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**January/February 2016 / Volume 76 Number 1**

**National Safety**

[www.safety1st.co.za](http://www.safety1st.co.za)
Editor’s Comment

This is our first issue for 2016, and although it is too late to wish all our readers a happy new year, it is never too late to wish you all a safe and healthy way forward.

The year started with many difficulties - not least is our poor economic situation. It is up to each and everyone of us to contribute positively to try and help turnaround the economy. Nevertheless, companies cannot cut back on products to safeguard their employees. Nor can they afford to compromise on the quality of their products purchased. It will be a difficult balancing act.

Building awareness is part of the challenges ahead. The Department of Labour hosted a workshop to empower the industry regarding new developments for explosives training, and updates regarding the progress with regard to the Explosives Regulations Amendment process. In May this year, the A-OH will hold its annual conference and exhibition. Several free presentations will be held throughout its duration. These include the free-to-attend PASM A Working at Height and NOSH EBO Seminar Theatres. Visitors are encouraged to go onto the A-OH website to find out more about the programmes - they are being held for the improvement of the industry at no cost. Worthwhile to attend! Don’t miss out!

In March 1989, the oil tanker Exxon Valdez ran aground resulting in an oil spill that had a disastrous environmental effect. Twenty five years later there are still remnants of oil remaining in what was a pristine coastline. Rob van H emert examines what went wrong to cause this disaster.

Dr Bill Pomfret looks at a number of chemical plants and laboratories that he has visited where employees cannot use the provided eyewash stations resulting in serious injuries.

Hope K wekele writes that leading the way with quality leadership needs to be part of any leader’s DNA.

Bad communication still remains a problem with safety awareness. Is it because employees regard it as boring? Or, heard it before? This will be the case if safety and health professionals, continue doing the same things in and year out. Brian D arlington emphasises that companies need to find new ways to get people excited.

Another subject that we often cover is road accidents. In his article Leighton Bennett looks at the importance of tyres in vehicle safety.

Richard W hittaker touches on the subject of children’s nursery rhymes, and questions if they are giving the wrong safety message.

SP van Rensburg. looks at safety and health related issues for agricultural workers.

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Editor: Debbie Myer
Production Editor: Lindsay Myer
Chairman: George Browse
Vice Chairman: Leighton Bennett
Marketing & Subscriptions: Maureen Schwegmann
Admin Manager: Bruce Schwegmann
Committee members: Leighton Bennett
Wensley Misrole
George Browse
Debbie Myer

Subscriptions / Administration / Marketing / Promotions
3 Kwartel Street Vorna Valley
PO Box 321 Halfway House 1685
Tel: + 27 11 701-5054 Fax: 086 684 2664
E-mail: admin@safety1st.co.za

Advertising & Editorial
Delinds Publications cc
12 Delta Road, Blairgowrie, Randburg,
PO Box 72366 Parkview 2122
Tel: + 27 11 886-5985 Fax: +27 11 886-1332
Cell: + 27 83-266-6662
E-mail: delinds@mweb.co.za

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www.safety1st.co.za National Safety January/February 2016
North Safety is pleased to announce its merger with Budgie Shearer, which was officially finalised in November 2015 to give the companies an opportunity to achieve joint measurable growth during tough economic times.

Budgie Shearer, based in eMalahleni in Mpumalanga, was established in 1989 and has built a strong reputation by developing long-lasting relationships with its suppliers and associating itself with top brand names and products. Through this merger, North Safety is able to complement its extensive personal protective equipment (PPE) range with cleaning and engineering products.

The Budgie Shearer line of products include; Reinol hand cleaners and industrial chemicals, Spanjaard industrial lubricants and sprays, lifting machinery and repairs, lifting tackle and slings, Megaroller conveyor idlers and scrapers, Allied screen and filter products, Petrozorb oil absorbents and oil spill kits, industrial valves and slurry pumps, as well as specialised bolts and nuts.

The partnership between the companies is based on mutual benefit. “The companies boast similar values and principles, and have a shared vision for growth in the future. This will benefit both parties and subsequently the customers, who now have access to diverse products that will sufficiently cater to the industrial, cleaning and consumables sector,” explains North Safety CEO Craig Garvie and Budgie Shearer, new business development manager.

The PPE industry was previously a niche sector, making many products hard to come by. “New legislation and the drive by employers to have a safe working environment for employees has since pushed the revolution of having a large chunk of PPE become more of a commodity product that is readily available. North is adapting to this ongoing trend by growing its product line up to satisfy the current market demands and trends,” Garvie continues.

According to Garvie, Budgie Shearer’s geographical position will allow North Safety to further expand its growing footprint. “As part of the North Safety family, Budgie Shearer will enjoy the benefits of having support and back-up as the relationship develops. North Safety has now strengthened infrastructural footprint with this merger. Some of the systems will change but the general philosophy of service levels and customer satisfaction will remain the same,” he adds.

Covering over 15 regions across southern Africa, North Safety continues to reinforce its staying power by constantly adapting to changes. It continues to take part in activities that promote the expansion of its local manufacturing through extensive research and development.

Garvie says: “Our aim is to reduce cost with local content to get cost savings on many of our products so that we can pass this saving onto our customers, helping them cope in this tough economic climate.”

Garvie highlights that both companies have a very positive outlook. “North Safety’s footprint in Africa has placed it ahead of the pack and will be in a great position when the economic climate turns. We are making decisions and taking actions that are helping us survive through the tough times and to excel when the economy recovers again. Through combining both companies’ unique strengths into one, we know the partnership can grow and develop into the future,” he concludes.

North Safety Products Africa
Contact: Lizette Kasselman Group marketing manager
Phone: (031) 705 6085
Email: marketing@northsafety.co.za
Web: www.northsafety.co.za
In March 1989, the oil tanker Exxon Valdez ran aground resulting in an oil spill that had a disastrous environmental effect. Twenty-five years later there are still remnants of oil remaining in what was pristine coastline. What went wrong to cause this disaster?

Some background first. Oil produced from the Prudhoe Bay oilfield, the largest oil field in North America, located on the far north shore of Alaska, is transported by a 1280km long pipeline all the way to the Pacific coast to the port of Valdez, located on the N E corner of the Prince William Sound (PWS). There, tankers are loaded daily to transport this oil to refineries in California. The T/V Exxon Valdez had loaded ~180 000 tons of North Slope oil during the 18 hours she was in port, and was ready to depart at about 22:00 on 23 March. Her master had been ashore most of that time, some of which was spent in two bars, where it is reported that he drank 5-9 double tots of 80 proof alcohol. He arrived back on board immediately prior to departure and seemed to be visibly under the influence, which is not surprising. Some years prior to this incident, he had been convicted of drunken driving and had his driving licence (cars) revoked. Exxon allowed this, now relapsed alcoholic, to continue to drive their supertankers, though. This issue is one that was considered to play a large part in future proceedings.

The 1st mate had been on duty throughout the loading operation, something that must suck, as he is always on duty when product transfers take place, in order to ensure that the vessel maintains its trim and damage stability, using the tank management system via the loading computer. Readers may remember the January 1979 sinking of the M/V Betelgeuse, which was offloading a cargo of crude oil in Bantry Bay, Ireland. The tanks had been unloaded in such a way that the bows tanks were empty and the buoyancy thus achieved was pushing upwards, creating high stress and instability. The bow section eventually broke free resulting in a major oil spill of light crude that subsequently caused an explosion, killing all 32 crew members and 5 shore personnel on board at the time. A 1st mate’s responsibilities concerning trim and stability during any cargo movement, is therefore an important duty which cannot be delegated. However, all deck officers rotate their duties on a 4 hour basis, and his duty was due at the departure hour. The 3rd mate, who was to be relieved by the 1st, decided to remain on duty to give the 1st some needed rest. The 3rd had also been on duty quite a long time before that, something which may also have played a part in the causes for this incident.

The first section of the PWS is traversed with a pilot on board. This section is also monitored by shore based radar. The pilot reported that icebergs from one of the many glaciers that empty into the PWS, were massing further towards the entrance to the Pacific Ocean, at H inchinbrook Point, and for the ship to be wary. State-of-the-art iceberg monitoring equipment, which the oil industry has promised to install, was still not available. A lookout was therefore posted on the bows. When it was time to drop the pilot, the master came onto the bridge to take over the watch duty, as the 3rd was then required to see that the pilot was safely transferred. At about that time there was a change of crew and the new lookout was posted on the bridge wing by the master, 300m from the bows. It was a pitch black night and raining lightly, visibility was thus not too good and this move was thus not one that looks favourable. The master had also been in contact with the shore radar station and given them their position and speed, and asked if they could move across the lanes to be in a more favourable position when exiting into the main part of the PWS at Bligh Island. That was granted as there was no shipping movement in the incoming lane. However, he was also unaware of the fact that the US Coast Guard (USCG) had ceased the previous practice of tracking ships out beyond Bligh Reef. The master then proceeded to order full speed ahead, even though he’d informed the radar station that he was moving at half that speed. He did not bother to inform them of his change of plan, but, this had no bearing on the incident anyway. It was simply strange activity on his part, which the prosecution tried to blame on his intoxication. The master further gave the 3rd an instruction to turn a certain way at a certain point, and then left the bridge.

The bridge wing lookout reported variously that she could see a certain light, which marks the Bligh Reef, but
the 3rd mate did not recognise the significance of this and did not order a change of course. He also went past the point where the master had informed him that he should turn to a new heading, without making the heading change. A radar on board the Exxon Valdez was inoperable (had been for over a year - too expensive to repair) and this inexperienced mate was thus a bit on edge. In terms of the company’s regulations, there should have been two watch officers on the bridge during this part of the journey. The master, who was actually the only one on board licenced to navigate through the PWS, had not insisted on it, though, and had himself left the inexperienced officer in charge of this huge tanker in an extremely complicated navigation locality. All the hallmarks of a disaster slowly unfolding!

With the 3rd mate at 6’s and 7’s he eventually contacted the master in his stateroom and told him that he was in trouble and needed assistance. He also made the heading change but as the master entered the bridge the ship hit some rocks and then ran aground on Bligh Reef. The master took charge of the situation, waking up the 1st officer and telling him to check the tank levels to see if these were breached, as oil could be smelled. (Of the 11 cargo tanks were ruptured, as it was revealed.) He continued to run the engine at top speed, hoping to free his ship, but then the 1st officer reported that the trim was such that the ship would sink if freed from the reef. There would remain, spilling more than half of its cargo.

This spill was the largest in USA waters until the Acondo spill in 2010, which at 3 times the amount of oil spill than the Exxon Valdez, is still the largest oil spill in the world. (South Africa experienced an oil spill that was twice the size of the Exxon Valdez one, when the Castille de Bellver exploded and sank in the vicinity of Saldahna Bay in 1983. Luckily, not much of that 252 000 ton spill came ashore.) The estimated maximum 140 000 tons of oil spill into the Price William Sound ended up to soil the shore up to 650km away to the Southwest from where the tanker grounded. There are many small islands and inlets that extend the coastline in Alaska. The clean-up was a most difficult task and cost Exxon over US$2 billion in direct clean-up costs.

2100 km of coast line was covered in thick oil. It took 3 days to get equipment and men mobilised to start the clean-up, which took place over 4 summers before a stop was put to it. Hot water treatment was initially used until it was realised that this was killing other stuff. Cold water at high pressure was used on rocks, with the oil collected or absorbed. On beaches, mechanical clean-up with backhoes was used. On certain beaches they successfully tried bioremediation using fertilizer. Some minor use of solvents and other chemicals was also tried. However, nature took its course and the winter storms remediated more locations than all of the human intervention combined.

All this effort employed up to 10 000 workers, 1 000 boats and 100 airplanes and helicopters – Exxon’s army, navy and air force, as it became known. The death toll amongst sea life was horrific. It was estimated that 250 000 birds died, 2 800 sea otters, 300 harbour seals, 250 bald eagles, 22 killer whales and billions of salmon and herring eggs. Having sailed through these waters not long ago and having seen all the aforementioned sea life, I can only imagine how grim the picture must have been for the locals.

The master of the ship got off lightly, with only a US$50 000 fine and 1 000 hours of community service, picking up rubbish along the highway between Anchorage and Seward and serving meals in a hostel in Anchorage. Exxon did not fare so lightly. After years of costly litigation in the Supreme and other courts they were finally awarded $507 million in punitive damages and paid up to $1 billion in settling 32 200 civil claims (it is amazing how many people suddenly develop symptoms of illnesses, etc when something of this nature happens). People in every one of the 50 states of the USA (including 22 in Hawaii) made claims of suffering injury, illness or damage due to this spill.

Multiple factors have been identified as contributing to this incident:

1. Exxon Shipping Company (ESC) failing to properly maintain the radar system, the Raytheon Collision Avoidance System, which, if functional, would have indicated to the 3rd mate that a collision with Bligh Reef was impending.
2. ESC failing to provide a sufficiently rested crew. (This is something that is prevalent in this industry, though, and needs to be addressed on a much wider basis.)
3. The oil industry failing to install iceberg monitoring equipment.
4. The master failing to provide a proper navigation watch i.e. two navigation officers on duty as required, and a bow lookout.
5. The ship sailing outside the normal sea lane, in order to avoid small icebergs thought to be in the area.
6. The tanker crew being half of what it was previously, thus requiring personnel to work up to 14 hour shifts plus overtime.
7. The need to leave harbour as soon as the loading was complete. No time allowed for personnel to rest.
8. The 3rd mate failing to properly manoeuvre the vessel. This was highly probably due to fatigue, an excessive workload and inexperience. The fact that icebergs lay ahead could also have made a turn towards them something that he tried to avoid until the last moment.
9. The USCG failing to provide an effective vessel traffic system. They did not anymore monitor ships once these were beyond a point some way before reaching Bligh Reef on the way out.
10. The USCG also failing to provide effective pilot or escort services. The pilots were dropped well before reaching Bligh Reef.
During the past year or so while conducting 5 Star Health & Safety Management System™ Audits, I have been astounded at the number of chemical plants and laboratories where employees do not practice, and cannot use the provided eyewash stations.

My normal auditing practice, is to request an employee to participate in a short practical exercise, usually within a few metres of an eyewash station. I place a blindfold (issued on the plane) covering the eyes of the volunteer, then turn him/her around 3 or 4 times, then pour an egg cupful of water into his/her face, saying it is a caustic mixture. On other audits, I pour whipping cream onto goggles. I then ask them to clean their eyes in the eyewash. What happens is that the person cannot find the eyewash, unless guided. Then they cannot activate the eyewash - some even have a valve, which is stupid and illegal. All too often I have found that employees have rarely practised using the eyewash and are not effective able to use it.

A chemical eye injury is something to avoid at all costs. It’s a painful and frightening experience and one that may leave a person blinded for life. So if your workers are exposed to hazardous chemicals and other substances, it’s imperative that you do everything you can to ensure that your emergency eyewash stations meet the required safety standards to best protect workers.

Here are some suggestions that I recommend.

Many eyewash stations are obstructed, do not have the correct demarcation, have unauthorized items inside, are not on a formal inspection or planned maintenance programme and employees have never been properly instructed, practised or seen a demonstration of its use. Nor do they know that eyes have to be washed for at least 3 minutes.

1. KEEP THE DOORS OPEN
Don’t place an emergency eyewash station behind a closed or locked door. While the station may be used infrequently, remember that when it’s needed, someone’s vision is on the line. And every second counts.

2. DON’T HANG THE UNIT AT AN ANGLE
This can interfere with the proper flow of flushing fluid and may force an injured person to stand in an uncomfortable position to flush properly for between 15 and 20 minutes.

3. DON’T BLOCK ACCESS
Avoid storing anything underneath or in front of an eyewash unit, which can block an injured worker’s ability to reach or stand comfortably at the station.

4. WATCH THE FLUID’S TEMPERATURE
Don’t allow the flushing fluid to become too hot or too cold. Storing eyewash in extremely hot or cold conditions can cause injury and discomfort to the user.

In this article, Dr Bill Pomfret discusses the two recent fatal accidents to have taken place during the annual Hajj pilgrimage.
environments can cause the flushing fluid's temperature to rise or fall outside of both CSA and ANSI's stated standard for tepid water. Flushing eyes with scalding or ice-cold solution can cause further damage to an already compromised eye.

5. FILL THE UNIT PROPERLY
Avoid mistakes when mixing flushing fluid. Both CSA and ANSI requires that the unit be filled with flushing fluid or the pre-packaged fluid provided by the manufacturer. Always prepare fluid according to the manufacturer's instructions.

6. CLEAN THOROUGHLY AFTER USE
Don't forget to clean, disinfect, rinse and completely dry the unit after each activation, including hoses, nozzles and nozzle covers (this doesn't apply to sealed-fluid cartridges). Any lingering cleaning chemicals or particles may harm the next user's eyes. When the wrong chemicals mix, the fluid may turn brown or another colour and coloured fluid is never usable.

7. DON'T COVER THE UNIT
Don't place a plastic bag or other makeshift cover over the unit to keep dust or particles out. This can hinder an injured person's ability to activate the unit properly in a single motion and start the flow in one second or less.

8. CHECK THE SHELF LIFE
Avoid using expired flushing fluid. Like any standing water, eyewash fluid can grow bacteria that may be harmful to eyes. Be sure that someone is responsible for checking stations' expiration dates and refilling/replacing them according to the manufacturer's guidelines. Generally, according to ANSI Z358.1-2009, weekly flushing is required for plumbed stations; every three to six months for tank-style fluid stations; and every two to three years for sealed-fluid cartridges and bottles.

9. INSTALL THE UNIT CORRECTLY
Don't install an eyewash unit without carefully following the manufacturer's instructions. Stations vary and have precise installation instructions to ensure proper performance, never use a valve for turning on, only a touch lever at the correct height, including installation height, the rate of fluid flow, required spray pattern and much more.

10. DON'T ALTER OR TAMPER WITH THE UNIT
Again, the manufacturer's instructions are the only ones that should be followed. Don't try to re-route hoses, change nozzles or otherwise compromise the station's performance.

E-mail pomfrabb@spi5star.com

Eyes are one of the most vulnerable parts of the body, in demonstrating the eye's vulnerability, I crack two eggs onto a saucer, and then put one drop of a chemical into the yoke, and the dispersion will be remembered by everyone present.

By understanding how to use emergency eyewash properly, your facility can ensure greater workplace eye safety. And that's a clear benefit everyone can see.

E-mail pomfrabb@spi5star.com
Safety communication must captivate

Brian Darlington is the Group Head of Safety and Health for the Mondi Group and works out of Vienna. After finishing his studies with ISCOR, he joined Mondi in 1987 and completed his NADSAM and Logistics diplomas. He worked at operations in Gauteng and Richards Bay and was transferred to Austria in 2005. Brian was Chairman of the Zululand Branch of IOSM during the years he spent in Richards Bay.

Safety communication efforts can become boring if we, as safety and health professionals, continue doing the same things year in and year out. Let’s face it, the conventional safety and health presentation showing the lagging indicators from the previous months and years don’t get many people excited.

The same applies to the safety and health toolbox talks that are presented to working groups on site.

ANNUAL MAINTENANCE SHUT DISAPPOINTMENT

A few months back I was visiting one of our operations when it was carrying out an annual maintenance shut. Having concerns about the safety culture of one of the contractor companies, a colleague and I participated in the contractor’s daily toolbox talk. Not surprisingly, what we witnessed was disappointing: not only was it the safety officer rather than the contractor manager or supervisor that conducted the toolbox talk, but he also simply proceeded to read two full pages of safety jargon verbatim.

To add to the challenge, the content had very little relevance to the maintenance shut activities that were front of mind at the time of our visit. For example, this particular toolbox talk would have been an ideal opportunity to address the high risk activities associated with the mill’s maintenance shut, including topics such as working at extreme heights and heavy lifts.

But the reality is that, regardless of the fact that the safety content is potentially life-saving, the way in which we deliver that content plays a critical role in how well it is received and internalised.

IT’S IN THE WHAT AND HOW

To ensure maximum impact, the way we communicate needs to captivate our audience! We need to catch the attention of employees and contractors from the start; they need to feel completely engaged in what we’re saying and how we’re saying it. To do this, we should:

• Select topics that are relevant to the risks of the current tasks being conducted as well as department or working area
• Keep safety talks brief, clear and to the point
• Ensure talks are focused on the high risk activities and not the same old housekeeping or PPE type issues
• When using photographs to support your content, seek images from the actual site
• Avoid only using off-the-shelf / generic safety talks and posters - ensure a customised message.

• To be more effective HSE professionals should assist by developing the communication material, however the safety talks should be conducted by the managers and supervisors. After-all the message will be more powerful and have a better effect if the working teams hear it from their leaders rather than the HSE professionals.

• It is always useful to develop a poster or two that is linked to the safety talk that has been conducted which can be placed on the HSE notice boards after the communication session. This then acts as a reminder of what was discussed.

• Avoid the clutter; keep the contents of the posters short and to the point. Once again if using photographs in the posters try and make use of photographs taken at the actual site.

FOCUSED HSE DAYS

Consider having a focused HSE day each year during which all sites within the company place additional focus on the HSE topics.

The company that I work for has an annual “Making a Difference Day” during which all operations worldwide are encouraged to dedicate a full day to focus on the safety, health and...
environmental issues prevalent in their working and personal lives. The enthusiasm with which employees embrace these days seems to grow year on year. There is so much that companies can do during similar focused HSE days to promote the safety, health and environmental programmes and drive a culture of safety. Some examples include:

- Encourage employees and their families to focus on creating a 24 hour safety mindset
- Conduct regular information sessions focused on the top risks specific to that site
- Involve third party companies to promote activities such as road safety, healthy eating, stopping smoking, etc.
- Use simulators to demonstrate the benefits of wearing a seat belt when in a vehicle
- Conduct hazard searches during which employees and contractors are requested to search for specific hazards related to the selected topics. These are then listed and suitable action plans developed to address the issues identified
- Launch new initiatives, videos, employee engagement initiatives, etc.
- Demonstrate the use of key personal protective equipment such as fall arrest equipment, breathing apparatus, etc.
- Conduct refresher training for fork lift and other mobile plant and equipment operators
- Involve family members to develop a set of safety posters that can be used for an annual calendar.

SO WHAT SHOULD LEADERS DO? Just think about how many people actually listen to the air hostess giving the safety instruction on an aircraft prior to take off - not many!! And when asked why not, the most frequently stated response is “I have heard it so many times before!” The same human behaviour applies to our industrial safety communications - if it’s the same old message delivered in the same old way, your audience may hear you but are very unlikely to listen. This has no benefit on your drive for continuous improvement and zero injuries. Encourage and support your front line managers and safety professionals in developing suitable skills to be able to prepare and present good, to the point and interesting safety communication material. This will without doubt make a huge difference to your efforts going forward.
Thousands of vehicles travel daily in South Africa, with everyone relying on four or more “rubber” contacts with the road. Lives are dependent on the contact that the rubber tyres make with the road.

The question is - how often do we consider the safety condition of our tyres? The answer is probably seldom, although our lives depend on it.

Let’s consider the issues that impact on our tyres and their safety:

- Road conditions – wet, dry, potholes, etc
- Speed and load
- Tyre types
- Tyre wear and tear - wheel alignment and inflation
- Spare wheels and “skinny” spare wheels (“marie biscuit” wheels)

All the above issues are interrelated and each one impacts on our safety while travelling.

ROAD CONDITIONS
Unfortunately our road conditions are getting worse over the years because of inadequate road maintenance funding in all Provinces of the country, and the damage that roads are suffering due to increasing heavy vehicle use. Potholes are everywhere and hitting one can cause damage from tyre nicks to blowouts and rim damage.

Furthermore, asphalt surfaced to gravel road conditions impact on the contact ability of tyres with the road surface. The safety conditions are impacted depending if the road surface is wet or muddy, resulting in aqua-planeing and other risks. While dry conditions become risky when loose materials are lying on the road surface, leading to steering and higher skidding risks, especially during braking.

SPEED AND LOAD
Our roads have design speed restrictions which are often exceeded especially by drivers thinking they can handle anything because of their perceived “fancy car’s” road holding capabilities. The evidence from accidents proves otherwise. Speed has its role in causing road fatalities. Loaded vehicles, including those towing loaded trailers, caravans, boats etc, have increased momentum due to the load mass and the travelling speed, so that the braking distance and time to stop the speeding load’s momentum is significantly increased as the tyre’s braking grip can also be compromised by the tyre’s condition, the road condition and the response time of the driver to apply the brakes, which averages about 0.75 seconds which at 60km/hr means travelling some 12.5 meters during that driver’s response time. All light vehicles must meet the braking legal requirement of being able to stop from 40km/hr within a stopping distance of 14m.

Meanings of these tyre sidewall markings
- 205 = the tyre width in mm
- 55 = the side wall height (aspect ratio) as a percentage of the tyre width (eg. 55% of the tyre width)
- R = radial construction tyre design
- 16 = the tyre’s inner rim diameter in inches
- 91 = the tyre’s load rating (eg. 615kg max load)
- W = the speed rating of the tyre under full load (eg. a 270km/hr speed limit).

Note, having the wrong speed rated tyre on your vehicle could result in a tyre blowout at speed and further invalidate your insurance policy cover. There are specified Rating Tables for the load and speed rating characteristics of tyres. See Table 1.

TYRE TYPES
Very few people understand much about tyres except for the rim size, a flat tyre and possibly a radial vs cross-ply tyre difference.
engine size and gearbox configuration, because of the vehicle mass loads, with specified tyre diameter sizes displayed means a cross-ply tyre. 750R16 it is a radial, while no R 16, and if the tyre sidewall is marked as common sized tyre for a 4×4 is 750. This can reduce your steering safety sidewall (aspect ratio) flexing capacity. This can reduce your steering safety siding differently under driving conditions, especially while driving through road bends or corners. This different flexing ability means that tyre road holding of the less flexing tyre with a lower sidewall, is placed under higher stress because it is holding most of the turning moment. While the other tyre on the same axle is not at its flexing limit because of its higher sidewall (aspect ratio) flexing capacity. This can reduce your steering safety while cornering, especially at speed.

Table 1: Tyre speed rating table

<table>
<thead>
<tr>
<th>Speed rating</th>
<th>Km/hr</th>
<th>Speed Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>140</td>
<td>U</td>
</tr>
<tr>
<td>P</td>
<td>150</td>
<td>H</td>
</tr>
<tr>
<td>Q</td>
<td>160</td>
<td>V</td>
</tr>
<tr>
<td>R</td>
<td>170</td>
<td>Z</td>
</tr>
<tr>
<td>S</td>
<td>180</td>
<td>W</td>
</tr>
<tr>
<td>T</td>
<td>190</td>
<td>Y</td>
</tr>
</tbody>
</table>

Radial vs Cross-ply Tyres

All originally manufactured tyres were cross-ply design constructed until radial tyres were invented in the early 1970s. The cross-ply tyre was designed with a rigid sidewall which in general does not allow heat to dissipate easily and so the tyre wears out faster. Consequently radial tyres are more popular now, but cross-ply tyres still have their place and generally can be fitted to vehicles (like 4x4s) that work in extremely harsh environments where there are no roads and where the tyre risks of getting sidewall punctures from tree stumps or sharp rocks is common place.

By contrast the radial tyres are manufactured giving them a flexible side wall whilst still retaining strength. This flexible sidewall allows greater control over the direction of the tyre on the road so that the vehicle moves to where you steered it without any hesitancy! Also, of extreme importance, it allows the tyre to retain its contact patch on all corners rather than lean on a corner and lose contact, like a cross-ply tyre may do.

How does one recognise whether the tyre is a cross-ply or radial? This is very straightforward, for example, a common sized tyre for a 4x4 is 750 16, and if the tyre sidewall is marked as 750R16 it is a radial, while no R displayed means a cross-ply tyre.

Tyre Wear and Tear

Tyre wear and tear occurs to all tyres in use but bad road conditions can cause quicker damage and wear and tear to tyres.

The tyre tread depth must be legally more than 1 mm deep, or when the tyre wear has reached the wear bar in the tyre grooves. The tread is made of a thick rubber or rubber/composite compound with a pattern of grooves, ribs, lugs (tread blocks), voids and sipes (the water releasing across the tyre grooves), which is a tread pattern developed by each tyre manufacturer and which is unique to that tyre.

The impact of tyre tread depth and wet to dry road condition on stopping distances are significant. See Table 2.

Secondly wear and tear is influenced by both the maintenance of the vehicle and the tyre itself.

Vehicle wheel alignment and tyre inflation are major factors that impact tyre wear and tear.

Inspect your tyres and consider the tyre wear diagrams in Figure 2 and the corrective actions listed.

Spare Wheels and "Skinny" ("Marie Biscuit") Spares Wheels

The first issue with a spare wheel is how often to check its inflation - finding a flat spare when suffering a punctured tyre leaves one stranded on the road side waiting for help or worst being attacked. The spare wheel should be checked whenever you do a tyre pressure check at the petrol station. Also consider the spare be pumping to a slightly higher pressure (eg. 2.5 bar) than your other tyres (eg. 2.2 bar) because you may not check it as often as you should.

A second issue is that many drivers decide to fit "cool" lower profile (aspect ratio) tyres to their vehicle when they buy a normal set of 4 larger diameter "mag" rims. This means when they have a flat spare emergency they fit the spare wheel which has a different tyre sidewal height on the same axle as their low profile tyre. The tyre sidewall

Table 2: Stopping Distances from 80km/hr, under different road and tyre tread conditions

<table>
<thead>
<tr>
<th>Road condition</th>
<th>Tyre condition</th>
<th>Driver reaction distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry</td>
<td>Tread depth 1m or more</td>
<td>15 m</td>
</tr>
<tr>
<td>Wet (2mm water)</td>
<td>Tread depth 5mm</td>
<td>15 m</td>
</tr>
<tr>
<td>Wet (2mm water)</td>
<td>Tread depth 1mm</td>
<td>15 m</td>
</tr>
<tr>
<td>Damp (misty conditions - lifts rubber dust &amp; oil to give a slippery film surface)</td>
<td>Tread depth 1mm or more</td>
<td>15 m</td>
</tr>
</tbody>
</table>
flexing of the two tyres is different when driving through road corners and bends, and this risk escalates when driving at speed. This presents a similar risk having a radial and cross-ply tyre on the same axle.

Several vehicle manufacturers in their wisdom provide a reduced sized “marie biscuit” type tyre as the emergency spare wheel to provide move usable boot space. This “marie biscuit” tyre has a narrowed tyre width, a lesser side wall height than the normal vehicle tyre. And although the vehicle manufacturer’s manual normally suggests a maximum travelling of no more that 80km/hr or less, driving at such reduced speeds in reality is seldom the case. For example, I recently travelled on the N1 toll road from Northcliff, in Johannesburg to the Midrand turnoff and counted 5 cars using their “marie biscuit” spare wheels and all travelling at speeds over 80km/hr.

Furthermore, spare wheels are being used for longer periods now than ever before, probably because of the cost of re-placing a tyre. With the result, more drivers are taking the chance of driving on the spare for longer, but the skinny tyre rubber compound is normally softer, has a 3mm tread and so will wear out quicker than a normal type. For example, I recently saw a vehicle and its fitted “marie biscuit” wheel parked outside the gym, and a week or so later I saw the same vehicle again still travelling on its “marie biscuit” wheel. Also I often notice vehicles with a flat tyre parked along the road side because of a usable spare not being available.

CLOSING COMMENTS

To the casual observer all tyres look alike. Don’t be fooled. I hope that I have given some insights about tyres and tyre safety.

Today's tyres offer a degree of handling, ride comfort, traction, tread wear and fuel economy that far exceeds tyres manufactured just a few years ago.

However, the following six point tyre safety checks should be regularly performed to ensure safe travel:

1. Check overall condition of tyres, including inner and outer sidewalls.
2. Check tyre tread depth.
3. Check all tyre pressures.
4. Check signs of irregular wear.
5. Check and examine the spare wheel tyre.
6. Limit your speed and driving time period should you use a “marie biscuit” or different profile spare wheel to the fitted vehicle wheel tyres.

REFERENCES

Professional Driver's Digest, 7th edition, K Ramsden
Benrisk's Guide to Vehicle Safety, L Bennett

Figure 1: Checking the condition of your tyres

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over-inflation</td>
<td>If only the centre of the tread has worn, the tyres are over-inflated</td>
</tr>
<tr>
<td>Keep the tyres at the correct pressure</td>
<td></td>
</tr>
<tr>
<td>Under-inflation</td>
<td>If the outside tread of a tyre is worn, the tyres have been under-inflated.</td>
</tr>
<tr>
<td>Keep the pressure correct</td>
<td></td>
</tr>
<tr>
<td>Neglected cut</td>
<td>A cut in the tyre tread will let in water, which will rot the plies and cause a chunk to peel off.</td>
</tr>
<tr>
<td>Have cuts treated</td>
<td></td>
</tr>
<tr>
<td>Incorrect camber</td>
<td>Severe wear on one side of the tyre tread only is caused by incorrect camber angle.</td>
</tr>
<tr>
<td>Have the angle checked</td>
<td></td>
</tr>
<tr>
<td>Suspension wear</td>
<td>Regular wear across the tread is due to faulty suspension.</td>
</tr>
<tr>
<td>Check springs, dampers and bearings</td>
<td></td>
</tr>
<tr>
<td>Flat spots</td>
<td>Tread wear at one point only is caused by the brakes locking.</td>
</tr>
<tr>
<td>Check brake condition</td>
<td></td>
</tr>
</tbody>
</table>

(Note: Camber, track and toe-in or -out are parts of a wheel alignment test, mainly involving the front suspension and the steering wheels)
Leading the quality way

Often times we hear the phrases “Leading by Example” or “Walk the Talk”. These theories will equally influence how we are all keeping quality on track. According to Dr W Edwards Deming, out of his 14 Principles, the emphasis is “Institute leadership” it follows that “Adopt and institute leadership aimed at helping people do a better job”. For Quality Management Systems (QMS) to be effective and add value to an organisation, quality leadership needs to be part of any leader’s DNA! The recent significant change is the revision to be part of any leader’s DNA! The organisation, quality leadership needs to be customer-centric. This will be an ongoing commitment within and outside the organisation by meeting customer as well as applicable statutory and regulatory requirements. The establishment of the quality policy, quality objectives, conducting management reviews, and ensuring the availability of resources are responsibilities that will still have to be maintained.

PACE SETTERS THROUGH THE QUALITY POLICY

Any quality policy needs to be appropriate to the business environment. This is where top management outlines its intentions towards quality. In clause 5.3, it requires that “the commitment to comply with the requirements and has now been broadened in clause 5.3 “Organisational roles, responsibilities and authorities”. As was the case in the previous ISO 9001:2008 standard, the management representatives were highlighted in clause 5.2 such as “a) ensuring that processes needed for the quality management system are established, implemented and maintained, b) reporting to top management on the performance of the quality management system and any need for improvement, and c) ensuring the promotion of awareness of customer requirements throughout the organization”. Although some organisations were keen on outsourcing the management representative function, they should be aware of the risks involved in championing quality from outside instead of within the organisation.

CONCLUSION

The revised ISO 9001:2015 standard will certainly enhance how top management influences and spearheads quality improvements throughout the organisation. By helping their employees do better and becoming pace setters whilst championing quality, they will ensure strategic alignment of quality objectives to the strategic direction of their organisations. In the end they will be “Leading the Quality Way”. This will be translated into internal and external customer satisfaction.

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Clarke, 2015 ISO9001: 2015 A achieving Successful Certification:
ISO 9001:2015 Quality Management Systems - R requirements for Use
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Making Quality Work - A Leadership Guide For The Results

The views expressed in this article are the views of the author. They are not intended to substitute legal or professional advice.

Hope Kiwetelo is the Managing Consultant at Centre for Enterprise Sustainability (Pty) Ltd.
Consignors will be liable for all costs associated to any damage incurred to property and the environment due to non-compliance of the new regulations. Local and International industry leaders and regulators from the South African Maritime Safety Authority (SAMSA) and the National Department of Transport, gathered in Durban last year for the third International Cargo Transport Units (CTU) Packing Roadshow, where the importance of complying with the new CTU codes and weight verification Regulations were addressed and discussed.

Consignors and any company involved in the transport of cargo, whether general freight, refrigerated or dangerous goods by road, rail or water, in any form of container, trailer, tanker or rail car, will be required by law to implement and adhere to the new IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units (CTU)*. Compliance requires contents to be firmly secured to prevent movement when transported, particularly under turbulent conditions, as well as a stable distribution of weight (within the weight limitations) inside the container prior to sealing and shipping the consignment. The new regulations for the verification of container weight will come into effect in July 2016. This means that the consignor, in other words, the company responsible for packing the contents, will be liable for all the costs associated to any damage incurred should an incident occur while the cargo is in transport.

Captain Richard Brough from London, Director of the International Cargo Handling Coordination Association (ICHCA - the leading NGO association representing the interests of the global cargo handling industry) commented, “Container weight verification is crucial as part of this whole process; being a tonne or so out on your calculations can have devastating effects and cause major accidents and losses. With these new measures, it is hoped that high impact incidents will be significantly reduced, if not eradicated.”

Justin Reynolds from the International Maritime Insurance company TT Club added that, “Disastrous transport incidents are often a result of a domino effect following a single cause, whether it’s weight, packing or securing related. It’s therefore exceptionally important that we encourage behavioural change through regulations at all levels of the supply chain, to reduce loss and serious liability.”

Representatives from South African Maritime Safety Authority (SAMSA) and the Department of Transport endorsed the need for greater awareness, implementation and compliance by South African industries to reduce incidents in all modes of transport. The next stage is to create awareness about the availability of the amended CTU Code and weight verification regulations, and to train staff appropriately, which will result in improved compliance and fewer devastating incidents.

The extensively revised and upgraded IMO/ILO/UNECE Code of Practice for Packing of CTUs was approved in January 2014 by the International Maritime Organisation (IMO) and United Nations Economic Council for Europe (UNECE) Transport Committee, and in November by the International Labour Organisation (ILO), thereby protecting workers loading the cargo and also preventing accidents during transport. Companies involved in any form of CTU logistics must comply with the new Code this year and the weight verification regulations by July 2016.

The event was organised for ICHCA by, and in partnership with the Responsible Packaging Management Association of Southern Africa (RPMASA). Executive Director at RPMASA, Liz Anderson says, “We are thrilled about the great turn-out for the event. It goes to show that many industry professionals are eager to ensure their operations comply with international regulation. However this is just a start and there are still hundreds of organisations out there who need to be trained!

Email RPMASA info@rpmasa.org.za or visit www.rpmasa.org.za.

The new IMO/ILO/UNECE Code of Practice for CTU Packing is available and can be downloaded from the UNECE website.

ood day to all IOSM Members!

By the time you read this, we will be well into the New Year. But I would still like to use this forum to wish everybody a very prosperous year. May your goals be achieved!!

The IOSM National Council had a strategic planning session early in January to formulate our strategic actions for the year and the medium term. We also used it to reflect on our progress during 2015. After some robust debate on various issues and approaches, we decided to focus our attention on increasing our general membership, corporate membership as well as our professionally registered members.

Logically we will also be taking the process we started to restructure the IOSM’s activities driven by our branches, forums and electronic interaction a step further.

The web-based platform also needs further development before it will meet all our requirements. We will keep you updated on the developments in this regard as we progress.

The IOSM will again be actively involved in A-OHSExpo through our participation in NOSHEBO. Besides the wide spectrum of exhibitions that can be visited from 24 to 26 May at the Gallagher Convention Centre, you may also attend the NOSHEBO Seminar Theatre free of charge! The official programme will be communicated along the A-OHSExpo channels as well as through our normal IOSM channels.

Those that attended last year will be able to vouch for the fact that we had a very interesting programme presented by the some of the best professionals in Occupational Safety, Occupational Hygiene and Personal Protective Equipment, not only in our country, but internationally as well. Expect more of the same this year! We have again approached the Chief Inspector from the DoL and his senior staff to present on topical issues, amongst others. Keep your eyes peeled for more detail on the A-OHSExpo soon!

We are expecting a number of things to happen in our discipline again this year, so watch this space for all the interesting news from IOSM’s office!

Greetings,

Joep Joubert
I have the pleasure of living very close to my daughter and her growing family. My granddaughter, Annie Catharina - named after both grandmothers who have passed on - is now 20 months old and dotes on her "O bi" (that's our family name for Oupa). Anniebeg (Wee Annie in Gallic - her dad's a Scot) loves having O bi read her nursery rhymes and it struck me that in these kid's poems, many of which are centuries old, are some salutary lessons on safety from which we can all learn.

We all know that "Ring a ring a-rosies" is a rhyme based on actual issues relating to the Bubonic Plague in 1665, so why shouldn't we look at more of them as if they have "real life" context?

Take, for instance, H umpty Dumpty. He should never have been allowed to work at height in the first place. H is medical examination would have highlighted his fragile exoskeleton, not to mention his disproportionate body shape and limb sizes, neither of which were exactly predispositions for working at height - not to mention his high cholesterol!

But wait - shouldn't that ladder extend at least 900 mm above the landing? H e's also carrying "equipment" in his left hand whilst climbing the ladder - who knows why he should need a white flag!

And there was obviously no fall prevention or protection plan or even a decent emergency response plan. B ringing in soldiers when skilled first aiders and paramedics were required is all too obvious. Soldiers would bring a totally incorrect skill set to the table - not to mention the horses; no wonder they couldn't put him together again!

So what about Jack and Jill? W as Jack adequately trained in carrying pails of water? W as he medically fit to do so? F ive litres of water plus the weight of the wooden bucket may well have been too heavy a load for such a young man and, speaking of which, was he covered by the H ealth and Safety of Children at W ork Regulations?

Even at his tender age, he may well have been distracted by J ill's good looks and slim ankles so would not have noticed the slip/trip/fall hazards. T he result? A fractured skull.

And when he ran home (to his "employer"?), again no emergency response plan. H e received no medical attention apart from a vinegar and brown paper dressing - neither of which are in the First Aid Box requirements of GSR 3; and for sending him to bed when there is possible concussion... T he incident report is incomplete since we have no record of what happened to J ill - is this gender discrimination?

I nsey-winsey Spider? W e all know that he climbed up the water spout; a classic confined space entry issue (GSR 5) with risk of engulfment (GSR 7)! S ure enough, down came the rain and washed the spider out.

H e was lucky that the sun dried him out but obviously the incident was not reported to the H & S committee to review and issue a "Lessons Learned" statement because, sure enough, Insey- W insey spider climbed up the spout again!

I n Rock a bye Baby - why would one actually put a baby in a cradle "on the tree top"? Possibly a lazy child minder who wants the wind to blow so that the cradle would rock. B ut we can't even say that the minder did this out of ignorance of the possible outcomes since the last lines of the poem give a really succinct hazard identification - "when the bow breaks the cradle will fall" (and "when" implies a higher probability than "if"), even citing possible outcomes - "down will come cradle, baby and all"!

I'm writing this in Cape Town where, quite unseasonably, it's Raining and it's Pouring but I'm not snoring. H owever, the old man of the rhyme, who bumped his head as he went to bed, obviously had undiagnosed concussion since he couldn't get up in the morning!

D espite the above examples, the safety game, as we all know, is more than just child's play. B ut here's a suggestion. W hen you're next doing a risk assessment, especially with an inexperienced team, why not offer them these, or your own favourite nursery rhymes, as an ice breaker to get them in the right frame of mind?
Agricultural workers are at risk of work-related injuries, lung disease, noise-induced hearing loss, skin disease, as well as certain cancers related to chemical use or prolonged sun exposure.

The most common cause of fatal agricultural injuries is tractor rollovers, which can be prevented by the use of rollover protection structures which limit the risk of injury in case a tractor rolls over.

Pesticides, biocides and other chemicals used in farming can also be hazardous to worker health, and workers exposed to such chemicals may experience illnesses or birth defects. As an industry in which families, including children, commonly work alongside their families, agriculture is a common source of occupational injuries and illnesses amongst younger workers.

Workers often work long hours, some as much as 60 hours a week. They are also frequently exposed to dust while working the soil, gases from vehicle and machinery exhausts, fumes and vapours during manual and aerial crop spraying activities and/or during their cooking activities in their domestic environments.

Apart from basic induction training, all agricultural workers should be trained in:

- How to use machinery safely.
- Good manual handling techniques. The lifting of heavy objects.
- Confined space entries such as cleaning inside a grain silo, pits and sumps.
- The danger of electricity and overhead power lines.
- The handling of hazardous chemical substances.
- Biological hazards in agriculture. Contact with animals may result in zoonosis (diseases transmitted from animals to humans), including ringworm or leptospirosis from cattle or rats.
- Noise induced hearing Loss.
- Vibration (hand-arm vibration syndrome) from work with chainsaws, brush cutters or hand-fed circular saws.
- Natural substances - occupational asthma from grain dusts or insects used for biological control of pests; farmer’s lung/mushroom worker’s lung from moulds or spores from hay, straw or mushroom compost; or tetanus.
- Other substances - occupational dermatitis from work involving exposure to solvents or disinfectants.
- Pesticides, poisoning by organophosphates and bromides.
- Working at height.
- Exposure to weather conditions.
- Reporting of work related injuries and diseases.
- The use of PPE.

Occupational health and safety training in the agricultural sector, like all other work environment sectors, is of utmost importance in the prevention of Occupational Injury and diseases.
5th Annual Explosives Manager safety forum

The Department of Labour hosted the 5th Annual Explosives Manager Safety Forum on 26th November 2015 at Sanlam Auditorium in North West University, Potchefstroom.

The theme of the workshop was “Explosives Manager empowerment”.

Even though the workshop was empowering the industry regarding new developments for explosives training, we utilised the platform to update the industry regarding the progress with regard to the Explosives Regulations Amendment process.

Our own Deputy Director General: Inspection & Enforcement Services (Ms Aggy Moiloa) was the key note speaker and made the industry aware that her office is open and willing to work with the industry towards compliance.

Among the speakers were representatives from Chief Inspector SAPS, National Institute for Explosives Technology, Explosives manager, University of South Africa (UNISA), University of Pretoria (UP), North West University (NWU), and Interference Testing Service (ITC).

Mr Rudzani Ramabulana (from DoL) and Col Jurie van Staden (from SAPS CIE) Co-Chaired the workshop which was attended by about 300 delegates.

Amongst various speakers, the following topics were covered during the presentation:

- Explosives Regulations amendments
- Explosives manager qualification
- Explosives training
- Radio Frequency Devices in the Explosives Environment
- Explosives control by SAPS

The Department is still to host the final workshop once the consultation period is finalised in order to discuss the draft regulations.

---

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Launched by Executive Director of Chemical and Allied Industries Association, Deidré Penfold in November 2015, the report covered the chemical industry’s progress in meeting the Responsible Care® Initiative principles, its safety and health statistics for on and off-road activities, assessed the industry’s resource efficiency in terms of energy, water, waste and greenhouse gas emissions performance related to product stewardship and its community outreach progress.

Under Safety and Health, the association noted that of the ten fatalities recorded for 2014, six occurred during the signatory’s own road transportation activities – once again reflecting increased risk when transporting own material. It is however encouraging that 75.5% of submissions indicated that there is an implemented behaviour-based safety programme for employees and contractors.

The Recordable Injury Incident Rate, due to exposure to chemicals, has declined since 2013 activities, when segregation between material-related and material-unrelated recordable injuries was first reported.

Of the reporting signatories, 71.8% reported that no handling incidents occurred during 2014 activities. This result, reported for the first time this year, provides an excellent base on which to improve in the years to come.

There has been selective incorporation of aspects of the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals into South African legislation. At each point of the chemical value chain, there is a responsibility to manage chemicals in a safe and responsible manner. The principles and potential benefits of product stewardship practices still need to be entrenched in many signatories’ day-to-day operations. There has been no substantial increase in the proportion of signatories that positively report that product stewardship principles are a part of the company’s operations.

There is a marked increase, since 2013 in the proportion of signatories that have reported that a Community Awareness and Emergency Response Committee is in place on site. CAIA once again reiterates the importance of invitations to community members so that aspects such as general housekeeping, standard operating procedures, professionalism and conduct can be observed first-hand. Such activities have the potential to build confidence and positive relationships with community members.

There is a high level of confidence in the overall effluent discharge rate that has been calculated - a further 48% less effluent was reported to be discharged per tonne of traded products.

CAIA notes an increase in the proportion of signatories that have waste minimisation plans in place (85.4% compared to 83.2% for 2013 activities) across all signatories.

As Responsible Care® signatories, manufacturers and warehouses of chemicals must undergo a mandatory independent third-party verification audit that assesses the improvement in implementation of the eight Responsible Care® Management Practice Standards, every three years.

To view the report, go to www.caia.co.za/responsible-care/resources.
Safety Advocacy & Empowerment Foundation Nigeria in conjunction with SHEQ Foundation Ghana successfully organised the 4th West African Safety, Health, Environment and Quality (WASHEQ) Conference and Exhibition, held in Lagos, Nigeria on the 5th of December, 2015. The theme was “Driving Change, Creating Value ... from Vision to Action”.

The WASHEQ Conference and Exhibition is an annual gathering of stakeholders in the area of Occupational Safety, Health, Environment and Quality across industries in West Africa to deliberate and learn best practices in SH EQ (Safety, Health, Environment and Quality), to help reduce workplace accidents and safeguard our environment for future generations.

The 2015 event was powered by Nile support services that ensured a smooth and successful conference.

In their welcome address Mr Kadiri Shamusideen, National Coordinator Safety Advocacy and Empowerment Foundation and Ella Agbetor, Director SHEQ Foundation, emphasized that by achieving better health and safety, through managing real risks, will deliver huge benefit – in terms of less harm and suffering to the workforce as well as financially to the bottom line. So, it’s not a case of only being able to afford a certain level of health and safety - it’s about having a more productive, efficient and effective business with everyone sharing in the benefits.

Representatives from Government Agencies including National Environmental Standards and Regulations Enforcement Agency (NESREA), Lagos State Safety Commission (LSSC), Lagos State Fire Service attended the conference.

Other participants included representatives from HSEQ Professional bodies such as the Institute of Safety Professionals of Nigeria (ISPO N ), World Safety Organization (WSO), American Society of Safety Engineers (ASSE), International Association of Safety Professionals (I A SP), International Institute of Risk & Safety Management, Nigerian Red Cross and Corporate Institute of Risk & Safety Management (CIRSM).

There were presentations from fifteen speakers who represent the “best of the best” in Occupational Health & Safety, Quality and Environment from Nigeria, Ghana and Republic of Benin. Several HSEQ issues were identified and solutions provided by the speakers and participants. Dr Oyet Gogomary, the HSE Manager of Oando Petroleum presented a paper on creating a culture of personal accountability and compliance: A tool for Improving Safety Culture using his own personal experience from Oando on how to improve the safety culture in work places, other topics covered included Urban Mining (environmental impact of urban mining).

Excellent partnerships and alliances were established and continued support for SHEQ Foundation and Safety Advocacy & Empowerment Foundation will ensure that we can continue to provide a place and time each year for the WASHEQ conference where personnel can be empowered.

All the attendees agreed to meet in Ghana in 2016 for the 5th West African Safety Health Exhibition.

For more detailed information about the 2015 and previous conference, please visit www.lanyrd.com - presentations have been uploaded. Search using WASHEQ as the key word.

For more information on SAEF activities in Nigeria please visit www.safetyadvocacy-ng.org or for SHEQ Foundation - www.sheqfoundation.org

Contact: skadiri782000@yahoo.com

Ella Agbetor, Director, SHEQ Foundation.

Mrs. Dominga Odebunmi Nigeria

Participants
Dear Sapema Members,

As EXCO, we are fully aware that our members are looking for clear direction for the association during these difficult times.

Our market is always challenging us when it comes to upholding quality products, and with many of the big mining houses going through a series of restructuring and cost savings, balancing quality and competitive pricing brings about the need for our members to ensure that there is no compromise on safety.

As SAPEMA, we will continue to assist our members in our dealings with SABS, our development of training material, influencing standards for the industry and participating in trade shows.

Our desire to make our website more user-friendly and of better value to our members will be a priority during this year.

Clyde Beattie: Chairman

2015 GOLF DAY: 17 NOVEMBER
The Annual Sapema Golf Day took place on 17 November at the Modderfontein Golf Club and a GREAT DAY was had by all.
The event was kicked off with a shotgun start and 14 x 4 balls participated. (See the photostory)
The venue and food was excellent and the weather very good.

Cricketer Fanie de Villiers was the guest speaker at the evening function and the golf day profit of R22 000 was donated to a charity of his choice.

All the golf day photographs may be seen on the Sapema website at www.sapema.org.

A-OSHEXPO 2016: 24 TO 26 MAY
Sapema has once again, negotiated favourable conditions for its members participating in A-OSH Expo this year. Members will be receive a 5% discount on their exhibition stand fee.

Interested members are advised to book early as choice stand positions are already being snapped up.

Sapema, together with the Institute of Safety Management (IOSM) and the Safety First Association, under the umbrella of NOSH EBO, will be running the Seminar Theatre at the Expo again this year. We will also host an information stand as in past years.

IMPROVING SAPEMA'S ADMINISTRATIVE SERVICES
As reported in the previous newsletter, the 2015 AGM had requested Exco to research the possibility of improving the administrative function to meet the growing demands of the expanding activities and growing membership.

Sapema Exco has now done the necessary research and is expected to finalise its decision at the next Exco meeting on 2 March.

SAPEMA PPE HANDBOOK
The handbook is progressing well. The following chapters have been completed:

- Head Protection
- Hearing Protection
- Respiratory Protection
- Eye & Face Protection
- Fall Arrest
- Foot Protection
- Instrumentation

- Workwear & Reflective Clothing

TRAINING FOR SAPEMA MEMBERS’ SALES STAFF
The next training session in Gauteng has been arranged for 24 February and will deal with the module for Fall Protection with Duane Basson of HSE Solutions as the presenter.

KZNatal will also conduct a second session soon.

SAPEMA OFFICE BEARERS
National Exco
Clyde Beattie - Chairman
Ravesh Rama - Vice-Chairman
André Eloff
Deleane Luzzatto
Mike Freemantle
N els Coetzee
Justin Goldblatt
Loren Pearson
Stephen Burrow
Ray Strydom - Secretary
Mobile 083 273 5513
Tel. 012 661 5166
Email info@sapema.org

Inland Branch
André Eloff - Chairman
Michelle Mitchell - Secretary
Tel. 011 477 0190
Email: Safeco@icon.co.za

KZNatal Branch
Justin Goldblatt - Chairman
Ravesh Rama - Secretary
Tel. 031 304 8336
Email ravesh@ramagroup.co.za

Safest Greetings,
Ray Strydom
Secretary
2015 SAPEMA golf day in pictures

Modderfontein Golf Club lies sleeping in the early morning light ...

... to be rudely awakened by the Golf Day Hooligans

14 Teams: who are going to be the winners and who will trail behind them?

Warming up or practising?

The first shot?

Oops!

The day continuous!

Midday

Sundown

22 www.safety1st.co.za National Safety January/February 2016
Fanie de Villiers – Guest Speaker & Master of Ceremonies

Evening function

Auctioning cricket mementos for charity

Prize-winners

Ending the day with our second favourite pastime – Golf being the first!

Honouring the Pioneers – Cobus Kruger who retired recently

For membership and other information on SAPEMA visit: www.sapema.org
President’s report

I would like to take this opportunity to wish all our SAIOH members, partners and stakeholders a prosperous 2016. Considering that we are now entering a new year, we as SAIOH also want to especially thank Cas Badenhorst, the outgoing President, for his dedication, commitment and hard work during 2015. Cas will continue to serve on SAIOH Council and Exco as SAIOH’s Past President. SAIOH Council and Exco of 2015 also want to thank our administrative staff, Kate Smart and Lee Doolan, for their efforts and commitments in 2015, in achieving SAIOH’s goals and objectives.

2015 IN REVIEW

For SAIOH and us in general, 2015 could be considered a very successful and memorable year in terms of growth and development. As you know, SAIOH adopted a 5-year strategy in 2014, and is therefore committed to achieving certain strategic goals (focus areas) with the onset of each year, until the year 2020.

In 2015, our strategic focus area was to provide sustainable support systems to nurture (or foster) growth (or progression) of SAIOH and the occupational hygiene discipline. It is with pleasure to announce that, as part of our strategic focus area for 2015, SAIOH (with specific reference to our Chief Administrative Officer, Kate Smart) has managed to successfully implement the MySAIOH membership management system. Kate presented this initiative at SAIOH’s annual conference in Cape Town in October 2015, explaining the system and its benefits to attendees. Julie Hills, the PCB chairperson, and team also put in a lot of hard work and effort in updating and renewing the PCB’s assessment system for assessing and certifying Occupational Hygiene Professionals in South Africa.

As part of our strategic focus area, SAIOH Council and Exco also managed to update SAIOH’s QMS and Manual, aligning it with SAN S/EC 17024 requirements, and aiming at South Africa National Accreditation System (SANAS) accreditation in the near future.

It is also my great pleasure to announce that we had a very successful and well-attended annual SAIOH Conference in 2015. The conference was held from 28 to 30 October 2015, at the Lagoon Beach Hotel (Hotel and Conference Centre) in Cape Town. The Conference covered keynote, topical and technical papers, presented by local and international presenters. The abstracts will be published in the next issue of Occupational Health South Africa.

In November 2015, SAIOH and the American Industrial Hygiene Association (AIHA) signed a Memorandum of Understanding, paving the way for closer cooperation between the two professional bodies, but also with the aim to share information to the advancement of the occupational hygiene profession in southern Africa. One of SAIOH’s former presidents, Peter (Jake) Jacobs, played a pivotal role in seeing the process through until the Memorandum of Understanding was signed.

PROSPECTS FOR 2016

In 2016, our strategic focus area will shift to build SAIOH’s capacity on all levels and to strengthen branches in order to engage members at grassroots level (ownership through involvement). This means that we will revisit our branch structures to ensure that we engage our members to the advancement of the occupational hygiene profession. This will require some structural changes be made to SAIOH branches to ensure that we maximize our efforts in support of our vision and mission. As part of our commitments, vision and mission, we will consider establishing new branches in some of our provinces and neighboring countries, e.g. Namibia and Botswana.

SAIOH will hold its 2016 annual conference in the beautiful settings of Mpumalanga Province, from 26 to 28 October 2015. We hereby invite all our members, partners, stakeholders and other interested parties to attend the conference to promote the occupational hygiene profession and OH practice in southern Africa.

A formal announcement will be made on SAIOH’s Council composition for 2016, after the Council meeting to be held on 29 January 2015. We want to thank everyone who nominated and voted for member(s) to serve on the Council for 2016.

THE WAY FORWARD

It needs to be reiterated that SAIOH Council and Exco, with the support of our members, partners and stakeholders, will continue to strive to improve and commit SAIOH in advancing occupational hygiene in southern Africa. In 2016, SAIOH will also strive for accreditation in terms of the SAN S/EC 17024 requirements.

Most of the groundwork for this was performed in 2015 when updating SAIOH’s QMS and Manual. As part of the QMS update, and in alignment with SAN S/EC 17024 requirements, some structural name changes with regard to certain SAIOH structures were proposed. An official announcement will be made once these changes are officially endorsed by SAIOH Council and Exco.

SAIOH COUNCIL MEETING AND ASSESSMENT DATES

For Council meeting and assessment dates for 2016, please visit our website http://www.saioh.co.za.

e-mail: president@saioh.com
The Western Cape was tasked in 2014 by the SAIOH Council, to co-ordinate and host the 2015 SAIOH conference. Now with Cape Townians, we should have been tasked with this project in 2010. Yes Cape Townians have to mull over things, have plenty of meetings / dinners and discussions to ensure we are all on the same page. Socializing is a major part of any Cape Townian’s meetings. Most of the team tasked with this project, work in my office. I was able to hear each step as it came together. At times, I wondered with concern, if a conference would ever be held and if it even would be based on Occ Hygiene? However with our short notice, our Cape Town team pulled the conference together remarkably well.

The conference halls were far fuller than what I anticipated. The speakers were well selected and many of the delegates would have liked to attend all the sessions. Two topics really had an impact. The first was from Prof. Cas Bardenhorst’s called the “softer side”. We, as Occ Hylonists can carry out our work with perfection, however, we are not taught how to actually address people from labourers through to management. Often our people skills need improving. Cas addressed this matter with great diplomacy, that made us think on how to improve our people skills with our clients. (I did see that people skills were very well practiced at the gala event and socializing went very well indeed?). Howerver with our short notice, our Cape Town team pulled the conference together remarkably well.

The second topic that had a great impact was on Ionizing radiation presented by Ryno Botha. This often is a much neglected discipline of which may possibly become more and more important in the future. It made for a very interesting discussion.

Other topics covered during the conference included amongst others:

- European Trends in Occupational Hygiene: A Belgian Perspective by Steven Verpaele
- SAIOH and IOHA: Into the Future by Peter-John Jacobs
- The Value of Legislation in ensuring Occupational Health by Prof De Wet Schutte
- OH TA Modules by Terry Mcdonald
- Occupational Hygiene in South Africa: Quo Vadis by Deon Jansen van Vuuren
- Occupational Health and Hygiene Legislative Framework by Milly Ruiters

Many thanks to the all the exhibitors who participated and contributed. The exhibition hall looked fantastic! Lastly many thanks to the organising team. This included Kate Smart, Stacey Harrison, Hennie Van Der Westhuizen, Cara Kapp, Dahne Janse van Rensburg, Christia Steynberg and Rinus Kriel.

Well done to the Cape Town team!
The dawn of a new era

in Construction Health and Safety in South Africa

Part Two

A nton is a Business Partner: Health and Safety Executive (Pty) Ltd and advisor to Cynergy Solutions. He is Director of an International Group of Construction companies specialising in product and service delivery to the built environment.

Anton is a professionally registered Construction Health and Safety Agent. He is Chairman and Managing Director of the Association of Construction Health and Safety Management (SA), a Competent Registered Design Risk Management Consultant and Registered CD M Coordinator of the Association of Project Safety (U K). He is registered with several other occupational health and safety organisations both in the U K and South Africa.

THE “CLIENT” HOLDS THE KEY TO UNLOCKING HEALTH AND SAFETY ON A CONSTRUCTION PROJECT:

The role of the “Client” has been given a higher profile over the past thirteen years, to ensure that a construction project has sufficient health and safety leadership. To this end, the “Client” is expected to be responsible for ensuring that various health and safety actions are taken before, during and after the construction stage of the project.

The definition of “Client” in the secondary legislation known as the Construction Regulations, 2014 under the statute known as the Occupational Health and Safety Act (N o. 85 of 1993) is as follows:

Means, “A ny person for whom construction work is performed”

In both named regulations above it must be known that the “Client” has an absolute duty to perform all explicit and implied statute duties.

- The “Client” holds the key
  There is no question in that the

“Client” holds the key to the successful efforts by the South African construction industry in reducing the harm that is caused to people. This is because, at the simplest level, without the “Client” there would be no construction activity.

Although there is an explicit legal requirement for the “Client” to monitor the health and safety performance of their various service providers, it has been proven the world-over that a “Client” needs to champion the construction health and safety efforts on their projects in order to ensure a sustainable construction development. It is ultimately the degree of importance that a “Client” places on construction health and safety that determines the health and safety cultural tone set by the project team and therefore the attention paid to construction health and safety in their work.

Since the promulgation of the Construction Regulations, 2014 the majority of “Clients” may have expressed their desired construction health and safety standards in some form or another but their actions have not matched their words and if they do not “walk the talk”, all the other members of the project team will follow their lead and not their words.

If the “Client” does not provide adequate construction health and safety information to the project team in the early stages of a construction project this will have a negative effect on the construction works in the later stages. This might also serve to push aside the construction works in the later stages.

This might also serve to push aside the professional project team’s concerns regarding health and safety.

- “Client” - the head of the procurement chain
  The “Client” who procures the professional services of the various consultants that make up the professional project team and who decides on the budget and selects the contractor(s), is in a unique position to influence the way in which construction projects are procured. The “Clients” procurement leadership also establishes the correct health and safety culture for the professional project team including the contractor(s).

The various decisions that the “Client” makes can affect everyone in the supply chain and can assist in delivering a far healthier and safer construction project that is on time and within budget.

- The appointment of a competent Client Health & Safety Agent (CHSA)
  The Client should appoint the CHSA as early as possible with the aim of integrating health & safety into the construction process from the outset. Construction projects that require a construction permit from the Department of Labour need a registered CHSA to make the submission anyway.

The success of health and safety on a construction project, apart from competent and well-resourced contractors and competent designers, will without a doubt depend on the integration of a competent CHSA within all stages of the construction process.

CONCLUSION

In conclusion, although the “Client” must be able to rely on the construction industry to work with procedures and processes that achieve healthier and safer outcomes. Health and safety must be catapulted to the top of the “Client’s” construction project agenda, as it is always better to commit to health and safety and to set the standard to ensure and maintain the quality of work-life of all affected by construction projects.
In line with its philosophy of “protecting people”, the family-owned company based in Fürth has been synonymous with the best-possible protection for sports, leisure and industrial workplaces for 90 years. Having grown from its small workshop beginnings into a global company, uvex is today one of Germany’s major international brands.

**90 YEARS OF UVEX!**

When the champagne corks start popping at uvex’s headquarters in Fürth to celebrate the company’s anniversary, not only will old friends from business and politics be raising their glasses, so too will professional athletes including Felix Neureuther, Natalie Geisenberger and Severin Freund. These top performing athletes have been placing their trust in the latest uvex technologies and product innovations as they participate in international competitions.

**FROM POPPENREUTH TO THE WHOLE WORLD**

uvex's success story started in a small workshop in Poppenreuth on the outskirts of Fürth in 1926. This is where the company founder Philipp M. W inter made his first pair of safety goggles, which were crafted by hand. Demand for his products soon extended beyond labourers and craftsmen. Philipp M. W inter equipped different athletes with goggles for the first time at the 1936 Winter Olympics. In 1938, German mountaineers climbed Nanga Parbat in the Himalayas wearing glacier goggles made in Fürth.

The uvex brand was born in 1956. After living in the USA, Rainer Winter, Philipp’s son, joined the company and coined the “uvex” name, based on the quality seal for lenses – ultra violet excluded. Rainer Winter had recognised that a successful product needs a prominent brand and effective brand management. He subsequently drove forward the internationalisation and diversification of the company.

The sporting success of Alpine skiers wearing uvex goggles in the 1970s and 1980s raised brand awareness and helped uvex establish its international reputation. The family-owned company has expanded and now sells its products all around the world. Alongside sport, industrial health and safety has remained a key pillar of the company’s success, developing from a safety eyewear specialist to a brand systems provider of personal protective equipment (PPE) from head to toe.

From 1999 onwards, Michael Winter gradually assumed more responsibility for the uvex group, as the third generation of the W inter family to be Managing Partner. At the time, the company generated sales of EUR 180 million with 1,500 employees. Today, the multi-brand group employs more than 2,300 staff at 42 subsidiaries in 19 countries worldwide, with total sales of EUR 387 million in the 2014/2015 financial year. The course has been set for long-term business succession with the involvement of the fourth generation.

**LEADER OF INNOVATION FROM BAVARIA**

The uvex group’s company history has been shaped by its own innovative developments. Starting with the first safety ski goggles in the 1930s and the first anti-fog ski goggles in 1964 (uvex champion) to the development of the lightest industrial safety spectacles in the world in 2006 (uvex super g weighing just 18.7g), uvex has proven its impressive innovative strength time and again. Current solutions such as the revolutionary variotronic® technology for ski and cycling eyewear or the new i-gonomics product system, which combines traditional safety features with ergonomics, underline uvex’s claim to be a leader of innovation in the sports and industrial health and safety markets. Despite the international orientation, the uvex group has remained true to its location in Germany. In addition to the headquarters in Fürth, 90 years on, the majority of uvex production plants are still in Germany or elsewhere in Europe.

UVEX Safety South Africa (Pty) Ltd
uvex safety (Durban)
Phone: +27 (31) 569 6780 E-Mail: info@uvex.co.za
uvex safety (Pretoria)
Phone: +27 (12) 345 6656 E-Mail: safety@uvex.co.za
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One of the key issues facing companies with regard to adequate gas monitoring is instilling a culture of compliance. This is according to Adriaan van der Walt, a gas detection technical specialist from HSE Solutions. He says that many workers don’t know, do not believe or cannot be persuaded that chemicals, fumes, dusts and fibres can under many circumstances have extremely harmful effects and cause life-threatening illnesses, such as cancer. They also do not realise that gases are a threat to health at concentrations as low as 1 part per million.

Unexpected gas leaks can be a danger to a workforce and can impact greatly on the company if they go undetected. Gases such as methane, carbon dioxide, hydrogen sulphide, ammonia and chlorine pose health risks ranging from breathing difficulties, nausea and vomiting to heart damage, asphyxiation and even loss of life. Leakage of flammable or explosive gases can also lead to large-scale damage of infrastructure.

Any company employing staff has the obligation to conduct risk assessments to identify potential hazards and these can include potential gas, vapours or oxygen deficiency risks. If gas hazards are identified, gas detection is applicable as a risk reduction method. Depending on the processes being undertaken and the gases being detected, remote or off-site alarm notification plus event data logging/reporting may also be required for health and safety management records. Another factor impacting on the need for enhanced reporting functions might be regulatory compliance or a condition of insurance.

Another consideration relates to additional product functionality. Aspects like wiring configuration are important, especially when retro-fitting into an existing application. If the apparatus is being integrated into a separate safety system, certain communication protocols may also be required. Consideration will also need to be given regarding the requirement for local displays on transmitter units and local configuration of the unit and gas displays may also be a useful addition.

HSE Solutions supplies a full and comprehensive range of products manufactured by Honeywell, from low-cost, compliance equipment suited to a wide range of industrial settings to high-end, high-functionality devices.

“We take the health and safety of the South African workforce very seriously. Each one of our A-OSH EXPO exhibitors provides a risk mitigation solution to industry so visitors are guaranteed to find workable solutions through the interactive nature of the exhibition,” says Joshua Low, A-OSH EXPO Event Director at Specialised Exhibitions.

Now in its sixth year, A-OSH EXPO has earned its reputation as Africa’s largest and most targeted occupational health and safety exhibition. The event, which will take place from 24-26 May 2016 at Gallagher Convention Centre, boasts a number of visitor attractions that make the show experience even more worthwhile. These include the free-to-attend PASMA Working at Height and NOSH EBO Seminar Theatres. As in the past few years, Saiosh will also be running their comprehensive conference alongside A-OSH EXPO.

A-OSH EXPO 2016 enjoys the endorsement of a number of leading industry associations, including the Institute for Working at Height (IW H), IOSM, N ebo sh, FPASA, N OSH EBO, PASMA, the Safety First Association, SAIH O, Sapema and Saiosh.

Visitors will have access to the Business Matchmaking Service sponsored by Ideco which allows visitors to be pre-matched with relevant exhibitors. This initiative allows meetings to be arranged in advance of the exhibition, thereby maximising the visitor’s time at A-OSH EXPO 2016.

A-OSH EXPO will again be co-located with Securex, Africa’s leading source for security and fire products and services. The exhibition covers all aspects of security and fire risk analysis and alleviation.

Contact: Specialised Exhibitions
Joshua Low / Sven Riddle / Brandon Going
Tel: +27 10 003 3054 / www.aosh.co.za

Contact: HSE Solutions
Tel: +27 (0) 11 971 8040
www.hsesolutions.co.za

Reducing health and safety risks - with adequate gas monitoring

health and safety solution to industry professionals. Each one of our A-OSH EXPO exhibitors provides a risk mitigation solution to industry so visitors are guaranteed to find workable solutions through the interactive nature of the exhibition,” says Joshua Low, A-OSH EXPO Event Director at Specialised Exhibitions.

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A job safely done

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When worker safety comes first, DuPont’s scientists and technicians have created and rigorously tested the materials that help protect against heat, flame and fire, electric arc flash, cut hazards, chemicals, dry particles, lead, asbestos, mold and hazardous aerosols. And there is further innovation to come.

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Nomex® for flame-resistant protection

Garments made of Nomex® fiber are inherently flame-resistant, lighter in weight for increased comfort, and are breathable. Innovative Nomex® fabrics rapidly dissipate sweat through the fabric, helping the wearer feel dry and more comfortable. Nomex® is a highly cost-effective solution in terms of cost per wear thanks to its exceptional durability.

“People working in the toughest industrial jobs around the world face the risk of flash fire hazards during every shift. That’s why they choose FR clothing made with Nomex®, for proven protection and comfort” comments Loren Pearson, Sales and Marketing leader for Chemical Industrial and Thermal Apparel for Sub-Saharan Africa.

Nomex® is a revolutionary, inherent heat- and flame-resistant fiber that reacts in a crisis.

When exposed to extreme heat, Nomex® undergoes a special reaction, changing its properties to capture more energy in the fabric, giving the wearer valuable extra seconds of protection from heat transfer. This heat and flame resistance is built into the Nomex® fiber—it can’t be washed out or worn away.

Protera™ for Arc Flash protection

DuPont provides arc flash protection solutions by taking an holistic approach, from assessing the safety hazards to protecting the workers with optimized solutions. The DuPont 4P methodology is based on assessing the risks of arc flash and predicting the severity of the thermal effect, protecting the hazard at the source, preventing the wearer where there is residual risk of injury with appropriate PPE and publishing results as well as providing training.

“Garments made with DuPont™ Protera™ innovative arc-rated fabric and Nomex® garment solutions are available through our licenced DuPont Nomex® quality partners, who manufacture quality garments made from DuPont thermal protective fabrics to meet minimum garment construction and performance specifications” says Pearson.

In-house fabric performance test facilities

To test products made with DuPont™ Nomex® Fiber and DuPont™ Protera® fabric, we turn to a 6’1” man and engulf him in flames. He's DuPont™ Thermo-M an®, and because of him we can help manufacturers offer better, and safer products.

Fires are unpredictable. So in order to test our fabric under the most realistic conditions, DuPont turns to Thermo-Man® for help. This life-sized, instrumented mannequin system is one of the most advanced thermal burn injury evaluation devices in the world. Covered with 122 heat sensors and dressed in test garments, DuPont™ Thermo-Man® helps ensure optimal product performance. Thermo-Man® is a UL Certified test mannequin - the first of its kind developed in conjunction with the US Government to help protect the warfighter from burns.

The DuPont™ Arc-Man® is a remarkable test facility. It allows DuPont to measure how much protection fabrics and garments offer against electrical arcs that can generate temperatures of up to 20,000°C. As part of our ongoing commitment to safety and leadership, the DuPont™ Arc-Man® test helps manufacturers to assess and compare the protection that various materials provide against the thermal effects of an electrical arc. This unique service provides vital data on several key parameters that help manufacturers to optimise their fabrics and garments to protect against the heat of an electric arc. With its real demonstrations, DuPont™ Arc-Man® also helps raise awareness on the devastating effects that an electric arc could have on workers if not properly protected. Arc-Man® tests are conducted by the DuPont European Technical Centre in Switzerland.

Contact DuPont:
Tel: +27 11 218 8600

MEMBER OF
SAPEMA

www.safety1st.co.za National Safety January/February 2016
MB Workwear is one of South Africa's leading protective clothing manufacturers. For 60 years the company has been a prominent figure in the workwear industry and today their Marburg-based factory produces approximately 200,000 safety garments per month.

An ISO 9001 listed organisation, SABS permit holder and boasting accreditations with the Canadian and European Unions, MB Workwear is dedicated to safety and quality. These two pillars of their business philosophy guarantee that their workwear is superior on all fronts.

Over the years MB Workwear has become known for pushing the boundaries when developing and manufacturing safety products. It is an attitude on which the company prides itself. Combining high volume manufacturing capabilities with excellence and innovation allows MB Workwear to produce specialised workwear that meets the constantly evolving needs of the industries it serves.

It is this consistent innovation, best practices and cutting edge technology which ensures that they maintain their relevance in the industry. They have proved this yet again by introducing state-of-the-art software and machinery from Lectra Cutting Solutions to their factory.

These new additions will take efficiency in the factory to a whole new level and will enable MB Workwear to increase their production time and improve the quality of their garments. Essentially, this new solution will offer immense benefit to the customer by ensuring rapid production and a superior level of workmanship.

It is this innovation and “obsession” with quality, safety and a client-centred approach to manufacturing that drives MB Workwear to continually develop improved workwear solutions, both locally and internationally; staying true to their philosophy – safety obsessed, quality driven.
If you aren’t wearing an MB Workwear garment, you aren’t serious about safety

MB Workwear’s protective garments allow the wearer to perform their job safely and to the best of their ability.

For 60 years we have understood that comfort and durability are essential. It is this understanding and experience which has set us apart from our competitors. It is not only our commitment to quality standards which make us different, but our obsession with safety. It makes what we do more than a job. It’s a philosophy, “safety obsessed, quality driven”.

We’re serious about safety, are you?
SABS Conti Suit

Available Fabrics:
- DS9 SABS
- JS4 SABS
- Nomex®

Available Colours:
- Red | Orange | Yellow | White | Khaki
- UNB | Bottle Green | Emerald | Leaf Green
- Grey | Royal Blue | Navy Blue | Denim

Standard Conti Suit

Available Fabrics:
- Polycotton
- Denim
- 100% cotton
- Flame retardant
- Acid resistant

Available Colours:
- Red | Orange | Yellow | White | Khaki
- UNB | Bottle Green | Emerald | Leaf Green
- Grey | Royal Blue | Navy Blue | Denim

Original Zeroflame® Conti Suit

Available Fabrics:
- Zeroflame®
- Zeroflame® Acid Original

Available Colours:
- Orange | Navy Blue

The Ultimate Workwear

MB Workwear is a market leading manufacturer of workwear and personal protective clothing. Dedicated to producing garments of the highest quality and safety standards, MB Workwear is an ISO9001 listed organisation, accredited with the South African Bureau of Standards (SABS) as well as European and Canadian standards authorities.

In excess of 200 000 garments are produced per month by MB Workwear, including specialist protective clothing for the OGP, mining, construction and chemical industries. Specialised fabrics and fabric treatments are used where necessary, when extra protection is required.

Safety Obsessed, Quality Driven

Visit www.mbweworkwear.co.za or find us on Facebook or LinkedIn
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Eye Protection | Hand Protection | Respiratory Protection
Head & Hearing Protection | Disposable Protective Clothing

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