



DECEMBER 2018

SAFETYZONE MAGAZINE

Outsourcing Critical Aspects of Processing Systems

Cover Art Provided
By Piranha Safety

PIRANHA LITES



KNOW when you are in the ZONE

The PIRANHA LITES® are a simple safety accessory that can easily attach to almost any scissor or boom lift. The lights are a great way to highlight the surrounding perimeter of a scissor or boom lift that is in operation, helping the operator and the workers on the ground stay safe.

- Kit includes a set of 4 lights and wiring harness
- Lights are durable and built to withstand the harsh job site environments
- Installs using clamps. No drilling required



PIRANHA LITES are approved for use by major OEM's of mobile work platforms



www.piranha-safety.com /// 1-800-738-5004

Mention this ad and receive a discount!



PIRANHA SAFETY XRail is the *first of its kind, programmable guardrail system* that creates a safety barrier that is functional as well as being extremely safe to use.

FLUSH MOUNT

The XRail system can lower into a pocket on the floor eliminating tripping hazards, storage issues as well as allowing for workers and equipment to be easily moved in and out of the work space.



ADJUSTABLE HEIGHT

The XRail can raise to any height up to 42" per OSHA standards. Fully customizable, automatic and programmable features make this system a part of Piranha Safety's intelligent safety solutions



Patented
USA 9,745,762
Canada 2,889,091

APPLICATIONS

- Aerospace
- Industrial
- Maritime
- Roofing
- Loading docks
- Pharmaceutical
- Tooling manufacturers
- Elevator maintenance



- PG 4** Klein Tools® Expands Infrared Measurement Range for Use in Versatile Applications
- PG 10** Reinventing Fire Detection in Industrial Warehouses
- PG 18** Guard-Safe Guarding: Five Easy Steps to Successful Machine Guarding!
- PG 20** Company Profile: Jesco Industries, Inc.
- PG 22** Outsourcing Critical Aspects of Processing Systems
- PG 30** Company Profile: Malta Dynamics
- PG 32** Emergency Safety Shower Decontamination Booth
- PG 34** UniMax Floor Mounted (Walk-In) Fume Hoods
- PG 34** Enclosures for Lab Automation and Robotics
- PG 36** Ad Index
- Cover Art Provided by Piranha Safety



Piranha Tool Caddy

 Made in USA

The Piranha Safety Tool Caddy is a highly flexible, mobile and rugged tool storage and management system made of rust free heavy duty ABS plastic. The tool management system can mount to virtually any solid surface using the patented Piranha Lox surface mount.

Applications

Boom Lifts	Factories
Scissor Lifts	Construction
Facilities	Shops

www.piranha-safety.com /// 1-800-738-5004

Mention this ad and receive a discount!





CEO
Christy Hobson

PRESIDENT
Glen Hobson
glen@tipsmag.net

PUBLISHER
Anne Marie Miranda
205-470-1468
annemariemiranda1229@gmail.com

EDITOR
Brandon Greenhill
brandon@tipsmag.net

CREATIVE/ WEB DIRECTOR
Jacklyn Greenhill
jacklyn@handfmedia.net

ADMINISTRATIVE DIRECTOR
Steven Hobson
steven@tipsmag.net



Executive and Advertising Offices
P.O. Box 1568
Pelham, AL 35124
Phone: 205-441-5591 Fax: 205-624-3354
www.safetyzonemagazine.com

Safety Zone Magazine™ is published six times a year on a bi-monthly basis by CJS Media, P.O. Box 1568, Pelham, AL 35124 USA. *Safety Zone Magazine*™ is distributed free to qualified subscribers. Non-qualified subscription rates are \$57.00 per year in the U.S. and Canada and \$84.00 per year for foreign subscribers (surface mail). U.S. Postage paid at Birmingham, Alabama and additional mailing offices.

Safety Zone Magazine™ is distributed to qualified owners and managers in the safety industry. Publisher is not liable for all content (including editorial and illustrations provided by advertisers) of advertisements published and does not accept responsibility for any claims made against the publisher. It is the advertiser's or agency's responsibility to obtain appropriate releases on any item or individuals pictured in an advertisement. Reproduction of this magazine in whole or in part is prohibited without prior written permission from the publisher.

POSTMASTER: Send address changes to
CJS Media, P.O. Box 1568
Pelham, AL 35124
PRINTED IN THE USA

i-Comply CHECKLISTS™

Office & Data Centers

Got Sales Offices and Data Centers Around the Globe?

Too **many** sites? Too **hard** to coordinate? Too **costly** to send auditors?
Having **difficulty comparing results** across the locations you have inspected?

If you said **yes** to any of these questions, how can you be sure that
those sites are in compliance with your Global EHS compliance and
risk programs?



Topic	Question ID	Audit Questions	Auditor Guidelines
CheckPoint® Office Audit Protocols Environmental Health And Safety	CHC-130.1.1.5	1. Does the facility have an employee alarm system? Cite: 29 CFR 1910.135(d), 29 CFR 1910.135	An employer must have and maintain an employee alarm system that is able to be heard, seen, or otherwise perceived by everyone in the workplace. The employee alarm system must be distinctive and recognized by all employees as a signal to evacuate the work area or perform actions identified in the ERP/SAP.
OFFICE: ALARM SYSTEMS	CHC-130.1.1.5	2. Is the employee alarm system tested annually? Cite: 29 CFR 1910.135(d)(4)	Employee alarm systems must be tested at least annually for reliability and adequacy.

G. AUDIT QUESTIONS						
Date: _____						
Facility: _____						
Auditor: _____						
Question ID	Audit Questions	Auditor Guidance And Notes-Audit Questions	Y E S	N O	N A	Comments
ERGONOMICS						
OFF-140.1.1.5	1. Are workstations configured so that employees can achieve ergonomically correct working postures?	Workstations should be configured to prevent common ergonomic problems. The computer keyboard and mouse should be within easy reach and at a comfortable height (elbow high), the keyboard and monitor should be aligned, and the screen should be at or slightly below eye level. There should be no under the desk storage.				
OFF-140.1.1.5	2. Are chairs used at workstations adjustable and in good condition?	Chairs should be so that employees can work in a comfortable seated position, with good body support. Chair height should allow feet to rest flat on the ground with thighs parallel to the ground.				

Learn More by Visiting

www.regscan.com/products/icomply

Klein Tools® Expands Infrared Measurement Range for Use in Versatile Applications

Klein Tools (www.kleintools.com), for professionals since 1857, introduces a 20:1 Dual-Laser Infrared Thermometer, which offers a wide measurement range, a tight distance-to-spot ratio, dual targeting lasers and several calculation modes. With the reliability needed to get the job done right, this new jobsite essential enables accurate temperature measurements on inconvenient-to-reach smaller objects at distance.

Dual-Laser Infrared Thermometer, 20:1 (Cat. No. IR10)

- Measures temperatures ranging from -40 to 1200°F (-40 to 650°C)
 - Measures surface temperature when using IR emission, or
 - Measures bulk temperatures of air, gas or liquids when using a standard K-Type probe
- Dual-laser targeting and 20:1 optical resolution (distance-to-spot) enable accurate measurements of smaller objects at farther distances
- Adjustable emissivity from 0.1-1.0 provides flexibility for use across multiple applications
- Bright backlit display provides easy viewing in low light
- Statistical parameters are calculated for measurement events - Max/Min/Avg/Diff
- User definable high/low limits with audible and visual alerts when breached
- Powered by one 9V alkaline battery, which has an eight-hour runtime with continuous use of laser and back-light
- Rugged design (U.S. patent D791,624) stands up to harsh jobsite conditions
 - Soft-touch, over-mold housing
 - 9.9-foot (3m) drop protection
 - IP54 ingress protections for dust- and water-resistance
- Includes custom carrying pouch, K-Type temperature probe and battery



“When professionals rely on a durable, dependable, rugged instrument to deliver accurate temperature measurements as part of their day-to-day responsibilities, it is crucial that they are equipped with the right tools for the job,” says Sean O’ Flaherty, director of product management at Klein Tools. “Klein Tools’ new 20:1 Dual-Laser Infrared Thermometer enables accurate IR measurements of surface temperatures, and bulk temperatures of air, gas or liquids with standard K-Type probe, with a wide measurement range that makes it the perfect tool for use across various jobsites day-in and day-out.

For more information, visit www.kleintools.com/new-products or search for #NewKleins on social media. •

About Klein Tools

Since 1857 Klein Tools, a family-owned and operated company, has been designing, developing and manufacturing premium-quality, professional-grade hand tools. The majority of Klein tools are manufactured in plants throughout the United States and are the No. 1 choice among professional electricians and other tradespeople. For more information, visit www.kleintools.com.

Klein is a registered trademark of Klein Tools, Inc.



30% OFF Select SRLs



C7500
~~\$265.50~~

**NOW JUST
\$185.85!**



C8000
~~\$287.10~~

**NOW JUST
\$200.97!**



C8001
~~\$296.10~~

**NOW JUST
\$207.27!**



R0003
~~\$1,504.80~~

**NOW JUST
\$1,053.36!**

**Use the code
"SAFETYSRL"
to get 30% OFF
when you call us or visit our website**

BE SAFE. BE PREPARED. BE PROTECTED.



CoreTex
Products Inc.

See Our Full Line of Products at
www.CoreTexProducts.com

BOOTH NUMBER AT the NSC SHOW #3552

**Protect your People
and Property from**

Pest Bird Mess

Clean the mess & stop dirty birds
from returning with Nixalite!

- Surface Sanitizers & Deodorizers
- Stainless Steel Bird Exclusion Spikes
- Structural Bird Exclusion Netting
- Bird Fogging & Hazing Equipment

FREE Bird Control Catalog

www.nixalite.com - 888.624.1189



Nixalite® of America Inc

1025 16th Ave, East Moline, IL 61244

E-mail: birdcontrol@nixalite.com

67
Years
1950-2017

Piranha Blox™

Intelligent Self Retracting Device



The Piranha Blox System is the only fall protection product that identifies the proper and safe connection of a worker to an approved anchor point before allowing the operation of equipment.

- *Connects to any harness*
- *Simple 2 wire connection*
- *OSHA & ANSI Tested*



www.piranha-safety.com /// 1-800-738-5004

Mention this ad and receive a discount!



PIRANHA SAFETY XRail is the *first of its kind, programmable guardrail system* that creates a safety barrier that is functional as well as being extremely safe to use.

FLUSH MOUNT

The XRail system can lower into a pocket on the floor eliminating tripping hazards, storage issues as well as allowing for workers and equipment to be easily moved in and out of the work space.



ADJUSTABLE HEIGHT

The XRail can raise to any height up to 42" per OSHA standards. Fully customizable, automatic and programmable features make this system a part of Piranha Safety's intelligent safety solutions



Patented
USA 9,745,762
Canada 2,889,091

APPLICATIONS

- Aerospace
- Industrial
- Maritime
- Roofing
- Loading docks
- Pharmaceutical
- Tooling manufacturers
- Elevator maintenance





Applicability Wizard



RegScan ONE

One World, One Platform

Streamlined,
Simplified,
Legal Registers
& Audit Protocols



SAFETY RAILINGS MEET STYLE

ACCU-FIT

DON'T HIDE YOUR RAILINGS, EMPHASIZE THEM

- UNIFORM LINES
- NON-PENETRATING
- SLEEK APPEARANCE



TRADITIONAL STRAIGHT SERIES



DESIGNER CURVED SERIES



ARCHITECTURAL CURVED SERIES

Accu-Fit Fall Protection Railings from Safety Rail Company are the perfect solution for combining form and function with distinctive styling that compliments building architecture. Accu-Fit Railings offer clean sight lines, upscale styling, non-penetrating design and are assembled right on-site to ensure an accurate fit that maintains a uniform appearance throughout the installation.



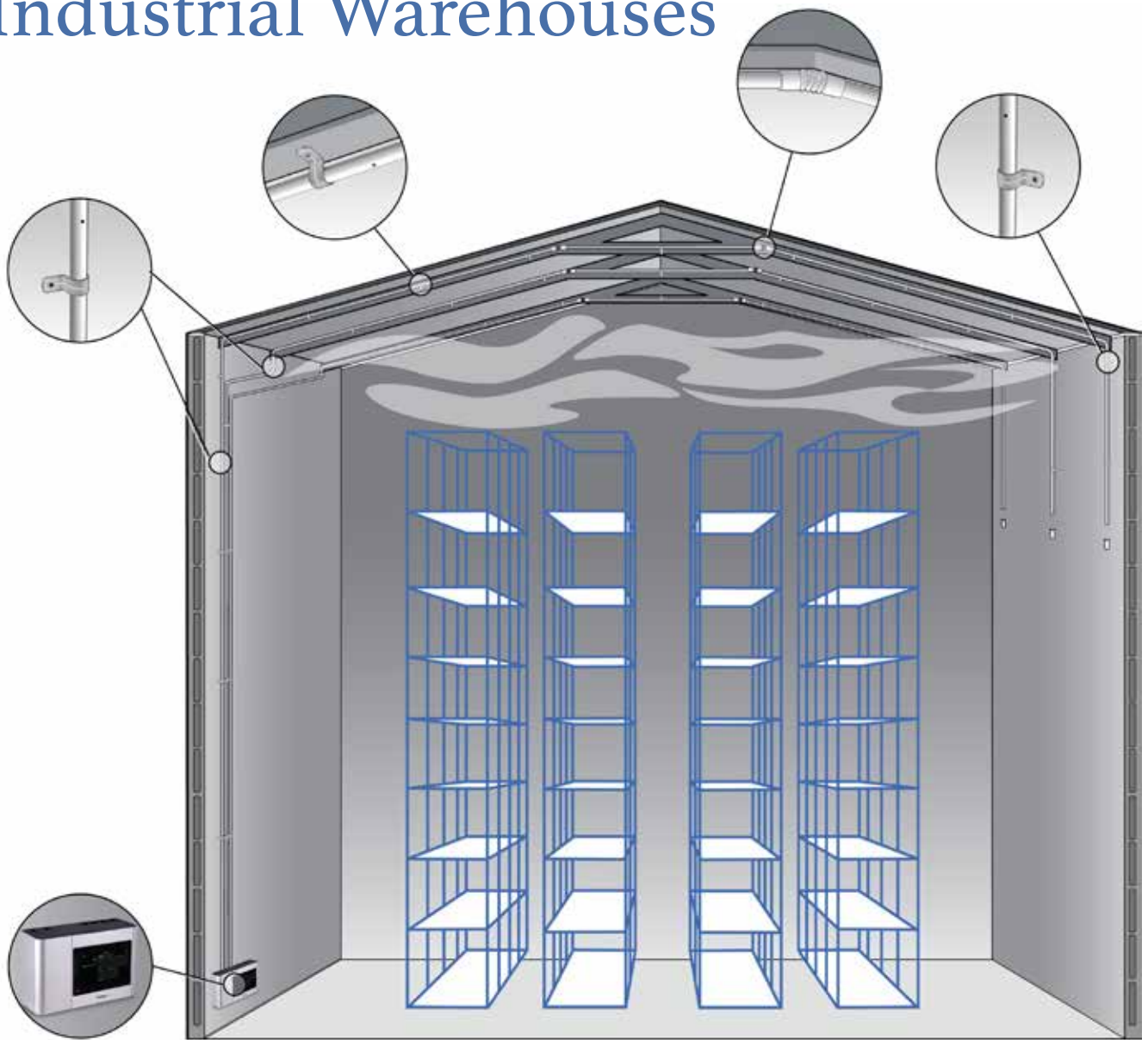
**PROTECT LIVES.
BE OSHA COMPLIANT.
CONTACT US TODAY.**



SafetyRailCompany
Fall Protection for Life and Compliance

SAFETYRAILCOMPANY.COM | 888.434.2720

Reinventing Fire Detection in Industrial Warehouses



Advanced fire detection technology detects smoke at the earliest possible stage, while reducing false alarms and

maintenance in large industrial warehouses

The cost of a fire in a warehouse goes far beyond the loss of the building and goods. The consequential loss caused by downtime, operation interruption, business reputation and goodwill can be significant.

Modern goods also tend to have increased flammability, in addition to the presence of large

amounts of packing materials such as plastics, cardboard, wooden crates and pallets. There are various possible ignition sources in warehouses including smoking, lighting, electrical equipment and heaters. Although sprinklers are typically installed in warehouses, the lack of an appropriate early warning smoke detection system can not only compromise the safety of the facility but also that of adjacent buildings.

Fortunately, protecting life and inventory is much easier for even the largest warehouses as aspirating smoke detection (ASD) technology becomes more widely adopted. The process draws in air samples through durable piping to detectors and tests it using sophisticated laser-based technology, imaging, and photodiodes. Far from new, the core technology has been used for decades in sensitive applications such as cleanrooms and data centers where early smoke detection is critical.

Compared to traditional spot smoke detectors and other technologies, this approach dramatically improves warehouse facility safety by detecting smoke at the earliest possible stage via numerous sampling points, while reducing false alarms and maintenance.

Industrial-Sized Smoke Detection Challenges

Warehouses come in a wide range of sizes and contain a wider range of goods. Most large warehouses have high ceilings of over 40 ft. (12 m), with some modern automated high rack storage facilities having ceiling heights over 130 ft. (40 m).

The problem is that in these conditions any smoke is heavily diluted. This makes detection difficult for conventional detection technologies where smoke must build up to certain levels before the alarm sounds. Furthermore, before sprinklers are triggered, sufficient heat needs to be generated by the fire – by which time, it is well underway.

Because of these concerns, traditional spot smoke detectors are usually considered unsuitable for warehouses with high ceilings. The installation, wiring, testing, and maintenance of such spot detectors make them inconvenient and costly.

For instance, regularly testing the smoke detectors requires having an inspector introduce smoke into the devices. This requires safely lifting the inspector to the level of the detector on a scissor lift, cherry picker, or other access equipment, which adds to inspection costs. Maintaining and repairing the smoke detectors is similarly costly.

The situation is even more challenging in facilities that operate 24/7, where maintenance is only allowed during a planned maintenance period.

Linear heat cables and flame detectors are sometimes suggested offered as a solution and might be tempting from a maintenance point of view. However, their detection point (i.e. the flaming stage of fire) is too late to be truly considered as early warning or adequate detection.

Optimizing Warehouse Smoke Detection

Instead, as an alternative, ASD technology is a more effective, early detection option that does not require physical maintenance to access warehouse ceiling areas above high bay racks.

Because of such flexibility, ASD smoke detection accommodates irregular ceiling structures. Moreover, the technology is not affected by forklifts, robotic gantries, and internal business operations. Finally, it can even provide detection within storage racks for the fastest possible response to a fire threat.

As an example, one system, called VESDA-E VEU, by Xtralis, a global provider of aspirating fire detection equipment, draws air samples in a continuous process through holes in long runs of durable industrial pipe

OIL ALERT[®]

LIQUID LEAK DETECTOR

DETECT OIL LEAKS AND SPILLS...FAST!



5 3/4" Dia. x 1 1/4" H

- AVOID OPERATIONS SHUT-DOWN
- REDUCE ENVIRONMENTAL RISKS
- MINIMIZE COSTLY CLEAN-UP
- MONITOR OFF-SITE EQUIPMENT

APPLICATION AREAS	
Elevator Pits	Hydraulic Test Stands
Oil Storage Locations	Wind Turbines
Diesel fuel storage tanks	Hydraulic Piping
Remote Site Monitoring	Coolant oil storage

Go to **WWW.OIL-ALERT.COM**
OR CALL: 1-800-533-6392
FOR MORE INFO!!

DORLEN Products Inc.
6615 W. Layton Ave. Milwaukee, WI. 53220





mounted along the walls and ceiling.

While some ASD products use an LED light source and one or more photo receivers, the VEU utilizes a flair detection chamber that uses a short wavelength laser, a CMOS imager, and multiple photodiodes.

Direct imaging of the sampled particles using the CMOS camera allows data regarding its size, color and shape to be derived. Additional data from five photodiodes allows measurement of light scatter in different directions.

With more detailed information to analyze, the unit is able to differentiate smoke from other factors that could cause disruptive false alarms. For warehouse environments where airborne dust particles may also be present, which can be confused as smoke by some systems, the unit's dust rejection and data

analytics minimize nuisance alarms by at least 3 times compared to similar technologies.

Compared to even other aspirating technologies, the system significantly saves on maintenance costs by allowing long pipe runs up to 1,310 ft. (400 m) and branched pipe networks up to 2,625 ft. (800 m) to extend detector coverage. This reduces the number of detectors required to protect a single fire zone in a warehouse facility.

Unique Warehouse Challenges

Certain types of warehouses in difficult environments may still require a high level of fire protection, while posing unique challenges to smoke detection systems.

Freezers & Refrigerated Storage

While most warehouses with freezers or refrigerated storage have some form of automatic doors or plastic barrier curtains to limit warm air ingress, it is inevitable that warm air will enter the room. This

OSHA COMPLIANT ROOF SAFETY IS SMART BUSINESS

OUR SAFETY SOLUTIONS HAVE YOU COVERED



ACCESS LADDER SAFETY



ROOF HATCH SAFETY



MOBILE RAILINGS



PERMANENT RAILINGS



WARNING LINES



SKYLIGHT SAFETY

Safety Rail Company is your one-stop destination for OSHA compliant safety solutions to prevent falls and injury. Every product is designed for simple installation and flexible integration into any commercial or industrial application. All of our products work together to create a comprehensive fall-prevention solution.



**PROTECT LIVES.
BE OSHA COMPLIANT.
CONTACT US TODAY.**



SafetyRailCompany
Fall Protection for Life and Compliance

SAFETYRAILCOMPANY.COM | 888.434.2720

often creates condensation within the room, which causes icing on ceiling-mounted equipment and structures close to the entry points.

Even though ASD technology is generally accepted as the best solution for refrigerated storage facilities, there are some typical problems associated with its application in such situations.

Over time, ASD sampling points and pipe within the sub-zero area can become blocked causing air flow issues and inoperative detection of smoke. In some instances, the only solution is to remove the iced up section of the ASD pipe network and fit a new pipe.

To combat this issue, some providers offer a unique



sampling arrangement that is specifically designed for refrigerated storage facilities.

For example, Xtralis enables ASD air sampling pipe

INTRODUCING THE XS WARTHOG HARNESS

A comfortable fit is essential when wearing harnesses on your jobsite. Finding the right size, though, doesn't have to be a challenge.

We get that sizing matters, and as America's fastest growing fall protection manufacturer, we listen to your requests and your needs. Beyond our three standard harness sizes, you can now find the perfect fit with the XS harness, in stock and on our shelves now.

Our harnesses represent the quality work and streamlined manufacturing process that you've grown to appreciate and expect from Malta Dynamics. Whether you choose the Tongue & Buckle harness or the X-Pad model for added padding and comfort, know that you're wearing quality safety equipment that delivers optimal fall protection.

Learn more about our new XS harness and the other safety equipment we can provide at MaltaDynamics.com.



FLEXIBLE SOFTWARE PLATFORM

SOUND AND VIBRATION SOFTWARE THAT WORKS LIKE YOU WORK



BK CONNECT™ – A FLEXIBLE SOFTWARE PLATFORM DESIGNED AROUND YOUR NEEDS AND TASKS

Full of innovative features and functions, BK Connect – the new sound and vibration analysis platform from Brüel & Kjær – is designed around user workflows, tasks and needs, so you get **access to what you need, when you need it**. This user-friendly platform streamlines testing and analysis processes, which means you work smarter, with a high degree of flexibility and **greatly reduced risk of error**.



Brüel & Kjær 

BEYOND MEASURE

Brüel & Kjær Sound & Vibration North America, Inc.
3079 Premiere Parkway, Suite 120
Duluth, GA 30097
Telephone: 800 332 2040
bkinfo@bksv.com

bksv.com/bkconnect

to be installed, inspected and maintained outside the refrigerated environment (i.e. within roof space). This makes it less prone to blockage due to icing, easier to inspect, and provides a more robust, longer lasting installation.

Dusty Warehouses

Certain warehouses are very dusty or highly contaminated environments such that the performance, longevity and maintenance of the detection equipment are a real concern.

For these environments, ASD systems exist that are design to withstand the harsh environments in industrial applications, have superior dust filtration and are enclosed in NEMA 4 equivalent enclosures.

The Xtralis' VESDA VLI system, for example, comes in an International Protection Marking IP66 enclosure that provides total protection against the ingress of dust and strong water jets. The unit also is designed with a patented intelligent filter that significantly

reduces the amount of contaminants entering the detector. An integral secondary filter and sub-sampling probe also rejects larger dust particles, which further safeguards against nuisance alarms and extends detector life.

Protecting the Warehouse Bottom Line

Some managers of warehouse facilities may be inclined to use spot smoke detectors or other traditional devices because of their familiarity with such systems.

However, those who take advantage of the superior capabilities of ASD systems will protect lives and inventory to a degree not previously possible in warehouse settings. This level of protection will also prevent serious supply chain disruption as well as liability and litigation in worst case scenarios.

For more information, contact Xtralis at 175 Bodwell Street, Avon, MA 02322, call: +1 (619) 252-2015; email: rsandler@xtralis.com or visit:

www.xtralis.com/vea •

Guard-Safe Guarding

Your Total Guarding Solutions Company



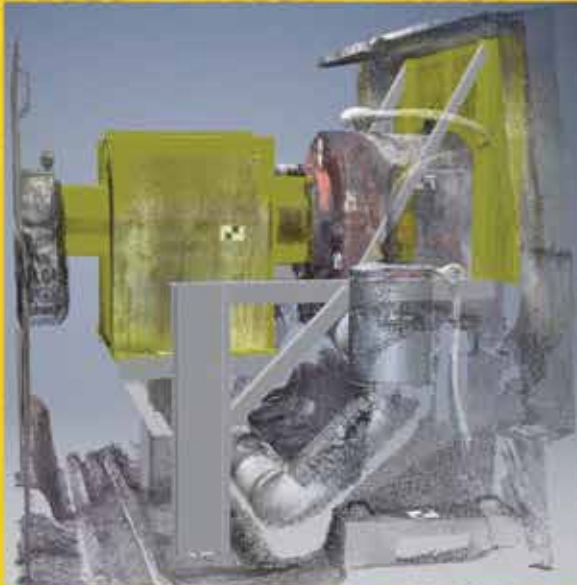
Guard-Safe • P.O. Box 275 • Sibley, IA 51249 • (712) 754-4838
sales@guardsafeguarding.com | guardsafeguarding.com

OSHA and MSHA Compliant Safe Guarding | Machine Safe Guarding Assessments and Safety Audits
IASHEP Learning Partner – Safety Training Courses | Engineered custom guarding made in the USA



Guard-Safe Guarding

Utilizing Laser Scanning to Design Machine Guarding



- ❖ **Identify Hazards – Access over, under, around or through to a moving or rotating part must be guarded.**
- ❖ **Scanning & Measurements – GSG visits your facility to acquire critical dimensions and perform scanning.**
- ❖ **Designing Your Guards – Accuracy of -1/16” ensures that the guards we design from scanning will fit without interference.**
- ❖ **Engineered Drawings – Arrangement and details are approved by client prior to fabrication.**
- ❖ **Custom Guards – Powder coated Safety Yellow, preassembled parts ensure proper fit & function.**
- ❖ **Installation – GSG technicians assure that all guards are mounted rigid and secure.**

To learn more about our custom engineered guarding process and our standard offerings including: Coupling Guards, Barrier Guarding, Idler Guards, V-Belt Guards and much more, please contact us via:

website: www.guardsafeguarding.com

phone: 712-754-4838

email: sales@guardsafeguarding.com



Guard-Safe Guarding

Five Easy Steps to Successful Machine Guarding!



Identify the Hazards

Not all hazards are created equal. Nor are the solutions for guarding them. Keep in mind the basic principle: Over, Under, Around or Through. If any body part is capable of reaching a moving component by those means, it must be guarded. The example to the left shows an exposed rotating shaft and a fan that present a hazard to employees.



Scanning & Measurements

Set up an appointment with Guard-Safe Guarding to visit your facility and review your goals and primary objectives regarding your hazards. GSG will perform their own safety assessment to assist you in this process. GSG will photograph and measure the application. Some applications may require Laser Scanning to capture interferences and assist us in the design stage. The shaft/fan hazard from above was scanned by GSG, as shown here.

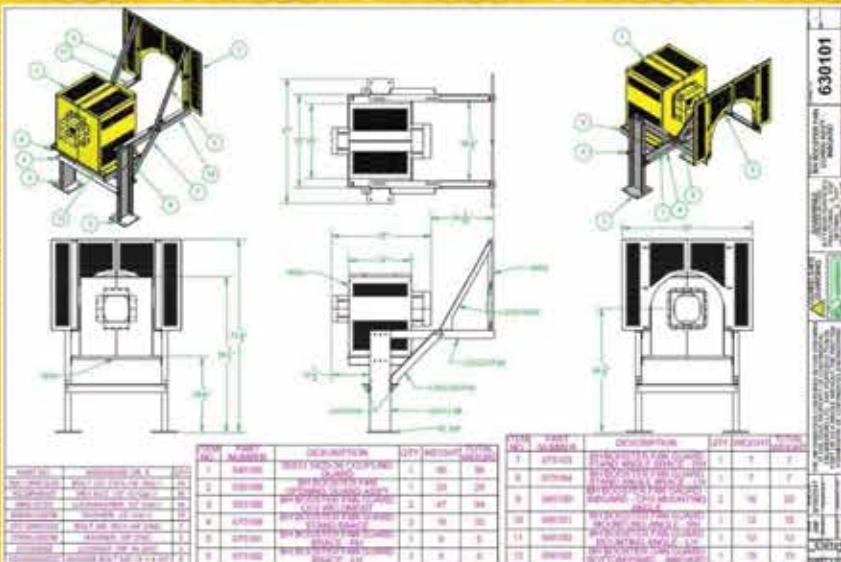


Designing your Guards

Upon processing the Laser Scan, GSG utilizes 3D CAD software to model the new guards and supporting structures. For simpler applications, the model is created based upon site measurements. A 3D CAD image is created and shared with our clients. The client is then able to visualize the final product, ask questions, and provide feedback regarding accessibility, or other concerns.

Engineering Drawings

Upon approval from the client of the initial concept model from above, GSG proceeds to create complete fabrication, arrangement and installation drawings. The drawings are once again submitted to the client for final approval prior to fabrication and shipment. O&M Manuals & drawings are provided for the client in electronic pdf format and paper format.



Installation

Guard-Safe Guarding powder coats all guards Safety Yellow. GSG preassembles the parts prior to shipping to ensure proper fit and delivers the guards assembled as much as possible to save time at installation. All guards are carefully packaged and shipped in a wooden box. It is recommended that a GSG technician be present during the installation process. All guards must be mounted rigid and secure.



At Guard-Safe Guarding we know that you care about your employees. We understand that guarding your equipment is not a simple or glamorous proposition. Guard-Safe Guarding is well prepared to answer your guarding questions. Typical concerns we hear are from Safety Managers looking for guidance, Maintenance personnel wanting easy access & removal of protective barriers, and from operators wanting to work safely, yet unencumbered. We have heard and addressed all of your concerns with our innovative and time saving products.

Please visit our website at www.guardsafeguarding.com call 712-754-4838 or email sales@guardsafeguarding.com to learn more about our custom engineered guarding process and our standard offerings including: Coupling Guards, Barrier Guarding, Idler Guards, V-Belt Guards and much more!





Established in 1932 in Detroit, Michigan, by the grandfather of the company, Jesco Industries Inc. has grown to become one of the leading manufacturers of material handling equipment. We serve our customers very well by offering a wide variety of products which may be used from the processing department through the shipping department. A Woman Owned Small Business is WBE Certified.



urrent owner,
tures of materi-
a wide variety
ugh to the ship-
ertified.

JESCOHUSKYDUMPERS® available in over 60 different sizes and maintain stock of standard sizes over 800 standard units of self dumping hoppers (2000#, 4000# and 6000# capacities). We offer several large volume self dumping hoppers in 6 cubic, 8 cubic and 10 cubic yard 6,000-10,000 capacity. Special applications deserve a specially designed unit. After many customers inquiring about a controlled dump or hydraulic unit, we decided to engineer and add several different hydraulic units to the product line.

JESCOHYDRATILT™ Dumpers which are available in 4000# capacity in .50, .75, 1, 1.5, and 2 cubic yard. The units are operator controlled with the hydraulic system of your forklift and used while seated on the lift. These new units are ideal when controlling the speed of discharging material is critical. The quick-disconnect lines are included on each of the units and a safety retaining chain. To fill out the line even more we have included ten different sizes of our Filter Press Hopper. Then along came the 90 degree Side Pivot Hopper and Low Profile Portable Hoppers with casters already installed.

Wire Mesh Partitions: 2"x1" rectangular mesh 10 gauge wire welded into an angle frame system is easy to use and easy to install. Ideal for around your automation enclosures, prevent your valuable tools from walking away from the tool crib, and quality control on non-conforming material, computer rooms, high security storage and so many more uses. JescoPalletGards® are wire containment backs for the pallet racks with stand-off clips (1.25, 4, 6 or 8 inch) design to fit most standard drilled pallet racks spaced two inch on center. Double hinge doors or double slide doors is an excellent way to secure high value products on the shelves.

1-1/2" Diamond mesh 10 gauge wire partition system are engineered for easy installation allowing unrestricted visibility and total air circulation. Inventory of standard height panels of 7, 8 or 10 high are available; but don't stop there because many industries require partitions to reach the trusses or building joists and that certainly can be accomplished. If you are installing partition on a raised platform (mezzanine) remember this requires zero or "no" sweep to keep everyone safe walking below. This is to prevent tools from dropping from the edge of the platform. (OSHA 1910.23(e)(4) Either partition system will work well but the more project information you are able to supply, the more knowledgeable we all become and it is truly amazing how that works!

The JESCOGARD® industrial guard rail 3-rib corrugation system will act as both a visual and physical barrier around your facility. The Economy Rail System is a 2-rib system and has been tested to withstand an impact of 10,000# traveling 4-mph. Should the need arise you can count on its strength without compromising quality at a price you can afford. Each system has available a self-closing single hinge gate with a sound dampening gasket on the gate.

Industrial shelf carts, platform trucks die storage racks and material handling trucks are built tough to move raw stock, cartons or finished materials in your plant for many years to come. Special carts are no issue just let us know what you need.

JESCOHUSKYDUMPERS®, wire partition systems, industrial guard rail systems, wire tenant storage lockers, industrial shelf carts, LP cylinder cabinets, machine guarding just to name a small portion of the products we offer to our customers. Our products are built to be the best in the industry and it is the reason customers keep coming back. Your satisfaction for a project well done is what really counts when the day comes to a close. We look forward for an opportunity to be able to assist your next industrial guarding or material handling requirements. Check out the full product line shown on the website at www.jescoOnline.com

"From the simplest to the complex, Jesco does it best!"

Jesco Industries Inc. • 950 Anderson Rd • PO Box 388 • Litchfield, MI 49752-0388

Email: Jesco@jescoOnline.com • Toll Free: 800-529-6691 • Direct: 517-542-2903 • Fax: 517-542-2501

Outsourcing Critical Aspects of Processing Systems

Leading OEMs turn to contract manufacturers that can combine engineering, manufacturing and supply chain expertise to deliver complete systems that lower costs

For equipment designers in processing industries, there are aspects of any system that are more functional in nature, yet still critical. This includes gas, fluid and chemical handling systems that play an integral role in equipment that extracts, dispenses, blends, controls temperature or some other aspect of control.

For these aspects of the system, OEMs face a critical business decision: whether to fully engage as a manufacturer, or to outsource certain or all aspects to trusted, qualified contract manufacturers. By doing so, they expect to control and even lower production costs.

However, even within the category of contract manufacturing there can be a broad range of capabilities. Some shops focus solely on build-to-print projects, often in niche categories such as piping or sheet metal work. On the other end of the spectrum are companies that offer a more diverse range of capabilities, complete supply chain management and engineering services.

According to Jason Medhurst of Aztech Controls, even companies that decide to outsource may not have the in-house expertise to assemble and, in some cases, complete the drawings for a system or execute the required change con-



trol. For this reason, there are benefits to more of a full-service approach that includes engineering.

"The truth is OEMs don't always know how much engineering and design support they actually need," says Medhurst. "They'll ask us to

build a system and say, 'we've engineered it for you' and when we get in there we discover the design is in its infancy."

"In other cases, we receive well-developed drawings and the engineering requirements are minor. Then, we might help them with

jesco

— Since 1932 —



A division of Jesco Industries, Inc.

Woman Owned Small Business

WBE Certified



From the simplest to the complex, Jesco does it best!

Call 800-529-6697

Visit www.jescoonline.com

Jesco Industries, Inc. PO Box 388 Litchfield, MI 49252-0388
Phone: 517-542-2903 Fax: 517-542-2501

supply chain management,” Medhurst adds, explaining that this can include sourcing, purchasing and holding in inventory all the individual component parts of the system.

With this type of support, OEMs are truly free to focus on higher revenue, proprietary aspects of their system.

“The moment the OEM starts retaining pieces of the project, they are not fully utilizing everything a contract manufacturer can do for them,” says Medhurst. “Then they end up still being part of the project they are trying to offload.”

Supply Chain Management at Kurita America

For large OEMs, outsourcing frees

up a valuable resource: time and attention. The ability to offload some of the “detail work” allows key personnel to concentrate on more important functions such as client relations, scheduling and managing the budget.

“Outsourcing opens up a lot more time for me to focus on other areas of the project instead of having to worry about some of the minor details that eat up valuable time,” says Tony Harlan of Kurita America, one of the world’s largest suppliers of industrial water treatment systems.

Kurita America’s industrial water treatment solutions include everything from chemicals to custom designed and constructed water treatment, re-use and reclamation

systems. The company also offers operation and maintenance services as well.

Given the nature of water treatment systems, no two completed systems are exactly alike. As a result, every system must be engineered to meet the requirements of the individual client.

However, to create these systems it is standard practice for companies like Kurita America to outsource aspects of the mechanical, electrical and control system to subcontractors.

“Typically, we would purchase all the valves, pumps – whatever was going on that skid – and only ask the fabrication shop to do the assembly,” says Harlan.

**Weather Resistant
Solid Brass Padlocks**
Made to your specifications in the U.S.A.

HERCULOCK
Hercules Industries, U.S.A. ®

HERCULES INDUSTRIES, INC.
Manufacturer of HERCULOCK Padlocks
P.O. Box 197 • Prospect, Ohio 43342
Toll Free: 1-800-345-2590
Fax: (740) 494-2274
www.HERCULOCK.com

**WP MAKE EVERY STEP
A SAFE ONE**

Help Prevent

SLIP AND FALLS
Stairmaster®

WOOSTER PRODUCTS

For more products & information
visit us on-line or call:
www.wooster-products.com
800-321-4936

**MADE IN
U.S.A.
PRODUCT**

ELIMINATE FALL HAZARDS

ON METAL DECK ROOFS WITH ACCU-FIT RAILINGS



**FROM START TO FINISH, FALL PROTECTION AND
PEACE OF MIND HAVE NEVER BEEN EASIER**

OSHA COMPLIANT | NON-PENETRATING | EASY INSTALLATION

We offer a full menu of fall protection products addressing individual hazards or combined together for a comprehensive, 100% fall protection solution for the entire facility.

- EXPERT ADVICE
- FACILITY SITE SURVEYS & CAD MODELING
- FULFILLMENT, DELIVERY, INSTALL & SIGNOFF



**PROTECT LIVES.
BE OSHA COMPLIANT.
CONTACT US TODAY.**

MADE IN USA



SafetyRailCompany
Fall Protection for Life and Compliance

SAFETYRAILCOMPANY.COM | 888.434.2720

VISIT US AT THE NSC TRADESHOW, BOOTH #1339



There were several motivations for this approach, including the belief that purchasing the parts would ensure the best price without the usual mark-ups.

However, this logistical work came with additional costs that often were not considered. This included the time and effort to create each purchase order, deal with invoices, manage and store parts inventory, ensure it was shipped properly and arrived as scheduled at the fabrication shop, and deal with any necessary returns.

So when Aztech Controls pitched Kurita on the concept of building the entire system for them, including sourcing all the components, they were intrigued.

Aztech Controls was originally founded in 1986 as a distribution and rep company for products used for wastewater and other processing industries. Today, the company offers full engineering and manufacturing capabilities to build-to-

print or design and build complete systems from scratch.

Kurita felt that the company's long history as a distributor in the industry gave them confidence Aztech Controls could source the parts at a reasonable cost.

"It was an extremely smooth and thorough process," says Harlan. "The quality of the system was excellent, there were no issues whatsoever, which is why we were interested in working with them again."

Based on the success of the project, Harlan says that in the past year, Kurita America has worked with Aztech Controls to produce six or seven additional skid-mounted subsystems.

Advanced chemical blending

David Radnich, retired engineer, recounts a project for something that he says is a bit of a rarity in the industry – a just-in-time chemical blending and delivery system.

The project was part of a cost-cutting initiative to eliminate the need to purchase a very expensive chemical blend for a large semiconductor chip manufacturer. The company had determined it could save a lot of money by blending the chemicals on site, since the 3 constituent chemicals were not expensive.

Radnich was asked to participate on the team that would design and build a prototype system from scratch.

"They didn't have the bandwidth to build advanced systems like that completely in house," explains Radnich. "They certainly could do it, but they want to run more of a streamlined operation, so for a one-off like that, better to go to a trusted source."

After working up an initial design concept, he contacted Aztech Controls. Working together, the two groups quickly completed the design and the contract manufacturer then proceeded to build the entire system at its facility in Arizona.

Radnich was impressed that the prototype was completed in only a few weeks.

"They built an extremely cost-effective prototype unit and were able to integrate it into our system very quickly; I'm talking a few weeks, not months," says Radnich.

Radnich says the prototype was tested over six months and "it worked flawlessly."



WHY IS IT OKAY WHEN IT'S ONE OF YOUR WORKERS?

Don't fall victim to inadequate fall protection.

Not following industry standards? One fall can have disastrous consequences for your workers, their families and your business. You can't afford to wait to change the way you look at workplace fall protection.



Find out how you can prevent the inevitable from becoming the unimaginable. Download our new ebook at gorbel.com/righttrack.

DO IT RIGHT. DO IT SMART.
OUR SAFETY SOLUTIONS HAVE YOU COVERED



SafetyRailCompany

Fall Protection for Life and Compliance

SAFETYRAILCOMPANY.COM | 888-434-2720

NSC – BOOTH #1339

VPPPA SHOW #543

The next step was a full scale version of the system. Aztech Controls delivered it in six weeks, as opposed to the typical lead time of six months to a year from other vendors.

“Many of the vendors of large scale systems are proven, but extremely expensive and have long lead times,” says Radnich. “Also, the operational costs of the systems can be quite high and a lot of these systems have capacity constraints.

“The system from Aztech Controls literally had no capacity constraints, no scheduled invasive PMs and the cost of ownership once it was running was almost nothing,” adds Radnich.

Radnich says the system that Aztech Controls designed and built not only fit the application requirements, but went well beyond technological expectations.

“The chemical blending system was truly state-of-the-art, next generation,” says Radnich. “Actually it skipped a couple generations it was so advanced, compared to what we had been using. We couldn’t have done it ourselves.”

To date, the system has been working for 6-7 years without any issues, which he calls “astonishing” for that type of equipment. The project was also a success in terms of the cost savings the company was hoping to achieve.

“It was a cost savings, from an equipment standpoint, installation standpoint and operational standpoint,” says Radnich.

For more information, contact Aztech Controls at (480) 782-6000, visit www.aztechcontrols.com, e-mail: sales@aztechcontrols.com, or write 324 S Bracken Lane, Chandler, AZ 85224.

www.aztechcontrols.com •

No False Alarms

Gas Detection Systems

LEL Catalytic Sensor

LEL Infrared Sensor

Solid-State
MOS Sensor

VOC PID
Sensor

Toxic/Oxygen
Electrochemical
Sensor

CO₂ Infrared
Sensor



MIL-RAM
Technology, Inc.
no false alarms
Gas Detection Systems



MIL-RAM TECHNOLOGY, INC.
REGISTERED TO ISO 9001:2008
FILE NUMBER 10000074 0000

mil-ram.com

Tel: 510-656-2001 Fax: 510-656-2004
Toll Free: 888-4MILRAM (1-888-464-5726)
Email: sls@mil-ram.com

Gas Detection Excellence | Since 1990

no false alarms

Gas Detection Excellence Since 1990

Industrial Gas & Fire Detection Systems

BUILD



- Combustibles, LEL
- Hydrocarbons

TEST



- Refrigerants
- Toxics

DEPLOY



- VOCs
- Oxygen



MIL-RAM TECHNOLOGY, INC.
CERTIFIED TO ISO 9001:2015
10000574 QM15

Tel: 510-656-2001 • Toll Free: 1-888-464-5726

Fax: 510-656-2004 • Email: sls@mil-ram.com

MIL-RAM
Technology, Inc.
no false alarms
Gas Detection Systems

For More Details Go to MIL-RAM.com



MALTA DYNAMICS

CORPORATE PROFILE

FALL PROTECTION AND SAFETY EQUIPMENT

- XSERIES Mobile Fall Protection System
- Anchorage Connectors
- Full Body Harnesses
- Self-Retracting Devices
- Shock Absorbing Lanyards
- Guardrail
- Rigid Rail and Track Systems
- EyeCatcher Horizontal Lifelines
- Beam Stanchions
- Carabiners
- Roofers Kits
- Hard Hats
- Safety Vests
- Safety Shirts
- Safety Glasses
- Earplugs
- Gloves

Need a custom fall protection solution? Contact us today to learn more about our custom engineered systems.

YOUR SAFETY IS OUR TOP PRIORITY

Malta Dynamics offers products and services to help you meet, but more importantly, exceed OSHA and ANSI fall protection standards. We design, engineer and manufacture an ever increasing product line of fall arrest solutions, including our award-winning XSERIES mobile fall protection system.

Our full line of anchors, bodywear, connectors and personal protective equipment is used across multiple industries including construction, aviation, military, manufacturing and power plants. The Malta Dynamics Print Shop makes creating custom hard hats and high visibility gear easy.

Our fall protection specialists can provide you with an assessment of your fall hazards, suggest the appropriate equipment and fall protection systems for your jobsite and provide high-quality installation services, so you know your equipment is safe for your crew.

We provide full turnkey design and engineering services, consulting services, training, on-site assessments, equipment re-certifications and equipment fabrication.

(800) 494-1840

www.MaltaDynamics.com



Your One Stop Shop for Sound and Vibration Measurement Needs

Sound Level Meters



Vibration Meters



Dosimeters



Scantek's product line provides complete solutions designed for:

- Occupational & Industrial Hygiene Noise Evaluations
- Hearing Protector Selection
- Workplace Noise Measurements
- Measurements and Analysis of Acoustic and Vibration Signals
- General Noise Measurements
- Loudness and Sound Quality Analysis
- Measurements of Sound Power Levels

Distributed by:

Scantek, Inc.
www.ScantekInc.com



Emergency Safety Shower Decontamination Booth

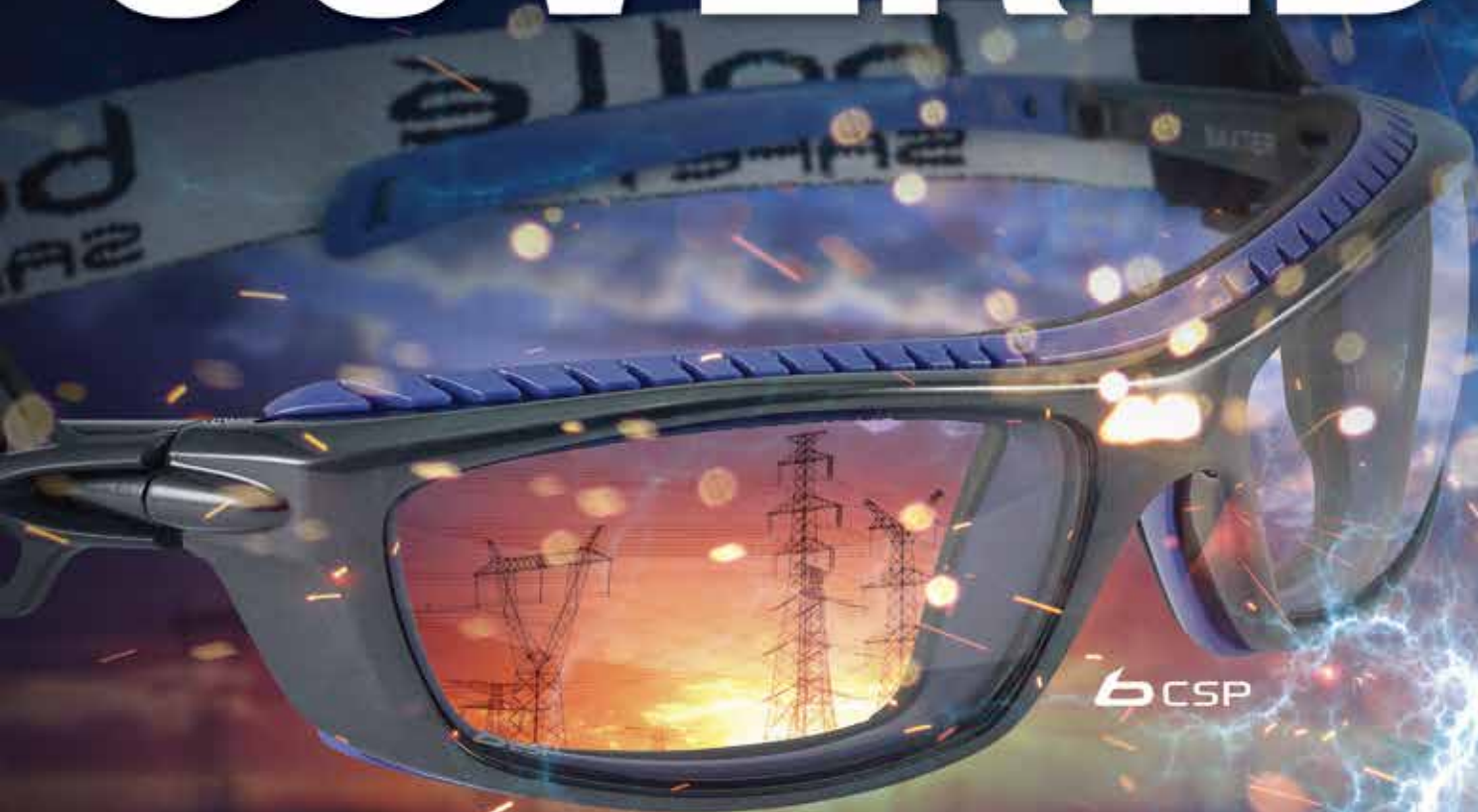
When Time is of the Essence, after an exposure to a hazardous chemical substance, any delay, even for a few seconds, can result in serious injury. OSHA and ANSI require that Emergency Showers be located within 10 seconds walking distance from hazardous site location.

The New Laboratory Applications Emergency Shower Booths are available with finished side exterior panels. HEMCO Decontamination Booths are fully assembled and ready for installation to water supply and waste systems. The shower

is molded one piece seamless of chemical resistant fiberglass and is equipped with a pull rod activated shower and push handle eye/face wash for immediately drenching of personnel that have been exposed to hazardous chemicals. Shower is equipped with frosted front strip curtains, interior grab bars, raised deck grating, and bottom or rear drain outlet. Compliant with A.N.S.I. and O.S.H.A. requirements.

www.EmergencyShowerBooths.com •

WE'VE GOT YOU COVERED



b CSP

PLATINUM WHEN YOU WORK. IT WORKS.

No other brand on the market will work harder to preserve your vision and protect your eyes, while providing ultimate fit and comfort. CSP technology's ability to perform in indoor to outdoor environments and in hot to cold conditions is combined with the exclusive PLATINUM® coating to substantially combat fogging and provide permanent visual comfort from a single pair of glasses.

800-262-7306
bollesafety-usa.com

bolle
SAFETY



UniMax Floor Mounted (Walk-In) Fume Hoods

The UniMax series of hoods has been expanded to include wide selection of models that feature fire suppression systems to meet California requirements. Standard models range from 6 feet to 24 feet wide, 4 feet to 8 feet deep, and 7 feet to 16 feet high. Tall apparatus / distillation processes, roll-in reactors, or long integrated instrumentation systems can be easily accommodated in these hoods.

UniMax Floor Mount Hood's are constructed of chemical resistant, non-conductive modular panels featuring composite resin surface material. This modular design allows for onsite assembly and the ability to disassemble at a later date, move and reassemble. Custom sizes and designs can also be designed and built to exact specifications. Call 800-779-4362 or visit <http://www.UniMaxFumeHoods.com> •

Enclosures for Lab Automation and Robotics

HEMCO Enclosures are designed to isolate liquid handling workstations, HPLC equipment, sample weighing, high throughput screening, powders handling and other lab automated processes by providing exhaust air systems or HEPA filtered clean workstations. Enclosures are built to protect personnel from hazardous fumes, and processes from Lab contamination. Utilizing a flexible, modular design, HEMCO Enclosures are engineered and built to exact customer size and design requirements. HEMCO offers a wide selection of standard sizes in vented or HEPA filtered models. For more information please call 800-779-4362, or visit us at www.hemco-corp.com/enviro.html •





You'll never see it coming.

One second can change everything - especially where arc flash is concerned. That's why it's critical to understand the proper selection and use of PPE tested to withstand an arc flash event. To learn more about arc-rated PPE solutions from MSA or request a FREE, no obligation safety evaluation, visit MSAsafety.com/safetyevaluation.

WE KNOW WHAT'S AT STAKE.

© MSA 2018 • ID 55-6285-MCP

MSA
The Safety Company

Company	Pg.	Website
Bolle Safety	33	www.bollesafety-usa.com
Bruel & Kjaer	15	www.bksv.com/vmt
CoreTex Products	6	www.coretexproducts.com
Dorlen Products Inc.	11	www.oil-alert.com
eMars Inc.	36	www.emarsinc.com
Gorbel	27	www.gorbel.com/righttrack
Guard Safe Guarding	16, 17	www.guardsafeguarding.com
Herculock	36	www.herculock.com
Jesco Industries	23	www.jescoonline.com
Malta Dynamics	5, 14	www.maltadynamics.com
Mil-Ram	28, 29	www.mil-ram.com
MSA Safety	35	www.msasafety.com/safetyevaluation
Nixalite	6	www.nixalite.com
Piranha Safety	IFC, 1, 2, 6, 7, BC	www.piranha-safety.com
RegScan	3, 8	www.regscan.com
Safety Rail Company	9, 13, 25, 28, IBC	www.safetyrailcompany.com
Scantek	31	www.scantekinc.com
Wooster Products	36	www.wooster-products.com

TAKING CHANCES WITH DAVIS - BACON MANUAL PAYROLL COMPLIANCE?

EACH WEEK, EVERY CHECK HAS 30+ WAYS TO BE A LOSING PROPOSITION.



NONE OF OUR 15,000+ CLIENTS HAS EVER HAD A LEGAL COMPLIANCE ISSUE... NOT ONE.

480-595-0466



emarsinc.com

Be Davis-Bacon Compliant In Minutes

SAFETY RAILINGS MEET STYLE

ACCU-FIT

DON'T HIDE YOUR RAILINGS, EMPHASIZE THEM

- UNIFORM LINES
- NON-PENETRATING
- SLEEK APPEARANCE



TRADITIONAL STRAIGHT SERIES



DESIGNER CURVED SERIES



ARCHITECTURAL CURVED SERIES

Accu-Fit Fall Protection Railings from Safety Rail Company are the perfect solution for combining form and function with distinctive styling that compliments building architecture. Accu-Fit Railings offer clean sight lines, upscale styling, non-penetrating design and are assembled right on-site to ensure an accurate fit that maintains a uniform appearance throughout the installation.



PROTECT LIVES.
BE OSHA COMPLIANT.
CONTACT US TODAY.



SafetyRailCompany
Fall Protection for Life and Compliance

SAFETYRAILCOMPANY.COM | 888.434.2720

PIRANHA SAFETY XRail is the *first of its kind, programmable guardrail system* that creates a safety barrier that is functional as well as being extremely safe to use.

FLUSH MOUNT

The XRail system can lower into a pocket on the floor eliminating tripping hazards, storage issues as well as allowing for workers and equipment to be easily moved in and out of the work space.



ADJUSTABLE HEIGHT

The XRail can raise to any height up to 42" per OSHA standards. Fully customizable, automatic and programmable features make this system a part of Piranha Safety's intelligent safety solutions



APPLICATIONS

- Aerospace
- Industrial
- Maritime
- Roofing
- Loading docks
- Pharmaceutical
- Tooling manufacturers
- Elevator maintenance

Patented
USA 9,745,762
Canada 2,889,091

