

# Protection collection

Innovations that improve personal and environmental protection are worth taking seriously. Dr Tom Shelley reports from last month's Health and Safety 09 show

## Pointers

- Bamboo Twinflex material is ultra-strong, comfortable, wicking and good for heat transport: watch for it on glove
- Modern plastic overalls are lighter and more comfortable than rubber biohazard suits
- Gas monitors are now available with much simpler displays to alert the wearer quickly
- Fire safety refreshers should be mandatory across industrial plant

Much more comfortable safety gloves and shoes, ultra lightweight eye glasses and overalls, an ingenious plastic drum barrow and clearer warnings on gas detectors were among highlights at the Health and Safety 09 show at Sandown race course.

The gloves, shoes and glasses come from German Uvex. Its Helix C5 gloves use a material called Bamboo Twinflex, which comprises strands of bamboo round DSM Dyneema – polyethylene fibres about 15 times as strong as steel and 40% stronger than Aramid fibre. The combination improves comfort and wicks away moisture, while the bamboo provide heat transport vastly better than synthetic materials and 50% better than cotton. Dubbed Climatec, the material is also being used in the company's Xenova footwear.

Meanwhile, its Super g safety glasses weigh in at 18g, partly due to their ultra-thin polycarbonate lenses, with anti-scratch and anti-mist coatings. Interestingly, they also have no hinges, instead incorporating residual stress in the arms, so that when they are pulled off, the arms fold behind the lenses – yet when worn, they exert barely perceptible pressure to keep them in place.

And then there are Uvex's disposable plastic overalls, which protect against chemical and biological hazards. These include a layer containing colloidal silver to reduce micro-organism growth by nearly 100%, to conform with DIN EN ISO20743: 2007-10 and EN 14126. Called AgPure, the new overalls incorporate ultrasonically sealed seams, as well as two-layer zip flaps

with Velcro and adhesive tapes, and a system for attaching a facemask for optimum protection.

They are much lighter and more comfortable to wear than the rubber biohazard suits that seem to be the norm. Additionally, their associated earplugs are shaped and hollow, so they fit comfortably.

Beyond the clothing, a pink plastic foam barrow, designed to house a 50-gallon drum, is worth taking a look at. Designed with an area at the front for liquid to be run out of the barrel and into containers,

## Fire safety

In the event of a fire, best practice is to apply a fire extinguisher from a safe distance, always keeping an exit route clear behind you to enable a swift getaway, should things go wrong.

That is sound advice from Bob Manser of safety trainers Principal People. Ignore the Hollywood movies, he says, where the hero rushes into the flames spraying his extinguisher around him. It isn't heroic, nor is it safe. Unless, that is, you're using a carbon dioxide extinguisher to put out an electrical fire, when you do have to get in close.

Powder extinguishers also put out electrical fires, but it's worth knowing that they also usually wreck the electrics and electronics to which they are applied. Finally, foam is still the best way to put out an oil fire, although you need to pause to let the foam settle before it works.

As for a fire blanket, make a twist in two adjacent corners, advises Manser, and then thrust your hands inside to protect them from heat and flames before applying the blanket to the fire. Otherwise, you'll have burnt hands.



it is available from Safety Unlimited, under the banner Enpac Poly-Dolly. Incidentally, the catchment area at the front can also be fitted with a liner that holds nearly a gallon to allow for spills. Should a larger spill occur, the liner can route the liquid into an 80 gallon sump for later recovery.

Continuing the 'simple, but effective' innovation theme, Industrial Scientific introduced a gas monitor with a full-colour display that simply turns red, if hazardous levels of gases are detected. Its Ibrid MX6 comes with 25 sensor options and can monitor up to six gases

simultaneously. **FE**



**Right: Fire drill**  
**Right below: Uvex's new ultra-lightweight glasses**  
**Below: Ultra-strong, cool, wicking glove material, using bamboo wound around DSM Dyneema**

