. ■

*If you would like any further information, contact Sarah on 1300 287 669, by emailing [sarah@atservices.com.au](mailto:sarah@atservices.com.au) or visiting [www.appliancetagging.com.au](http://www.appliancetagging.com.au).*

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