

# ORLAB newsletter



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## The news

It's been a while. The good intentions have always been there but distractions are widespread. The one valid excuse is that we were holding off to be able to announce some very significant equipment purchases in the eye protection testing area. However, the most expensive of the pieces of equipment (dust tightness) arrived damaged and the speed of resolution of the matter between our supplier and the shipping company was glacial. In fact, it may still not be resolved between them. The equipment had to be shipped back to the UK, another one made and shipped out again. It is now in place.

We are happy to announce that we can carry out all tests (mandatory and optional) in EN167, EN168, AS/NZS 1337.1,2 &6 and ANSI Z87.1. We have had delivered the tests for molten metal, dust tightness and abrasion resistance (falling sand) and our telescope is now adaptable to the ANSI configuration. This finally makes good on a commitment to Kevin King when he worked for SAI Global. This means that you can one-stop shop in Australia for European and AS/NZS approvals in conjunction with SAI Global or BSI Benchmark, who are notified bodies in the European system. Even if these are not your compliance authority, we can still do the testing. We welcome to opportunity to see if we can reduce your current costs of testing elsewhere.

Since the last newsletter, ISO 12312-1 and ISO 12311 on sunglasses have been published. They have also been adopted as EN ISO. There is a proposal in with Standards Australia to revise AS/NZS 1067:2003 which will take into consideration the provisions of the ISO standards. There are some tests in ISO 12311 that are not in AS/NZS 1067, we now have the frame endurance and robustness test rigs to do all the ISO 12311 tests.

Another item of interest to the eye protection industry is that we have purchased a high-speed camera capable of capturing the impact of the 6 mm steel ball at all the velocities used. While the primary purpose is for research, we can offer the facility to film your products under test. Contact Brian Cheng if this is of interest to you.

We have also purchased a second haze meter and a third is on order. This avoids single instrument reliance (which is always a worry) but also gives us greater confidence in results when we can make comparisons.

The expenditure on capital items is not yet complete and the next purchases will be of interest to the window glass industry (an FTIR spectrophotometer for emissivity measurements) and the lighting industry (a B/β C/γ goniophotometer capable of luminaires of up to 1800 mm long and wide, we are currently limited to 300 mm).

In order to improve traceability of our results and an improvement in how we calibrate our focimeters, we have had our reference spherical lenses calibrated at NPL in the UK. We have also has a set of precision cylindrical lenses made and also calibrated at NPL.

Papers published since the last newsletter; Given the time lapse, these are several and are on a separate page grouped by interest area. Copies are available on request.

There has been some recent interest in non-prescription eye protection with powered lenses in the form of bifocals and degressive lenses (lenses for near work with a negative progression up the lens). These represent some challenges for a testing laboratory not least because there is no standard for them. We attach a technical note outlining the issues in testing these items. If a standard for them is seen as desirable, then a proposal may be made to Standards Australia or Standards New Zealand.

[http://www.standards.org.au/StandardsDevelopment/Developing\\_Standards/Pages/Proposing-a-project.aspx](http://www.standards.org.au/StandardsDevelopment/Developing_Standards/Pages/Proposing-a-project.aspx)

<http://standards.org.nz/international-engagement/new-work-item-proposals/>

## Standards news

Since the last newsletter the amendments (mainly editorial) have been made to AS/NZS 1337.1, which is the main eye and face protection standard. The new AS/NZS 1337.2 Mesh eye protectors has been published. The revised AS/NZS 1337.4&5 have been published. These are copies of EN 207 and 208.

The revision of AS/NZS 1337.0, which is the vocabulary and was a copy of ISO FDIS 4007, has been voted on. It is ISO 4007 with some amendments and will be published very soon.

AS/NZS 3957 Transparent screens and curtains for welding has been revised, mainly to update the UV resistance test that required a lamp that has not been available for many years. The new test is the same as EN 168 and likely to be in the ISO eye and face protection test methods. ORLAB is already equipped to do this test. AS/NZS 3957 has been voted on and due out very soon. We have also become aware of an ISO draft welding curtain standard. SF-006 is not the mirror committee for this activity so we became aware by accident. The draft standard is very poor. ISO tends to be a juggernaut and its concrete sets very quickly once you get to the draft international standard (DIS) stage. It is doubtful that any influence can be exerted on ISO at this stage, which is the final draft international standard (FDIS), at which national organisations will, on principle, not vote negatively. It should not influence the contents of AS/NZS 3957 in the future.

In the cycle of eye and face protection standard revisions, this now brings us to AS/NZS 1336. Committee SF-006 has completed its deliberations and the standard has been out to public review. Voting and publication are the only remaining steps.

SF-006 continues to be the mirror committee for ISO TC96/SC6 Eye and face protection. As indicated before, ISO 12311 and ISO 12312-1 have been published. ISO 12312-2 Filters for viewing eclipses is well advanced. ISO 18527-1 Eye and face protection - Eye protection for sports Part 1: Downhill skiing and snow-boarding goggles and ISO 18527-1 Eye and face protection - Eye protection for sports Part 2: Eye protectors for squash and racquetball are at the preliminary work item stage but well advanced and waiting on the test methods working group to develop ISO 18526-1 to 3. ISO 16321, which is the occupational standard, is making very slow progress, not helped when the working group convener lost the support of his employer and had to withdraw from all standards work (UK government cuts).

## Research projects

We are currently running two eye protection projects of interest to the eye protection industry. The first is looking at the eye and face protection for paintball. We are building an addition to the ballistics gun to test to the ASTM standard. Some of you have already responded to a request for samples of what you would recommend for paintball and we will be giving you your test results in due course. If there are any others who have eye and face protectors that you supply for paintball, we would be interested in including them. We are adding a CSA headform to our collection for this purpose.

The second is to look at the procedures and practices in schools. We are aware that there are very few eye protectors certified on the small head. We are interested in looking at what the selection and fitting practices are in schools and what is available other than adult sized eye protection. We can then provide a guidance document. We would be interested in learning what you recommend and supply for high school students. In particular, small Asian faces and the faces of students with Down syndrome have been highlighted as particularly challenging. We are looking into getting some Asian headforms. 3D printing is a marvellous technology! If you were interested in having any products evaluated in schools, let us know and send us some samples.

### Useful websites

[www.standards.org.au](http://www.standards.org.au)  
[www.saiglobal.com](http://www.saiglobal.com)  
[www.benchmarkcertification.com.au](http://www.benchmarkcertification.com.au)  
[www.accc.gov.au](http://www.accc.gov.au)  
[www.fairtrading.nsw.gov.au](http://www.fairtrading.nsw.gov.au)  
[www.nata.asn.au](http://www.nata.asn.au)  
[www.ncsi.com.au](http://www.ncsi.com.au)  
[rvcs.dotars.gov.au](http://www.rvcs.dotars.gov.au)  
<http://www.vca.gov.uk>  
[www.consulting.unsw.edu.au](http://www.consulting.unsw.edu.au)  
[www.nsg.unsw.edu.au](http://www.nsg.unsw.edu.au)

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