

The FSS Post

THE FIRE SAFETY & SECURITY POST

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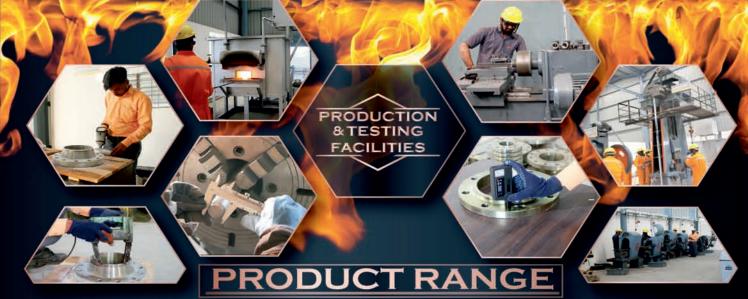
Welcome to UNITED FORGE, a renowned leader in the manufacturing of Forged Pipe Fittings, Buttweld Fittings, and Flanges, With over 18 years of expertise, we are your trusted source for high-quality products adhering to ASTM/ASME specifications and customized requirements.

Our sprawling 27,000 sq.mtrs manufacturing base, strategically located in Vadodara, India, houses state-of-the-art facilities for forging, forming, machining, and more. We take pride in our in-house capabilities, including heat treatment, surface treatment, and thorough testing.

At UNITED FORGE, our commitment to quality is reflected in our ISO 9001, ISO 14001, and ISO 45001 certifications, as well as our PED/2014/EU certification. Our dedicated team of Production Engineers, Supervisors, and QA/QC Engineers, alongside skilled workers, ensures immediate responses, excellent quality, quick delivery, and utmost customer satisfaction.

In a relatively short time, we've emerged as a leading manufacturer of top-quality Pipe Fittings & Flanges. Our strong fundamentals in design, manufacturing, quality control, and customer service, coupled with robustfinancial capability, enable us to meet demands not only in India but across the globe. Choose UNITED FORGE for reliability, precision, and excellence in the world of fittings and flanges





FORGED FITTING

Grades : Carbon Steel, Mild Steel, IS1239 Part II

Size : 1/4" NB TO 4" NB

Class : 1000#,2000#, 3000#, 6000#, 9000#.

Types : Socket Weld and Threaded



BUTT-WELD FITTING

Grades: Carbon Steel, Mild Steel, IS1239 Part II, IS 3589

Size : 1/2" NB TO 24" NB (Seamless)

1/2" NB TO 72" NB (Welded)

Sch : Sch. 20, Sch. 40, S/SD, S/60

Sch. 80, Sch. 120, Sch.160.

FLANGE

Grades : Carbon Steel

Size : 1/2"NB TO 24" NB

(Above 24" NB as per Customer Requirement) : 150#, 300#, 600#, 900#, 1500#,

Class : 150#, 300#, 600#, 900#, 1500#, 2500# Table D, Table E, Table F,

PN 16.

Types: Slipon, Blind, Weldneck, Socket-Weld

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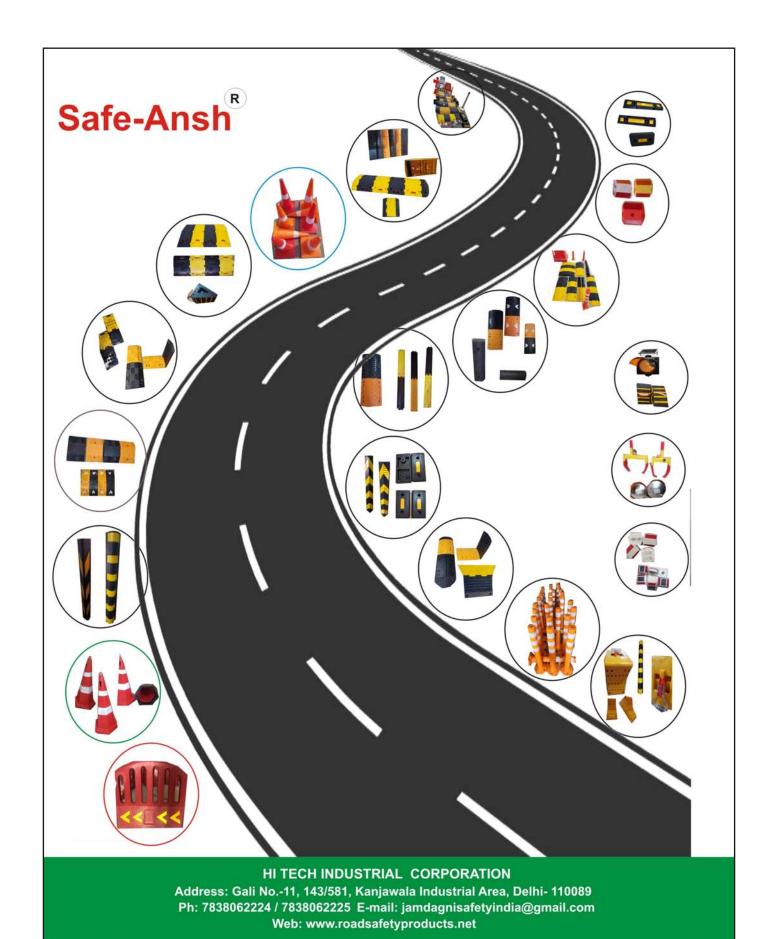


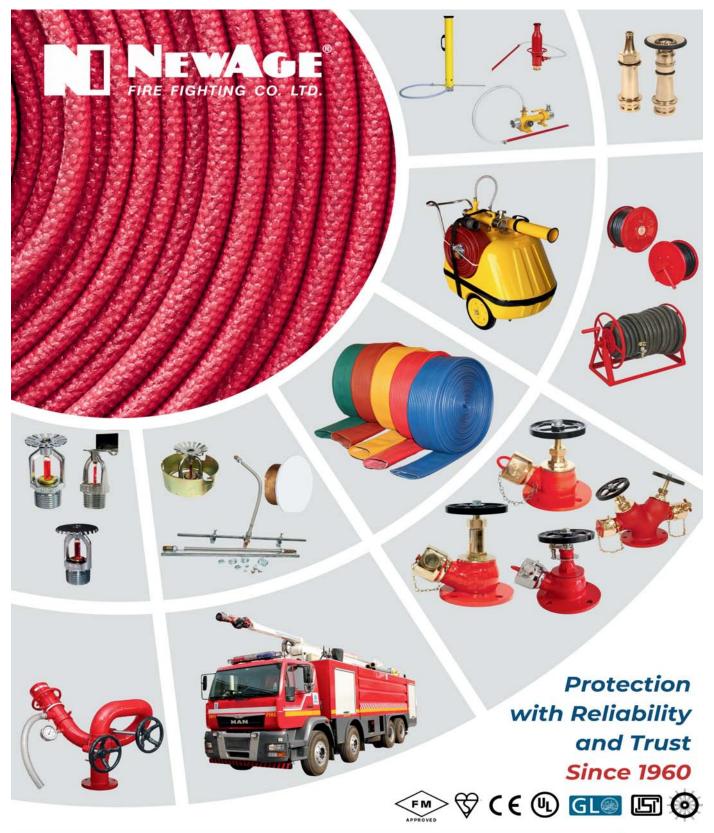


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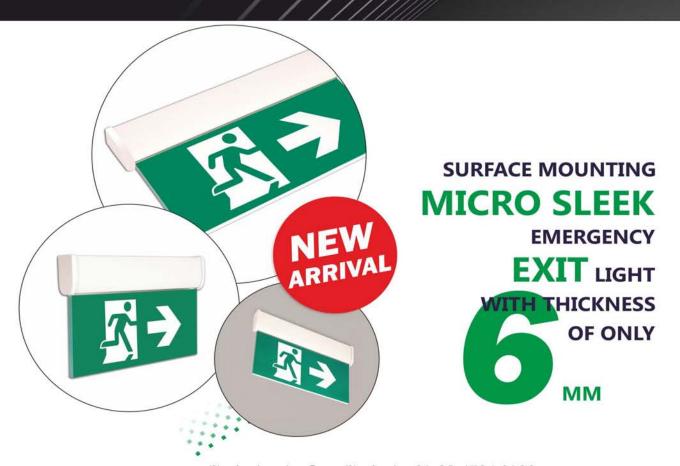






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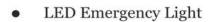


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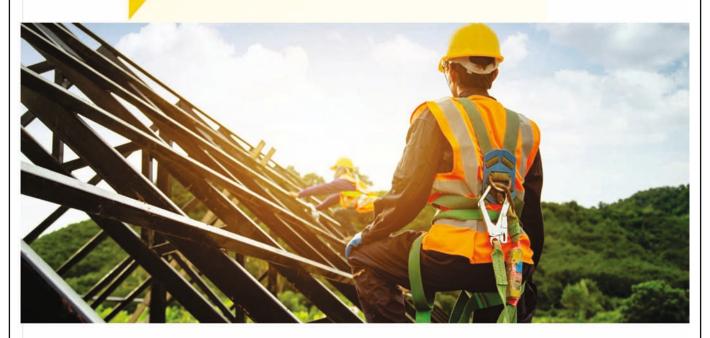
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THE FSS POST 9 SEPTEMBER-OCTOBER 2024



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Safety Appliances Manufacturers Association

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MESSAGE From GUEST EDITOR



Dear Industry Friends,

Greetings !!!

As we navigate the complexities of modern living, the importance of fire safety often takes a backseat in our daily conversations. Yet, the reality is stark: fires can devastate lives and properties in mere moments. As advocates for safety, it is our duty to prioritize awareness and education within our communities.

Fire incidents do not discriminate; they can affect anyone, anywhere. Whether it's a family gathering around the stove, a business operating long hours, or a community event taking place outdoors, the risk of fire is ever-present. Yet, many individuals underestimate their vulnerability. This editorial aims to shed light on the critical need for fire safety awareness and proactive measures.

Today Indian fire industry has come of an age to provide best suited fire & safety solutions. With state of art technology & quality products we are able to combat with fire with minimum or no loss.

Trade journals & magazines are the potent source to disseminate the information to the users & buyers.

"The FSS Post" is one of such potential media. We are happy that the new edition is brought where prominent industry leaders & professionals have shared views and information.

We hope it to continue and grow.

Ashish Shah

Director

Ambetronics Engineers Private Limited

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THE FSS POST

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Mayur Lalit

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IN CONVERSATION: INDUSTRY LEADERS



"PADMA SHRI" Mr. Jai Prakash Agarwal Chairman Surya Roshni Ltd.



Mr. Jimit Shah Director, NewAge Fire Fighting Co. Ltd



Dilshad Ahemad Director De worth Equipments Pvt Ltd.

CURRENT UPDATES



Railway hospital Patna catches fire, patients evacuated safely



In Germany Ferries wheel catches fire at musical festival: Dozen Injured

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ON-THE-GO **BILE DEMO VAN**



KARAM is committed to redefining safety practices by making them both accessible and practical for everyone. To achieve this goal, KARAM has deployed two state-ofthe-art Mobile Demo Vans across various locations in India, bringing safety education to the forefront. These vans enable our end users, especially workers, to engage with and understand the importance of personal protective equipment (PPE) and fall protection solutions. This initiative goes beyond merely showcasing products; it empowers workers with the knowledge and proper usage of safety gear to foster safer environments. With hands-on demonstrations and expert guidance, KARAM is dedicated to promoting a culture of safety that knows no boundaries.







Hands-on Experience



Real-Time Consultation



Enhanced Awareness



Time and Cost Efficiency

MDV 1.0

MDV 2.0

OPERATING

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KILOMETERS COVERED

336 OPERATING DAYS

49 CITIES COVERED

326 SITES COVERED

33098 KILOMETERS COVERED

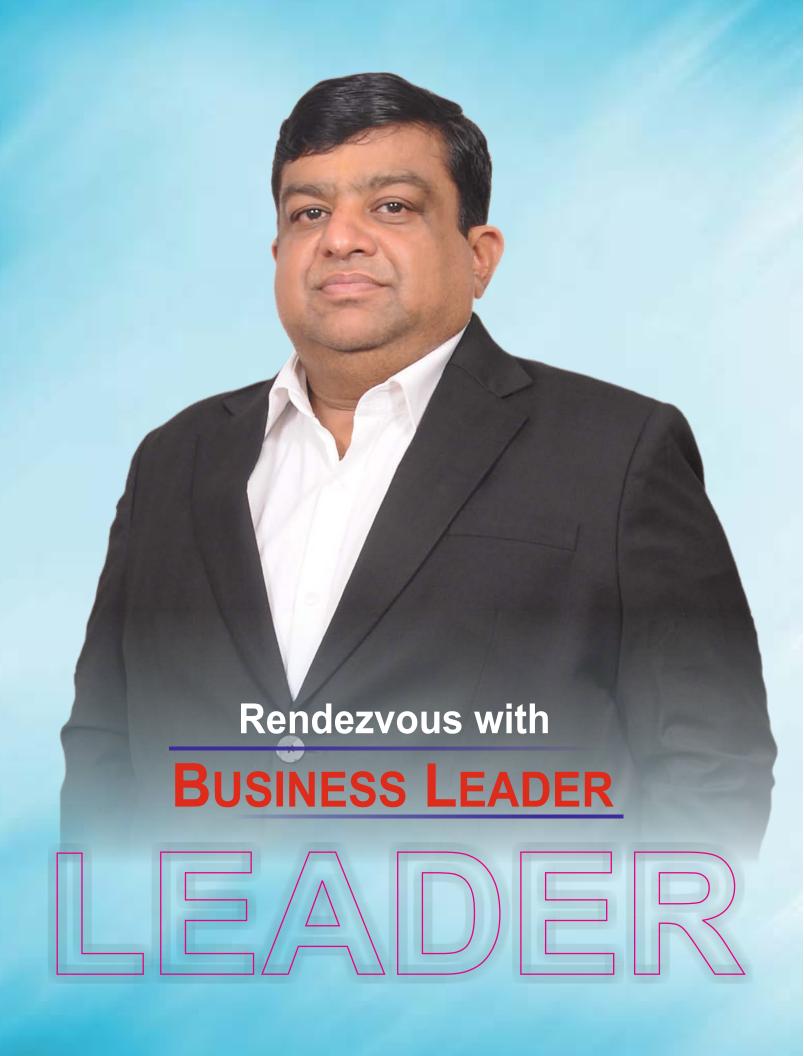
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Mr. Kamal Mittal Director

Aktion Safety Solutions Pvt. Ltd.

"Our mission is to safeguard lives by providing top-notch safety equipments that professionals across various industries can rely on, every day. We specialize in a wide range of products, including personal protective equipment (PPE) such as Safety helmets, Safety Shoes, Protective Workwear, Fall Protection Systems gloves, and respiratory gear, as well as industrial safety solutions like confined space equipment, road safety products, lockout tagout and emergency response supplies, including first aid kits and fire extinguishers."



Q: Kindly tell us about your company?

Our beginning in 2004 as a modest manufacturer of road safety products in a small local scope, we embarked our journey with a clear vision and mission to protect lives in different working environments. Over the course of more than two decades, the unwavering dedication and relentless effort of the AKTION family and its team have elevated us to proudly establish a leading brand as safety product manufacturer since beginning.

Our mission is to safeguard lives by providing top-notch safety equipments that professionals across various industries can rely on, every day. We specialize in a wide range of products, including personal protective equipment (PPE) such as Safety helmets, Safety Shoes, Protective Workwear, Fall Protection Systems gloves, and respiratory gear, as well as industrial safety solutions like confined space equipment, road safety products, lockout tagout and emergency response supplies, including first aid kits and fire extinguishers.

Our state-of-the-art manufacturing facilities are equipped with the latest technology, ensuring precision and efficiency. We maintain rigorous quality control standards, with thorough inspections and testing to meet and exceed industry regulations. Our skilled team of engineers, technicians, and customer service representatives are dedicated to continuous improvement and innovation.

We are proud of our global reach, exporting products worldwide and serving diverse industries with tailored solutions. Sustainability is a core focus, as we strive to minimize our environmental impact through eco-friendly practices and efficient resource management.

At AKTION, we are committed to protecting lives and enhancing

workplace safety. Thank you for considering us as your trusted partner in safety solutions. Together, we can create safer environments for everyone.

Q: What product range you offer in the market?

At AKTION, we offer a comprehensive range of safety products designed to protect lives across various industries. Our product lineup includes high-quality Safety Footwear, engineered for durability and comfort to prevent injuries in demanding work environments. We provide advanced Fall Protection Equipments. such as harnesses, lanyards, anchors, etc. to ensure safety at heights. Our protective workwear, including flame-resistant and high-visibility clothing, meets rigorous standards to safeguard workers in hazardous conditions. Additionally, we offer robust safety helmets that combine protection with ergonomic design. Each product is crafted with precision and adheres to the highest safety standards, reflecting our commitment to delivering reliable solutions. Our extensive range is tailored to meet the diverse needs of our customers, ensuring their safety and well-being on the job. Our commitment to quality, innovation, and customer satisfaction ensures that each product in our range is designed to offer maximum protection and peace of mind.

Q: Can you tell about the manufacturing capabilities?

At AKTION, our manufacturing capabilities are designed to deliver superior safety products. Our state-of-the-art manufacturing facilities are equipped with advanced technology and machinery, ensuring precise and efficient production. Our skilled workforce, comprising experienced engineers, technicians, and production staff, guarantees excellence from design to final assembly.

Quality control is paramount, with rigorous inspections and testing to meet and exceed industry standards. We offer customized solutions tailored to specific client needs, altering dimensions, materials, or features as required.

Our facilities can handle both small and large-scale production runs, ensuring fast turnaround times and the ability to serve a diverse clientele. Continuous innovation, driven by our dedicated research and development team, keeps us at the cutting edge of safety technology, ensuring our products are reliable, durable, and meet the evolving needs of our customers.

Q: What are the expansion plans for your company?

Our expansion plans focus on enhancing our global presence and product offerings. We aim to establish new manufacturing facilities in strategic locations to improve distribution efficiency and reduce delivery times. Investing in advanced technology and expanding our research and development capabilities will drive innovation in our product lines. Additionally, we plan to enter new markets and sectors, broadening our customer base while maintaining our commitment to quality and sustainability. Partnerships and acquisitions are also on our radar to leverage synergies and accelerate growth, ensuring we continue to lead in the safety products industry.

Q: How the safety industry is growing in India?

The safety industry in India is experiencing robust growth, driven by increasing industrialization, stringent safety regulations, and rising awareness about workplace safety. The government's emphasis on improving safety standards and implementing stricter compliance norms across various sectors has significantly boosted demand for safety products. Rapid infrastructure development, expansion of manufacturing units, and growth in sectors like construction, mining, and chemicals are further propelling the market. Additionally, the adoption of advanced safety technologies and personal protective equipment (PPE) is on the rise, making India a burgeoning market for safety solutions, poised for sustained growth in the coming years.

Q: How the government policies are in compliant with industry growth?

Government policies in India are increasingly supporting the growth of the safety industry through stringent enforcement of labor laws and safety regulations, such as the Occupational Safety, Health and Working Conditions Code. These regulations mandate higher safety standards across various industries,

driving the demand for quality safety products. Initiatives like "Make in India" and extensive infrastructure development projects further boost this demand by encouraging industrial growth and modernization.

The government also promotes industrial safety training and certification programs, enhancing workforce awareness and compliance with safety norms. Incentives for adopting advanced safety technologies and fostering domestic manufacturing of safety equipment align with industry needs, ensuring sustainable growth. By creating a regulatory environment that emphasizes safety and quality, the government is effectively fostering the expansion of the safety industry in India.

Q: Are you exporting to other countries?

Yes, AKTION proudly exports its high-quality safety products to various countries around the globe. Our commitment to excellence and adherence to international standards have enabled us to establish a strong presence in international markets. We serve a diverse range of industries, ensuring that our products meet the specific safety needs of each region.

By leveraging advanced manufacturing techniques and maintaining rigorous quality control, we deliver reliable and innovative safety solutions that are trusted worldwide. Our dedicated logistics team ensures efficient and timely delivery, enhancing our reputation as a dependable global supplier. Through strategic partnerships and a focus on expanding our international footprint, we continue to grow and meet the safety demands of industries globally.

Q: Any message for the readers?

To our valued readers,

Thank you for taking the time to learn about AKTION SAFETY SOLUTIONS PVT. LTD. Our commitment to safeguarding lives through top-quality safety products remains unwavering. We continuously strive to innovate and improve, ensuring that our solutions meet the highest standards and evolving industry needs. Whether you are a long-time partner or new to our products, we appreciate your trust and support.

Together, we can create safer workplaces and environments worldwide. Stay connected with us for the latest advancements in safety technology and join us in our mission to protect and preserve life through excellence in safety solutions.

Stay safe and protected.





ExxFire: The Vanguard of Innovative Fire Safety Solutions



In the landscape of fire safety, ExxFire shines as a beacon of innovation and reliability. With its roots firmly planted in the Netherlands, ExxFire has extended its reach to India through a strategic partnership with **NewAge Fire Solutions Pvt. Ltd.** bringing advanced fire detection and suppression systems to the forefront of the Indian market.

Innovative Features of "ExxFire"

- Pressureless Nitrogen Gas Storage: ExxFire's signature feature is its pressureless nitrogen gas storage technology, which offers a safe, clean, and environmentally friendly fire suppression solution.
- · Cool Gas Generator: This unique system generates nitrogen gas at ambient temperatures, eliminating the risks associated with high-pressure systems.
- Object Protection: ExxFire's systems are designed to protect high-value equipment within various enclosures, ensuring the safety of mission-critical assets.

Certifications and Compliance

CNPP Certified: ExxFire's systems have been tested and certified by CNPP, Vernon - France, for their quality and effectiveness.

ISO 9001: Reflecting ExxFire's commitment to international quality standards.

EPA SNAP Certification: Demonstrating ExxFire's dedication to environmental sustainability.

CE: Ensuring compliance with European safety, health, and environmental protection standards.

Diverse Applications

- Server Racks and Electrical Cabinets: ExxFire's systems are ideal for protecting the nerve centers of modern businesses, such as server racks and electrical cabinets.
- Battery Energy Storage Systems (BESS): ExxFire provides indispensable protection for the powerhouses of tomorrow, ensuring the safety of battery energy storage systems.
- High-Voltage Cabinets: Preserving the integrity of essential electrical components, ExxFire's systems offer fire suppression for high-voltage cabinets.

Conclusion

ExxFire's collaboration with **NewAge Fire** Solutions Pvt. Ltd. signifies a new chapter in fire safety for India. Their cutting-edge technology not only protects but also preserves, ensuring uninterrupted business operations and peace of mind. ExxFire's systems are a testament to their dedication to providing clean, efficient, and reliable fire protection solutions.







"PADMA SHRI"
MR. JAI PRAKASH AGARWAL
Chairman
Surya Roshni Ltd.

Robust Growth: "Surya Roshni" Registers Over INR 8,000 Crore Sales in FY 2023-24

"Surya Roshni, an Indian conglomerate, is among the oldest and largest pipe manufacturers in the country having a diverse product range, to meet all kinds of applications. Surya, being one of the largest exporters of pipes from India, with a formidable domestic presence, partners with its customers to provide optimized solutions. Surya supplies world-class quality pipes at competitive prices making it the preferred choice of its customers. The company has continued its upward trend in the growth trajectory and registered sales of around INR 8,000 crore in FY 2023-24. This was revealed by

"Padma Shri Jai Prakash Agarwal", Chairman - Surya Roshni Limited, during his recent interaction with "The FSS Post".

Please share Surya Roshni Limited's journey, major milestones, and crucial achievements.

Jai Prakash Agarwal (JPA): The journey of Surya Roshni started in 1973 by manufacturing steel tubes and gradually diversifying into the lighting category in 1984. Since then, it has grown by leaps and bounds to become one of the largest steel pipes and lighting companies in India. It further ventured into PVC pipes in 2010 and into consumer durables like fans and home appliances in 2014-2015. Today, we are the leading manufacturer of GI pipes and one of the largest exporters of ERW pipes in India. Surya exports its high-quality products to over 50 countries around the world. The company registered sales of around INR 8,000 crore in the last FY.

What is the manufacturing set-up and production capacity of your steel pipe plant?

JPA: Our steel pipes manufacturing facilities are located at Bahadurgarh (Haryana), Malanpur (Madhya Pradesh), Hindupur (Andhra Pradesh) and Anjar (Gujarat). The pipes are produced for

various applications including water, structural and also oil & gas. We produce ERW round pipe from $\frac{1}{2}$ " to 16", spiral welded pipe from 18" to 140", and ERW section pipes from 20x20mm up to 300x300mm. We produce GI pipes from $\frac{1}{2}$ " to 30" and also GP pipes. We also carry out 3LPE coating at our Anjar facility.

Our plants are suitably equipped with high-end machines ranging from slitting lines, pipe mills, galvanizing units, finishing machines, as well as high-pressure hydro machines along with adequate handling facilities. The Gujarat unit is strategically located in close proximity to two major ports, Kandla and Mundra, providing a significant advantage for exports and imports. The unit exports over half of its production. We are equipped with large-diameter section pipe facility at Gwalior, utilising Direct Forming Technology (DFT) with an annual capacity of 36,000 MT. We have a combined capacity of about 12.15 lakh MT (1.215 million MT) per annum for steel pipes and strips out of which we can produce upto 3 lakh MT of GI pipes.

Please tell us about your steel pipe product portfolio and its applications.

JPA: Our product portfolio includes GI pipes with applications for agriculture & irrigation, casing and tubing, water transportation, plumbing, cold storage, greenhouses, fire fighting, last mile connectivity of PNG, street light poles, and solar panels to name a few. Black/varnished/powder-coated pipes are used in applications for construction, fabrication, fencing, metro railway platforms, airports, sign boards, industrial, and scaffolding among other applications. Our hollow section pipes find applications for infrastructure and PEB structure of commercial buildings like airports, metro/railway stations, warehousing, industrial infrastructure, urban development, solar structures, electrical poles, telecom towers etc. API/3LPE coated spiral pipes are used for oil and gas pipelines, oil well casing and water transportation.

Please shed light on your steel pipe market footprint.

JPA: Surya has built an exceptional reputation in both the Indian and global markets due to its diverse product range, commitment to quality, and excellent service all offered at competitive prices. Our brand has gained the trust of millions of customers worldwide, and we remain dedicated to delivering superior products while adhering to the strictest global quality standards. Surya stands as a brand image that is synonymous with high-quality products delivering consistent performance and peace of mind. It is because of this trust of our esteemed clients that Surya today has a significant presence in more than 50 countries and is among the top three pipe exporters.

What is your USP that sets you apart from your competitors?

JPA: Our commitment to quality assurance begins from the raw material stage and continues throughout all manufacturing processes until the pipes reach our esteemed clients. To ensure the highest quality, our quality assurance department is fully supported by a modern laboratory for conducting metallurgical and chemical tests, as well as a test house for evaluating physical properties. One of our key strengths lies in producing large-diameter pipes, ranging from 114.3mm to 406.4mm in ERW and 457mm to 2667mm in spiral pipes. Our expertise extends to manufacturing various special grades, including API 5L grades such as X70, X80 in PSL 1 & PSL 2, and API 5CT grades H40, J55, K55.

What is your steel pipe technological and business roadmap?

JPA: We have a constant focus on technologically upgrading ourselves with an objective to make our processes cost effective, improve productivity and provide more consistent quality. Surya recently introduced the best-in-class direct forming technology (DFT) to produce ERW structural steel section pipe. This technology significantly reduces the time of producing customized hollow sections by including them in the mill range without changing the roll. Being a completely automatic and computerized process, DFT saves the setup time and makes operation settings accurate, easy, and efficient. Compared to traditional production processes, this method is completely automatic and computerized, with all PLC control with a DC digital control system only to motorize the roller movement during the size changes. Surya is taking big strides in its chosen areas with tested skills, commitment, a skilled workforce, vast experience, and mature leadership.

Please elaborate on your capex investments for new ERW pipe mills at existing facilities.

JPA: To meet the growing demand of pipes, we have decided to expand our operations at various locations. This expansion will not only enhance our capability to handle larger pipe sizes but also enable us to strengthen our presence in the oil and gas markets, increase our exports, and cater to local irrigation and water distribution projects. We are in the process of installing a new spiral welding line at Malanpur for producing pipes from 24" to 140" at an investment of around INR 25 crore. Another new mill is commissioned for producing pipes up to 8". The proposed manufacturing facility will have a capacity of 200,000 MTPA, with an estimated cost of INR 50 crore. This strategic move will position us to better serve our customers and expand our market reach, contributing to the growth and success of our company.

Surya Roshni has recently invested in its Prakash Surya brand and distribution networks. Can you share in detail all the steps that you have taken?

JPA: Over the years, the company has developed a strong brand and robust distribution network across the world. Our investments towards strengthening distribution (including trade network and retail outlets) and decentralized depot networks ensure smooth logistics movement, prompt delivery, and customer satisfaction, aptly supported by strong marketing initiatives. The company has been consistently promoting its brand 'Prakash Surya' through different advertising mediums for enhanced market visibility. Our products are sold across the length and breadth of the country and exported to over 50 nations across the world, owing to our strong

dealer and distributor network. Besides, the decentralized branch/depot networks help with the quick delivery turnaround to customers.

Have there been any other developments at Surya Roshni in recent times?

JPA: The company recently implemented SAP software to integrate and automate key processes, resulting in faster and more efficient operations. As a responsible corporate citizen, Surva Roshni aims to assist in promoting social development by building capacity within the broader society. The company considers societal well-being and ecological responsibilities as the key focus area for its ESG initiatives. We are continuing with the high growth momentum in lighting, consumer durables, steel, and PVC pipe by focussing on further improving the distribution and reach, across urban, semi-urban, and rural India. There will be several new product launches and the company will continue to aggressively drive channel financing too. We will also continue to invest in automation and upgradation of systems to drive higher efficiencies and productivity. Surya Roshni is focusing on aggressive advertising and promotions (including both above-theline and below-the-line advertising) to enhance its brand visibility.

Can you share with us your observations on key market trends in the Indian tubes and pipes market?

JPA: There is a high demand for steel pipe in various sectors with strong improvement in the Indian economy, including rural and urban. The industry opportunity has been so exciting considering the following encouraging developments which will generate demand for our steel pipes and strips business. The Indian economy showed resolute strength during the period with the government's stance for Atmanirbhar Bharat, which has opened new avenues with immense hidden opportunities to explore in making India a global manufacturing hub in the medium to long term. Prime Minister's initiative of Jal Jeevan Mission has given a huge impetus to pipe industry. The latest trend in the construction industry is to construct PEB buildings with extensive usage of hollow sections. Hollow sections provide a benefit of strength while reducing the overall weight of the structure. With huge

investments made in housing, and infrastructure like railways, ports, roads, airports, etc., demand for steel pipes is reaching a new level and more will be anticipated in time to come. The focus on green energy will create new opportunities for Hydrogen pipelines.

What is your vision and plans for the company's future?

JPA: Our vision is to become the most preferred brand of pipe and lighting products manufacturer in the country which delivers the best value to its customers worldwide. We are fully committed to satisfaction and growth of all our stakeholders, and employees alike. We carefully assess growth opportunities not only to improve top-line revenue but, more importantly, to ensure consistency and enhance our bottom line as well. We are continuing with the high growth momentum in lighting, consumer durables, steel, and PVC pipe by focusing on further improving the distribution and reach across urban, semi-urban, and rural India. There will be several new product launches and the company will continue to aggressively drive channel financing too.

Kindly share your views on trade fairs. How do you think such events help the industry?

JPA: We believe trade fairs are a great way to meet people, revive old connections and make new ones. They can be called a versatile marketing tool as they bring together the whole industry, including the manufacturers, suppliers, buyers and traders under one roof, thus giving every stake holder a good opportunity to connect with the best and make their business known. Besides giving recognition to a company, these fairs also enable businesses to analyze themselves, as well as prepare to sell products and services in a competitive environment. They can also be used as market research instruments to know customer needs and feedback for new product launches.





Ensuring Fire Safety:

The Importance of Testing & Certifications per Indian Standards

Author:
Sandy Dweik
CEO of Thomas Bell-Wright

Fire safety is a critical concern in India's rapidly growing construction landscape. With increasing urbanization and the construction of complex buildings, the need for stringent fire safety measures has never been more pressing. Thomas Bell-Wright (TBW) has made considerable efforts to develop a solution for certifying products tested according to Indian Standards, marking a significant advancement in this area.

The Role of Certification and Listing:

Certification and listing are fundamental to ensuring that fire safety products meet the necessary performance standards. In many cases, it is challenging to establish a connection between the manufactured product and what is delivered to the site. Certification is a process that bridges this gap. The aim of this exercise is to enable manufacturers to demonstrate that their production consistently adheres to the Testing Standard throughout the fabrication process, thereby establishing confidence in the product's performance.

Why Testing to Indian Standards is Crucial:

India's National Building Code by Bureau of Indian Standards along with state-wise fire acts and various technical regulations, prescribe specific requirements for fire safety products. Certification and Testing of products to Indian Standards ensures that these products can withstand the conditions they might face during a fire. For instance, the TBW certification covers a range of products such as fire-resistant doors, hardware, separating assemblies, and more. These products can be tested to Indian Standards like IS 17518 (IS 3614-2) for fire doors and door sets, IS 16947or 16945 for doors with glass panes, and various IS/ISO 834 series for load-bearing and non-load-bearing elements.

The Certification Process:

While test reports pertain solely to the sample tested, certification is a process that links production to performance, as verified by testing. This includes:

Pre-Test Sampling Audit:

Evaluating the quality control processes and selecting test specimen(s) from the production line.

Testing in Accredited Laboratories: Conducting tests in an accredited lab to ensure products meet the specified standards and benchmark performance.





Sandy Dweik

Initial Factory Production Control (FPC) Audit:

Performing a comprehensive audit to verify that manufacturing processes comply with required standards.

Periodic Surveillance Audits: Conducting regular follow-up audits to ensure ongoing compliance with required standards, thereby enabling the manufacturer to maintain certification and keep their product listing active on TBWCERT.com.

Traceability and Verification: Marking each certified product with a unique identifier and QR code, ensuring complete traceability of manufacturing.

Benefits of Certification:

Certification to Indian Standards offers multiple benefits:

Compliance with Regulations:

Ensures products meet the legal and technical requirements set by various authorities.

·Enhanced Quality:

Ensures that the manufacturer recognizes the importance of quality assurance and produces products consistently.

Market Trust:

Builds trust among buyers, specifiers, and end-users regarding the authenticity and quality of the products.

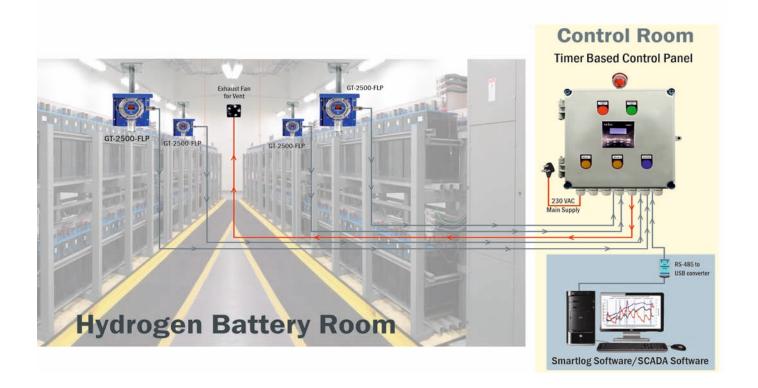
Global Recognition:

As TBW is accredited to international standards (ISO 17065 and ISO 17067), certified products also gain international credibility.

TBW's Certification Offerings

TBW's offerings include certifications for a wide range of fire safety products such as:

- · Fire-resistant doors and hardware
- · Fire-resistant separating assemblies
- Exterior wall assemblies and building materials
- Safety glass
- Fire-stopping materials and assemblies



These products are tested and certified to ensure they meet both Indian and international standards, thus ensuring a high level of safety and reliability.

Conclusion:

As India continues to build and expand its infrastructure, the importance of stringent fire safety measures cannot be overstated. Certification and testing as per Indian Standards play a vital role in this ecosystem, ensuring that products are reliable and effective. The comprehensive certification process offered by TBWIC not only enhances safety but also builds market trust, ensuring that all stakeholders—from manufacturers to end-





users—are confident in the performance of fire safety products.

In a country as vast and diverse as India, with varying building regulations and standards, such certification programs are essential to harmonize safety practices and safeguard lives and properties across the nation.



Short professional BIO: Sandy Dweik

Sandy Dweik, an Architectural Engineer with a 27-year career at Thomas Bell-Wright International Consultants, has risen from Façade Consultant to CEO. Her in-depth knowledge of façade engineering, honed through hands-on experience on hundreds of landmark projects across the Middle East, India, and the subcontinent, has been instrumental in shaping the company's global reputation.

Dweik has been at the forefront of implementing industry standards, ensuring the delivery of high-quality, cost-effective, and sustainable façade solutions. Her unparalleled expertise in façade technical review, curtain wall testing, and fire compliance has positioned Thomas Bell-Wright as a leader in the field. Renowned for her technical acumen, Dweik is a frequent keynote speaker at industry conferences.





Safe Haven - Fire Safety at Home

Mr. Rakesh Parashar

Fire is one of humanity's oldest and most significant discoveries, shaping the course of human evolution and civilization. Natural occurrences such as lightning strikes likely ignited the first fires, which primitive humans observed, and later learned to use. Archaeological evidence suggests that our ancestors used fire as far back as 1.5 million years ago, primarily for light, warmth, and protection from predators and pests.

The controlled use of fire marked a significant turning point in human evolution. Mastery over fire allowed early humans to cook food, making it tastier and more digestible. This dietary shift contributed to brain development and the evolution of Homo sapiens, which lead to fire becoming an indispensable tool for mankind. Today, it is impossible to imagine life without fire.

However, despite its many benefits, fire-related accidents result in significant loss of life and economic impact each year globally. According to the World Health Organization, it is estimated that approximately 1,80,000 people die worldwide every year from fire-related accidents. This includes both industrial and domestic settings, with domestic fires contributing a substantial portion of these fatalities. The economic impact of fire-related accidents is estimated to be around \$300 billion globally, each year, which represents a significant burden on the global GDP.

The phrase 'Fire is a good servant, but a bad master' thus aptly captures the dual nature of fire, as it serves as an invaluable tool when managed properly, yet can become overwhelmingly destructive when left unchecked. This highlights the essential balance between harnessing fire's benefits and mitigating its potential hazards, underscoring the critical need for enhanced fire safety measures, prevention strategies, and effective emergency response systems, to reduce both the human and economic toll of fires worldwide.

While extensive literature exists on fire safety in industrial settings, there is a notable lack of resources dedicated to protecting ourselves and our homes from fire hazards. This article focuses on fire safety in the Indian domestic context, offering practical advice to help protect our homes and our loved ones from the dangers of

fire.

Why fire safety matters at home

Domestic fires can start suddenly and spread rapidly, causing severe damage and posing a threat to lives and property. According to data from the National Crime Records Bureau (NCRB), thousands of incidents of domestic fires are reported every year in India, which account for around 2,500 fatalities on an average each year.

Since homes are generally, not as prepared to fight fires as businesses and industrial units, they have far reaching financial and emotional impact on individuals. Thus, adopting fire safety measures at home is not just a necessity, but a vital responsibility, to ensure the safety of our loved ones and the protection of our property.

Most domestic fires are preventable. Understanding the common causes of domestic fires can help us to significantly reduce the risk.

Common causes of home fires

Some typical scenarios where home fires may start include:

Cooking: The kitchen is one of the most common places for fires to start in the homes. Leaving cooking unattended, overheating oil, or placing flammable items like cloth towels or paper near the stove can lead to fires.

Electricity: Faulty, or outdated wiring, overloaded power sockets, and the misuse of electrical appliances can also cause fires. Appliances that are old or not functioning properly can also be a risk.

Open flames: Candles or oil lamps left burning without supervision, can easily start a fire. Placing them near flammable materials or leaving them burning while asleep can be hazardous.

Flammable liquids: Storing petrol, kerosene, or other

flammable liquids in the house, especially near sources of heat, can also lead to accidental fires.

Smoking: Cigarettes and other smoking materials are dangerous if not completely extinguished. Falling asleep while smoking or leaving lit cigarettes unattended can also start fires.

Practical fire safety tips for homes

Taking proactive steps to ensure fire safety can significantly reduce the risk of fires and improve the overall safety of our homes. Here are some simple, everyday tips to help prevent fires in our homes, particularly focusing on kitchen and electrical safety.

Basic kitchen safety

The kitchen is not only the heart of the home, but also one of the most common places for fires to start. Some basic fire safety measures to keep your kitchen safe include:

Stay attentive while cooking: Always keep an eye on the stove when cooking, especially when frying. Never leave a pan of hot oil unattended, as it can quickly overheat and catch fire. If you must leave, even for a short period, turn off the stove.

Practice safe cooking methods: Avoid wearing loose clothing and keeping long hair open while cooking, as they can easily catch fire. Use cloth napkins, pot-holders or gloves to handle hot utensils and always have a lid or towel available nearby to smother small fires in an emergency.

Keep flammable items away: Store flammable items like dish clothes, paper towels, or packaging materials away from the stove. These can easily catch fire if they come into contact with heat or open flames.

Keep appliances clean: Regularly clean cooking appliances, including ovens, stovetops, and microwaves, to prevent grease and food buildup, which can ignite.

Use cooking oil carefully: If you are frying, never fill the pan more than one-third full of oil, and heat oil slowly to the desired temperature. If oil starts to smoke, turn off the heat immediately or else it can even catch fire.

Keep children and pets away from the cooking area:

Do not let children or your pets to come within three feet around the stove and hot appliances.

Basic electrical safety

Electrical safety is crucial to prevent fires and ensure the safety of your home. Some basic fire safety measures for electrical safety at home include:

Avoid overloading electrical outlets: Using too many devices from a single socket or extension boards can cause overheating

and lead to fires. If you have to use extension cords, use them only as a temporary solution. Ensure that you use proper extension boards with surge protectors and never plug one extension board into another. Plug heavy-duty appliances like refrigerators, washing machines, air conditioners and heaters directly into wall outlets, and never on extension boards, as they can overheat and start a fire.

Inspect electrical cords: Check the cords of your appliances regularly. If you notice frayed wires, cracks, or other damage, replace the cord immediately. Using damaged cords increases the risk of short circuits and fires.

Maintain electrical equipment:

Regularly inspect and service electrical appliances, such as induction cooktops, chimneys, ovens, toasters, mixers, room heaters, geysers etc. and ensure they are always used according to the manufacturer's instructions. Ensure that cooking chimneys are cleaned regularly as over time, grease, oil, and other residues from cooking can accumulate in the chimney, which can significantly increase the risk of a grease fire.

Keep an eye on heating equipment:

Use your heating equipment like room heaters, with care, and do not place them too close to flammable materials like curtains, bedding, furniture etc. or use them without proper ventilation. Make sure to turn them off when you leave the room or go to bed. Having them inspected annually by a professional is a good idea.

Turn off appliances when not in use: Unplugging appliances when they are not in use is a simple way to prevent fires. This is especially important for appliances that generate heat, such as irons, heaters, geysers or electric kettles.

Install proper fuses: Make sure that the electrical system of your home's is equipped with the correct fuses or circuit breakers, as using the wrong fuse can cause overheating and fires.

Simple fire safety tips for every home

Apart from these simple kitchen and electrical safety measures, here are some other practical tips that everyone can follow at home:

Install smoke detectors: Smoke detectors are the first line of defence in detecting fires. While they are not yet widely adopted in Indian homes, installing them is highly recommended.

Open flames: In India, candles and oil lamps are commonly used for prayers, or during power cuts. To ensure safety, always place them in sturdy holders on stable surfaces, away from flammable materials such as curtains, paper, and clothing. Avoid placing them directly on wooden surfaces. Never leave candles or oil lamps unattended, and make sure to extinguish them before leaving the room or going to bed.

Flammable liquids: Minimise the storage of flammable materials such as petrol, kerosene, and paints in the house. If necessary, ensure they are kept in properly sealed containers which are tightly closed, and stored in cool, well-ventilated areas away from heat sources and out of reach of children.

Smoking: If you smoke, do so outside and well away from flammable materials. Always use deep, sturdy ashtrays to prevent cigarettes from falling out and ensure that cigarette butts and matches are fully extinguished before disposal. Additionally, never smoke in bed or when drowsy to minimise fire risks.

Keep fire extinguishers handy: Although having fire extinguishers is not very common in Indian homes, it is highly advisable to have them. Place extinguishers in easily accessible locations, such as the kitchen and near potential fire hazards. Make sure you and everyone in your household are trained in their proper use. Additionally, regularly inspect the extinguishers to ensure they are charged and ready for use.

Secure matches and lighters: Store matches and lighters out of reach of children and in a safe and secure place.

What to do in the event of a fire

Despite the best preventive measures fires can still occur at home. Knowing how to prevent and respond to fires quickly and effectively can be crucial for saving lives and protecting property.

Some steps which can help minimise damage and ensure everyone's safety include:

Stay calm and act quickly: Remaining calm during a fire is essential for clear thinking and effective decision-making, which can greatly enhance your safety and chances of survival.

Fighting small fires: For small fires involving flammable materials like wood, cloth, or paper, water, is the best solution. You can use a water-based extinguisher if available at home. Alternatively, you can smother the fire with a heavy, non-flammable blanket.

Cooking fire: Grease fires are common in kitchens and can be very dangerous. In the event of a grease fire, cover the flames with a lid or a damp towel. Do not use water to put out a grease fire under any circumstances, as it can cause violent flare-ups and spread the fire further.

Electrical fires: In the event of an electrical fire, immediately unplug the device and turn off the power, if it is safe to do so. Use a fire blanket or a Class C fire extinguisher, such as **CO**² or **Dry Chemical Powder extinguishers**, to extinguish the fire. Never use water or water-based extinguishers on electrical fires, as water can conduct electricity and cause electrocution.

Sound the alarm: Alert everyone in the home to the fire. Use a loud voice or an alarm to ensure everyone is aware.

Evacuate if necessary: If the fire becomes too large or uncontrollable, do not try to be a hero and fight the fire. Instead, prioritise safety by evacuating the house immediately alongwith all family members. Close doors behind you to help slow the spread of fire.

Call for help: Once safely outside, contact the fire department or emergency services. Provide them with your exact location and complete details about the fire.

Do not re-enter: Never go back inside a burning building. Wait for the fire department to declare the area safe before re-entering.

Conclusion: Safeguarding our homes against fire hazards transcends mere precaution; it is an essential commitment to the safety of our loved ones and the protection of our valuable property. In the Indian context, where diverse living conditions and varying levels of infrastructure present unique challenges, effective fire safety measures are even more crucial. By adopting practical steps, whether it is staying alert while cooking, being cautious with electrical appliances, or knowing how to respond if a fire starts, we can significantly reduce the risk of devastating fires.

As we strive to create safer living environments, let us remember that vigilance and preparedness are our best defenses. Equipping ourselves with knowledge and pro-active safety practices will not only safeguard our homes, and possessions, but most importantly, it will ensure the safety of our loved ones. A small investment in fire safety today can prevent profound losses tomorrow. Let's ensure that fire remains a beneficial tool rather than a destructive force, reinforcing our commitment to a safer, more secure home for everyone.



Fire Safety Practices in India: Essential Measures for a Safer Tomorrow





Gurpreet Singh
Managing Director
United Manufacturing Co.

Fire safety is a critical aspect of public safety and health, and its importance is increasingly recognized worldwide. In India, where rapid urbanization and industrial growth are prevalent, fire safety practices are more crucial than ever. Here's an overview of essential fire safety practices in India and recommendations for enhancing safety.

Understanding the Fire Safety Landscape in India-

India's fire safety scenario is shaped by its diverse geographical, cultural, and economic factors. The country's rapid urbanization has led to densely populated cities with high-rise buildings, congested markets, and industrial zones. This growth, coupled with varying levels of safety regulations and awareness, underscores the need for robust fire safety practices.

KEY FIRE SAFETY PRACTICES

Fire Safety Regulations and Codes

India has a set of fire safety regulations outlined in the National Building Code (NBC) and the Fire Services Act. These codes are designed to provide guidelines for the construction and maintenance of buildings to ensure fire safety. Key regulations include:

Building Design and Construction: Ensuring that buildings are constructed with fire-resistant materials and include features such as fire exits, staircases, and fire barriers.

Fire Safety Equipment: Mandating the installation of fire alarms, smoke detectors, and fire extinguishers in buildings.

Regular Inspections: Conducting regular fire safety inspections and audits to ensure compliance with safety codes.

Fire Prevention Measures

Prevention is always better than cure. Here are some fundamental prevention strategies:

Electrical Safety: Regular inspection of electrical wiring and equipment to prevent short circuits and overloading. Use of certified electrical products and avoiding overloading power outlets is crucial.

Safe Storage of Flammable Materials: Proper storage of chemicals, fuels, and other flammable materials in designated areas with appropriate safety measures.

Maintaining Cleanliness: Keeping surroundings, especially industrial and commercial areas, clean and free from excessive waste that can fuel fires.

Fire Safety Training and Awareness

Awareness and education play a pivotal role in fire safety. Initiatives include:

Fire Drills: Conducting regular fire drills in schools, offices, and residential buildings to familiarize people with emergency procedures.

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Training Programs: Offering training for employees in industries, commercial establishments, and public services on fire safety practices and the use of fire-fighting equipment.

Public Awareness Campaigns: Utilizing media and community outreach to educate the public about fire safety, including recognizing fire hazards and understanding emergency procedures.

Emergency Preparedness

Effective emergency preparedness is vital for minimizing the impact of fires:

Emergency Plans: Developing and communicating clear emergency evacuation plans and procedures for buildings and communities.

Fire Safety Equipment: Ensuring the availability and accessibility of fire extinguishers, hoses, and sprinklers. Regular maintenance and inspection of this equipment are essential.

Coordination with Fire Services: Establishing effective communication with local fire departments and understanding their protocols and resources.

Challenges and Recommendations:

Despite existing regulations and practices, challenges remain, such as inadequate enforcement, lack of awareness, and

insufficient infrastructure. To address these challenges, the following recommendations can be considered:

Strengthening Regulations: Updating and enforcing stricter fire safety regulations and codes, ensuring that they are followed diligently.

Enhancing Training Programs: Expanding fire safety training programs to cover more sectors and communities, with a focus on practical knowledge and skills.

Enhancing Training Programs: Expanding fire safety training programs to cover more sectors and communities, with a focus on practical knowledge and skills.

Improving Infrastructure: Investing in better fire-fighting infrastructure and equipment, especially in rapidly growing urban areas and industrial zones.

Fire safety in India requires a multifaceted approach involving regulations, prevention, education, and preparedness. By adhering to established safety practices and continuously improving strategies, India can enhance its resilience against fire hazards and ensure the safety of its people and property. As urban areas continue to expand and industries grow, a commitment to robust fire safety practices is essential for a safer and more secure future.

Center Stage



"NewAge Fire Fighting Co. Ltd. has a storied history as one of the pioneers in the fire safety industry. Founded in 1960, our journey began with a commitment to safeguarding lives and properties through innovative fire-fighting solutions. Over the decades, we have evolved from a modest start to becoming one of the leading fire-fighting equipment manufacturers in India."





Q: NewAge carries a rich legacy who happens to be pioneers in the fire business; can you please let us know about it?

NewAge Fire Fighting Co. Ltd. has a storied history as one of the pioneers in the fire safety industry. Founded in 1960, our journey began with a commitment to safeguarding lives and properties through innovative fire-fighting solutions. Over the decades, we have evolved from a modest start to becoming one of the leading fire-fighting equipment manufacturers in India. Our legacy is built on a foundation of quality, trust, and continuous improvement, ensuring that we remain at the forefront of the industry. Our products are designed with cutting-edge technology and adhere to the highest international standards, reflecting our dedication to excellence and innovation in fire safety.

The legacy we carry is not just about the years we've been in business but about the countless lives we've protected and the trust we've earned across the globe. As pioneers, we take immense pride in our history, and we remain committed to leading the way in fire safety for generations to come.

Q: What product range do you offer?

Range of Products: Fire hoses, hydrants, foam systems, sprinkler systems, firefighting vehicles.

1. FIRE HYDRANT SYSTEMS:

Hydrant systems are active re protection measures, consisting of a system of pipe work connected directly to water supply to each hydrant outlet and is intended to provide water for the fireman to fight a fire. We NewAge® provide various ranges of fire hydrant equipment like fire hoses, hydrant Stand Post, valves, water monitors etc.

2. FOAM SYSTEMS:

Foam systems Allows a specific amount of foam to be mixed with water through the fire apparatus pump mechanisms. Foam systems provide versatility and improved efficiency in the battle against dangerous fires. We NewAge® provide a range of foam equipment like foam branch pipes, foam inductors, mobile foam units etc.

3. FIRE SPRINKLER SYSTEMS:

An active fire protection method, in which fire sprinklers are connected to a water distribution piping system with adequate pressure and flow rate. Sprinklers consist of a glass bulb filled with glycerin based liquid which expands at appropriate temperature and breaks the glass to activate the sprinkler head. We NewAge® provide Fire sprinklers, Alarm check valves and flexible hoses.

4. FIRE RESCUE VEHICLES:

Rescue fire trucks are specialized vehicles designed to provide support in rescue operations. We NewAge® provides customized fire rescue vehicles and accessories as per the requirements of the various fire departments and clients.

Technological Advancements: Specialized crew seats, Pyrojet fire hose, Boom Towers, GRP Tanks.

Our Products:

- · Foam making branch pipes
- Fire Hoses
- · Fixed Inline Inductor
- Foam Monitor
- · Foam Makers & Foam Chambers
- Inline Balance Proportioners
- Water Spray Nozzles
- Foam Compounds
- · Alarm valves
- Hose valves
- Butterfly Valves
- Gate valves
- Flexible Sprinkler hose
- Sprinklers
- · Portable Nozzle
- Test & Drain valve

Our products like Fire Hose, Foam-making Branch Pipes, Sprinklers, Flexible Sprinkler Hoses, Inductors, Water-Foam Monitors, Alarm Valves, Hydrant Valves, Foam Makers, Foam Chambers, Fire Vehicle Mount Pumps, Fire Nozzles & Branch pipe, Portable Fire Pumps etc. are certified by approval bodies.

Q: What is the quality policy of the company?

At NewAge Fire Fighting Co. Ltd., our quality policy is deeply rooted in our commitment to excellence. We strive to provide products and services that not only meet but exceed the expectations of our customers. Our policy emphasizes continuous improvement, stringent quality control measures, and adherence to the highest international standards.

We are dedicated to achieving the following objectives:

- **1. Customer Satisfaction:** We prioritize the needs and satisfaction of our customers by delivering reliable, high-quality fire-fighting equipment and services.
- **2. Innovation:** We are committed to innovation in our products and processes, ensuring that we stay ahead in the industry and continue to offer state-of-the-art solutions.
- **3. Compliance:** We ensure that all our products and practices comply with relevant national and international regulations, standards, and specifications.
- **4. Continuous Improvement:** We believe in the continuous improvement of our processes, products, and services through regular feedback, audits, and reviews.
- **5. Employee Development:** We invest in the training and development of our employees to ensure they have the skills and knowledge to uphold our quality standards.

By adhering to this quality policy, we ensure that NewAge remains a trusted name in fire safety, delivering products and services that our customers can depend on for their safety and protection.

Q: Which countries are you exporting?

We export our products world-wide like Asia, Middle-East, Europe, and other countries too.

Below given are the various Countries:

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates (UAE), Singapore, Malaysia, Kenya, Myanmar, Indonesia, United Kingdom, Italy, Germany, Denmark, Belgium Greece, Canada, Ireland, United States of America, South Africa, Philippines, Zambia, Jordan, Maldives, Mauritius, Nigeria, Seychelles, Trinidad & Tobago, Egypt, Evador, Iraq, Fuji Island, Ghana, France, Tanzania, Cyprus, Yemen, Vietnam, Sri Lanka, Thailand, Australia, Bhutan, Brazil, Brunei, Nepal, etc...

Q: How are government policies compliant with your business? Are they helpful?

Government policies play a crucial role in shaping the fire safety industry, and at NewAge Fire Fighting Co. Ltd., we ensure full compliance with all relevant regulations and standards. We see these policies not just as guidelines, but as essential frameworks that help maintain the highest levels of safety and quality across the industry.

Compliance with government policies is integral to our operations. These policies set the standards for product design, manufacturing processes, and quality control, ensuring that our products meet the stringent requirements necessary for effective fire protection. By adhering to these regulations, we demonstrate our commitment to public safety and our responsibility as industry leaders.

Furthermore, government policies are indeed helpful as they create a level playing field, promoting fair competition and ensuring that all players in the industry adhere to the same high standards. These regulations also encourage innovation and continuous improvement, as they often push companies to adopt the latest technologies and best practices.

In addition, supportive government initiatives and policies, such as those related to infrastructure development and industrial safety, have positively impacted our business. They provide opportunities for growth and expansion, enabling us to contribute to national safety goals and to participate in large-scale projects that enhance fire safety across various sectors.

Overall, government policies are not just a compliance requirement for us—they are a catalyst for maintaining the highest standards in the fire safety industry, driving us to consistently deliver quality and innovation in our products and services.

Q: What prospects of fire business do you see in the coming five years?

The fire safety industry is poised for significant growth over the next five years, driven by increasing awareness of safety standards, urbanization, and the expansion of infrastructure across the globe. At NewAge Fire Fighting Co. Ltd., we see several promising prospects for our business in this evolving landscape.

- 1. Technological Advancements: As technology continues to advance, there will be a growing demand for smarter, more efficient fire-fighting solutions. We anticipate the integration of IoT (Internet of Things), AI, and data analytics into fire safety systems, which will enable predictive maintenance, real-time monitoring, and faster response times. NewAge is committed to staying at the forefront of these innovations, developing cutting-edge products that meet the needs of a rapidly changing world.
- 2. Infrastructure Development: The ongoing expansion of infrastructure in emerging markets, along with the modernization of existing buildings and facilities, will drive the demand for fire safety equipment. Governments and private sectors are increasingly recognizing the importance of robust fire protection systems, creating significant opportunities for growth in our industry.

- **3-Stringent Safety Regulations:** With governments worldwide tightening safety regulations, especially in high-risk industries such as oil & gas, manufacturing, and transportation, there will be a greater emphasis on compliance with fire safety standards. This will increase the demand for high-quality, certified fire-fighting equipment, which aligns perfectly with NewAge's commitment to excellence.
- **4. Sustainability and Green Technologies:** The shift towards sustainable and environmentally friendly practices is another key trend that will shape the fire safety industry. We foresee a growing market for eco-friendly fire-fighting solutions, such as water mist systems and biodegradable fire suppression agents, which reduce environmental impact while providing effective protection.
- **5. Global Expansion:** As economies grow and urban areas expand, particularly in Asia, Africa, and the Middle East, there will be a rising need for comprehensive fire safety solutions. NewAge is well-positioned to tap into these markets, leveraging our reputation for quality and innovation to expand our global footprint.

In summary, the fire safety industry is on the cusp of significant growth, driven by technological advancements, infrastructure development, stringent regulations, and the global push towards sustainability. NewAge Fire Fighting Co. Ltd. is prepared to seize these opportunities, continuing our legacy of leadership in the fire safety industry while adapting to the needs of the future.

Q: How fire compliant behavior in general can be attained?

- **1. Organizational Culture:** We foster a culture of integrity and responsibility, ensuring that compliance is a core value across all levels of our organization.
- **2. Clear Policies:** We establish clear policies and procedures that align with relevant regulations, providing employees with a roadmap for compliant operations.
- **3. Regular Training:** Continuous education keeps our team informed of industry standards and regulatory changes, enabling them to make compliant decisions in their daily roles.
- **4. Monitoring and Auditing:** Regular audits and assessments help us identify and address any gaps in compliance, ensuring we meet all legal and regulatory requirements.
- **5. Leadership Commitment:** Our leadership team drives compliance from the top down, prioritizing it in every aspect of the business.
- **6. Continuous Improvement:** We consistently review and update our practices to stay aligned with evolving regulations and industry best practices.

By integrating these practices, NewAge ensures that compliant behavior is a natural and consistent part of our operations, safeguarding our reputation and the safety of our stakeholders.

Q: Do you have any expansion plans in the near future?

Our vision for the future is to solidify NewAge Fire Fighting Co. Ltd.'s position as a global leader in innovative fire fighting solutions. We aim to continue expanding our market presence, both geographically and in terms of the industries we serve. To achieve this vision, we have several key plans for growing our company:

1. **Product I**nnovation: We will continue to invest in research and development to innovate new firefighting technologies and solutions that meet the evolving needs of our clients. This includes developing environmentally friendly and sustainable firefighting

products.

- **2. Market Expansion:** We plan to further penetrate existing markets and explore opportunities in new regions. Our focus will be on strengthening partnerships with agents and partners worldwide and identifying strategic collaborations to enhance our market reach.
- **3. Diversification:** We aim to diversify our product portfolio to cater to a broader range of industries and applications. This includes expanding our offerings in areas such as industrial firefighting, marine firefighting, and firefighting equipment for special hazards.
- **4. Digital Transformation:** Embracing digital technologies will be a key focus area for us. We plan to leverage digital tools and platforms to enhance our customer experience, streamline operations, and drive efficiency in our business processes.
- **5. Sustainability Initiatives:** We are committed to sustainability and plan to integrate more sustainable practices into our operations and products. This includes reducing our carbon footprint, optimizing resource usage, and promoting environmentally friendly firefighting solutions.
- **6. Talent Development:** Investing in our people will be crucial for our growth. We plan to focus on talent development programs to nurture a skilled and motivated workforce that can drive our company's success.
- **7. Customer Focus:** Customer satisfaction will remain at the core of our business. We plan to enhance our customer service offerings and build long-term relationships with our clients based on trust, reliability, and quality.
- **8. Global Leadership:** Solidify our position as a leader in innovative fire fighting solutions.

Q: Any message for the readers?

As pioneers in the fire safety industry, NewAge Fire Fighting Co. Ltd. has always been driven by a commitment to protecting lives and properties. Our journey, which began in 1960, is rooted in innovation, quality, and a relentless pursuit of excellence. As we look to the future, we remain dedicated to advancing fire safety technology, upholding the highest standards, and continuously improving our products and services.

To our readers, we say this: Safety is not just a responsibility—it's a legacy. At NewAge, we are honored to be a part of this essential mission, and we invite you to join us in our ongoing commitment to creating a safer world for all. Whether through our products, partnerships, or community initiatives, we are here to support you in safeguarding what matters most.

Together, let's continue to build a future where safety is a shared priority and a collective achievement.







Fire Safety Practices for Petroleum Oil: Ensuring Safety in High-Risk Environments

Mr. Dhiren Parekh Director Fire Safety Devices Pvt. Ltd.

Petroleum oil is a critical component of the global energy supply, but its flammable nature poses significant fire hazards. From refineries and storage facilities to transportation and distribution networks, the handling of petroleum oil requires stringent fire safety practices. This article outlines key fire safety measures essential for managing the risks associated with petroleum oil.

Understanding the Risks

Petroleum oil is highly flammable and can ignite under a variety of conditions. Fires involving petroleum can be catastrophic, leading to significant damage, environmental contamination, and loss of life. The key risks include:

Flammable Vapors: Petroleum oil releases flammable vapors that can form explosive mixtures with air.

Spills and Leaks: Accidental spills or leaks can create hazardous conditions, increasing the risk of fire.

High Temperatures: Petroleum can catch fire at high temperatures, especially in the presence of an ignition source.

Essential Fire Safety Practices

1-Safe Storage and Handling

Proper storage and handling are crucial to minimizing fire risks:

Designated Storage Areas: Petroleum oil should be stored in specially designed facilities with fire-resistant walls, proper ventilation, and containment systems to handle spills.

Temperature Control: Maintain appropriate storage temperatures to prevent the oil from reaching its flash point, the temperature at which it can ignite.

Leak Prevention: Regularly inspect storage tanks, pipes, and valves for leaks or weaknesses. Use leak detection systems and ensure prompt repair of any issues.

2. Fire Safety Equipment

Equipping facilities with the right fire safety equipment is essential:

Fire Extinguishers: Install fire extinguishers rated for petroleum fires (Class B extinguishers) in accessible locations.

Fire Suppression Systems: Implement fixed fire suppression systems, such as foam systems or deluge systems, which can effectively control petroleum fires.

Spill Response Kits: Have spill response kits readily available, including absorbent materials, neutralizers, and containment barriers to manage and contain spills quickly.

3. Fire Prevention Measures

Preventive measures are vital to reducing the risk of fire:

Regular Maintenance: Conduct regular maintenance of equipment, including pumps, valves, and storage tanks, to prevent malfunctions that could lead to fires.

Safe Work Practices: Train employees in safe work practices, including the proper handling of petroleum oil, the use of personal protective equipment (PPE), and emergency response procedures.

No Smoking Policies: Enforce strict no smoking policies in and around petroleum storage and handling areas.





4. Emergency Preparedness

Bein g prepared for emergencies is crucial for effective fire management:

Emergency Plans: Develop and re gularly update emergency response pl ans tailored to petroleum oil fires. Plans should include evacuation procedures, contact information for emergency services, and roles and responsibilities for staff.

Training and Drills: Conduct regular fire drills and training sessions for employees to ensure they are familiar with emergency procedures and can act quickly in the event of a fire.

Coordination with Local Fire Departments: Establish strong communication and coordination with local fire departments. Provide them with information about the facility, including the location of petroleum oil storage and potential hazards.

5. Monitoring and Detection

Effective monitoring and detection systems are essential for early fire detection:

Flame and Smoke Detectors: Install flame detectors and smoke alarms in critical areas to detect the early signs of a fire.

Vapor Detection Systems: Use vapor detection systems to monitor for the presence of flammable vapors and prevent their accumulation.

Challenges and Recommendations

Handling petroleum oil involves several challenges, including:

Complexity of Regulations: Navigating complex fire safety regulations and standards can be challenging. Regularly review and stay updated on local, national, and international fire safety regulations.

Aging Infrastructure: Aging infrastructure can increase the risk of fires. Invest in upgrading and maintaining facilities to meet current safety standards.

Recommendations for improvement include:

Investing in Technology: Utilize advanced technologies for leak detection, fire suppression, and monitoring to enhance safety.

Promoting Safety Culture: Foster a strong safety culture within the organization, emphasizing the importance of fire safety and proactive risk management.

Conclusion

Fire safety in petroleum oil handling is paramount due to the high risks involved. By implementing stringent safety practices, including safe storage, effective fire suppression systems, and thorough emergency preparedness, organizations can significantly mitigate the risks associated with petroleum oil. As the industry continues to evolve, a commitment to safety and continuous improvement will ensure a safer working environment and help protect both people and property from the devastating effects of fire.



Dilshad Ahemad Director De worth Equipments Pvt Ltd.

Q. Can you tell me about your company & its history?

Yes sure, it reminds me of a young ambitious Management graduate from Bihar who comes to Delhi in search of Job as job opportunities in Bihar were bleak. I was lucky to have a college mate who offered me a place to stay for a short period of time. I managed to get an ordinary job which was a dire necessity to sustain in a strange and costlier place like Delhi. Subsequently, through my MBA network I came to know about a leading Fire Fighting Equipment Supplier company and decided to join them in the year 1986. During my stay in the company I realized that Safety Industry has very vast potential but lacks sincere and dedicated players who can address the requirement and urgency of the clients and offer quick and cost effective solutions. Considering that, I took a bold decision to start a new venture but it was a tough call. The plan was discussed with my wife Mrs Zarina Ahmed, who is also Director of the company, and jointly decided to embark upon a new journey as an entrepreneur in the Safety industry. Filled with zeal and dream of doing some good for the industry and the society at the age about 30 + years we started our first venture M/s Fyresafe Engineers, with a meager sum of Rs 5000 from my briefcase and subsequently, from a rented space in Julena, in Friend's colony, New Delhi in the year 1991.

In the beginning our business was to carry out supply and maintenance of Fire Fighting equipment to different industries. But In 2005, We decided to launch new services and rechristened our company as M/s De worth Equipments Pvt Ltd. Since then we graduated from the modest



Equipment supplier company to a Technologically advanced enterprise who is ready to undertake complicated Project erection works. This step helped us to garner a larger pie in the market share due to execution of works like (DSITC) Design, Supply, Installation, Testing & Commissioning of high value projects / works in different industries demanding advanced/ contemporary technology.

Gradually as and when felt necessary the company acquired new tools & machinery and at the same time hired Qualified & Technically capable Manpower to execute different projects. We also initiated a Program to onboard best/ leading Technical and Design consultants, Management and Financial experts.

Glad to share from there on with absolutely no looking back. Today I feel proud to declare that De worth is a leading Fire & Safety solution provider to numerous modern age industries/ enterprises like grain based ethanol manufacturing units, Data centers, Petro Chemical, Refineries, Chemical industries, Sugar & Distillery units in India and abroad. This year we stepped out of India and started our first project in an African country.

As I just told you, we have a strict policy to maintain contemporary industry standards I.e. OISD,BIS, UL, FM,VDS and execute works as per standards laid down in the Safety manual, and deliver to the clients on promised time.

We strongly believe in On time completion of Projects as per PO, by ensuring advance availability of men, Fitments/ Spares etc.

At De worth we do not differentiate between large and small Client partners and accord privileged treatment to all our partners.

Q: You have been an eminent player in the industry; can you tell us some of your flagship projects?

Thanks for asking such a nice question, at the outset, my heartfelt appreciation to all the esteemed clients, who continue to repose confidence in De worth and regularly place orders on us. As you know we Indians are very emotional & I personally feel immensely attached to our clients and consider them as our larger family member, and hence, 1, myself, ensure to deliver Quality execution and on time project completion.

If you talk about my clientele base, then I must say it is almost equally distributed between public Sector enterprises and private sectors. We have done many projects which were very complicated in nature as the jobs were executed in running.

Distillery /plants in Meerut (U.P), another in a Sugar plant located nearby Meerut. In both of these plants we have installed the Hydrant system, Automatic MVW spray system and Foam Suppression System in a running distillery unit without any interruption in production & dispatch schedule.

Another interesting and challenging project was the Gas Suppression system at an IOCL Refinery where during the kick off meeting with the client the Chief Project Manager requested to complete the project in 3 months before the schedule. We took the challenge and our team successfully executed the work within the target period as requested by our esteemed client/ partner.

Our effort was recognized, and a letter of appreciation was given to De worth.

Q: What is your area of specialization?

Though we have presence in the entire spectrum of Fire prevention and Fighting solutions Designs & equipment for industrial as well as commercial set-ups.

Our research team tirelessly works on discovering economical, lethal and energy efficient solutions having Zero/minimum adverse impact on the environment.

Of late we have developed a very strong engineering team to undertake works in Automatic Clean Agent Suppression System, Automatic foam suppression system, Automatic MVW/HVW Spray system for a renowned Oil refinery. Recently, we have successfully revamped various gas suppression Systems, Fire Alarm & Detection systems. Today we are capable of carrying out installation without disruption of Client's production.

At the De worth we specialize in offering tailor made solutions for the Fire Prevention & Fighting systems/ equipment considering requirements of old/ new Industrial units. Or say, New-age Commercial establishments like Data- Center, mammoth Battery storage units for Renewable energy, Ethanol producing units apart from classical Processing/ manufacturing units Food & beverages, Petrochemical & Refineries, Pharmaceutical & Chemical, Sugar & Distillery and other industrial enterprises. Here, by commercial building I mean large complexes, Multi storied buildings, Hotels, Hospitals etc.

Q: What growth prospects do you see for the fire industry in the coming five years?

Well, have you seen our GDP number and industrial growth data post 2014. The Indian Industrial demand was such that even during peak of Covid -1, we were under heavy pressure and compelled to use personal transport even for very long destinations, as public trains, buses, flights were almost stand-still; to meet requirements of our esteemed clients who needed our services desperately. Post covid India has become one of the major beneficiaries of China +1 policy, the world is resting at.

The forward-looking Industrial policy formulated & implemented by the Central Government declaring PLI schemes to different industrial sectors and facilitation of financial assistance to SMEs and reduction of corporate tax rate to domestic companies @ 25% has opened a plethora of opportunities to the Fire Prevention & Fighting industry also.

If you happen to see the economic survey of World Economic Outlook (WEO), April 2024 of the IMF, the global economy registered a growth of 3.3 % in 2023, whereas India's real GDP

Q: Do you feel Government policies are in compliance with industry growth?

If I may say so, during my career span I never saw such an industry friendly policy by the Government of India. Just see, recently, India has overtaken China in the MSCI Emerging Market Index due to favorable economic policy, the fundamental growth drivers are gaining momentum. This gives me confidence to say that the dynamic Government policy is in place, today, India is poised to catapult the to the third largest economy by 2027 leaving behind Japan and Germany, from the fifth at present. India is expected to add trillion dollars to its GDP every 18 months to be \$25-30 trillion economy by 2050. The projection is not out of place, look at the RBI's policy of significantly increasing the gold reserve to above 820 metric tons.

To answer your question in one sentence, it's a big yes.

Q: If someone wants to avail your company services how he can approach?

Good question, well, we have a dedicated Marketing team who assists the new as well as existing clients on a regular basis..

We may be contacted at -

Linkedin- http://linkedin.com/company/74697995

Phone Nos - 9911663191 What's App No - 9891105317

Mail address: - deworth@deworth.com

deworthequip@gmail.com

Q: What expansion plans do you have for your company?

As I stated just now, we are heavily poised to cater to the Sunrise Industry apart from continuing with the existing ones. We are also exploring more opportunities to tap markets abroad. Our endeavor is to offer technologically advanced systems & solutions.

Q: Any message for the industry readers?

My advice to the industry friends who are planning to install a System is that even though in the local/ Grey market the project cost appears economical, but in all likelihood chances of compromised quality can't be ruled out. So In the long run one may find the system has failed to start in time of emergency causing irreparable losses to man & material, Hence, my earnest request to them is to consider a company and a system which has a sound track record in terms of technology, quality.





The Application and Importance of Safety Harnesses



Mr. Kamal Mittal
Director
Aktion Safety Solutions Pvt. Ltd.

Introduction

Safety harnesses are critical components of personal protective equipment (PPE) used across various industries, including construction, manufacturing, and climbing. They are designed to protect individuals from falls, ensuring their safety when working at heights or in hazardous environments. The importance of safety harnesses cannot be overstated, as they play a pivotal role in preventing serious injuries or fatalities resulting from accidental falls. This article delves into the applications of safety harnesses and their significance in maintaining workplace safety.

Applications of Safety Harnesses

1. Construction Sites

Height Work: Safety harnesses are essential for workers performing tasks at elevated heights, such as on scaffolding, rooftops, or ladders. They help prevent falls that could lead to severe injuries or death.

Fall Arrest Systems: In combination with fall arrest systems, harnesses ensure that workers who slip or lose their footing are safely caught before hitting the ground.

2. Industrial and Manufacturing Environments

Maintenance and Inspection: Workers performing maintenance or inspections in high or difficult-to-reach places, such as tall machinery or overhead tanks, use safety harnesses to secure themselves.

Hazardous Work Areas: Safety harnesses are used in areas where there is a risk of falling from heights or where fall protection is required by safety regulations.

3. Climbing and Adventure Sports

Rock Climbing: Climbers use harnesses to secure themselves to ropes and protection points, minimizing the risk of injury in case of a fall

Mountaineering: In mountaineering, harnesses are crucial for safety during ascents, descents, and traverses in challenging terrain.

4. Utilities and Emergency Services

Power Line Work: Utility workers who maintain and repair power lines or work on tall structures use safety harnesses to prevent falls from significant heights.

Rescue Operations: In rescue missions, such as in confined spaces or high-altitude rescues, safety harnesses are vital for the safety of both rescuers and those being rescued.

5. Entertainment Industry

Stunt Work: Performers and stunt professionals use safety harnesses during complex stunts to prevent injury from falls or high-impact activities.

Stage Rigging: In theaters and concert venues, harnesses are used for rigging and setting up equipment in elevated positions, ensuring safety during the setup and performance.

Importance of Safety Harnesses

1. Preventing Fatal Falls

Fall Protection: Safety harnesses are designed to arrest falls and distribute the impact force across the body, reducing the risk of fatal injuries. They are crucial in environments where falls can occur, preventing potentially deadly accidents.

2. Enhancing Worker Confidence and Productivity

Confidence in Safety: Knowing that they are secured with a reliable safety harness, workers can perform their tasks with greater confidence, which can lead to increased productivity and focus.



Reduced Hesitation: Workers are less likely to hesitate or take unnecessary risks when they know their safety is ensured by proper harness equipment.

3. Compliance with Safety Regulations

Regulatory Requirements: Many countries have strict regulations regarding fall protection in workplaces. Using safety harnesses helps employers comply with these regulations, avoiding legal penalties and ensuring a safe working environment.

Standards and Certifications: Safety harnesses must meet industry standards and certifications, ensuring that they provide the required level of protection and reliability.

4. Reducing Risk of Injury and Financial Costs



Injury Prevention: Proper use of safety harnesses reduces the likelihood of injuries such as fractures, head trauma, or spinal injuries, which can have long-term health implications.

Cost Savings: By preventing falls and injuries, safety harnesses help reduce medical costs, insurance claims, and potential compensation payments, leading to significant financial savings for employers.

5. Supporting Emergency Situations

Rescue Operations: Safety harnesses facilitate safer and more effective rescue operations by providing secure attachment points for rescuers and ensuring that individuals in distress are safely secured.

Emergency Preparedness: Harnesses are integral to emergency preparedness plans, allowing workers to evacuate or be rescued safely in the event of an emergency.

Conclusion

Safety harnesses are indispensable in a variety of settings where there is a risk of falling from heights. Their applications span across multiple industries, including construction, manufacturing, climbing, utilities, and entertainment. The importance of safety harnesses lies in their ability to prevent fatal falls, enhance worker confidence, ensure compliance with safety regulations, reduce injury risk and financial costs, and support emergency situations. By providing critical fall protection, safety harnesses play a vital role in safeguarding individuals and promoting a culture of safety in high-risk environments.





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E-mail: tssfirepumps@gmail.com





The Significance of Print Media in Promotion in Recent Times



Mayur Lalit Director D V Enterprises

In an era dominated by digital technologies and online marketing, print media often seems like a relic of the past. Yet, despite the growing prominence of digital channels, print media continues to hold significant value in promotional strategies. Its enduring relevance is a testament to its unique advantages and the multifaceted role it plays in modern marketing.

Tangible Impact and Credibility

One of the primary strengths of print media is its tangibility. Unlike digital ads that can be quickly scrolled past or dismissed, print materials like brochures, magazines, and direct mail pieces offer a physical presence that can leave a lasting impression. The tactile experience of handling a well-designed print piece—whether it's a glossy magazine or a high-quality flyer—can enhance the perception of credibility and professionalism. This tactile engagement often translates to higher retention rates and more significant impact compared to fleeting digital ads.

Targeted Local Marketing

Print media excels in reaching specific geographic areas and demographics. Local newspapers, community magazines, and regional brochures allow businesses to target their marketing efforts effectively within particular locales. This localized approach is especially beneficial for small to medium-sized enterprises (SMEs) looking to engage with their immediate community. Moreover, print ads in local publications often benefit from a more loyal readership that trusts and values these sources of information.

Enhanced Brand Visibility and Recognition

Print media provides an opportunity for brands to showcase their identity through creative design and high-quality production. Consistent branding elements such as logos, color schemes, and imagery across print materials help reinforce brand recognition and build a strong visual presence. Additionally, print media can complement digital campaigns by providing a cohesive brand

experience across multiple channels. This integrated approach ensures that audiences encounter a unified brand message, increasing overall visibility and effectiveness.

Less Competition and Higher Engagement

With the vast amount of content vying for attention online, print media often faces less competition for reader engagement. Print ads, articles, and promotional materials are not subject to the same level of ad clutter found on digital platforms. As a result, print media can offer a more focused and less interrupted experience, allowing for deeper engagement with the content. This environment is particularly advantageous for complex or high-involvement products where detailed information and a thoughtful presentation are essential.

Long-Term Value and Reusability

Print materials, especially high-quality ones, have a longer lifespan than many digital ads. A well-designed brochure or magazine can be kept for future reference, shared with others, and revisited over time. This extended usability ensures that promotional messages can have a prolonged impact. In contrast, digital ads may be fleeting, often disappearing from view once a campaign ends. Print media's enduring nature allows for sustained brand exposure and continued audience interaction.

Complementing Digital Efforts

Rather than competing with digital media, print can complement it effectively. Integrated marketing strategies that blend print and digital elements can amplify a campaign's reach and effectiveness. For instance, a direct mail piece featuring a QR code or URL can drive recipients to an online landing page, combining the strengths of both media. This synergy enhances the overall impact of promotional efforts and provides multiple touch-points for engaging with potential customers.

Reaching Specific Audiences

Certain audiences are more receptive to print media than digital formats. For example, older demographics who may not be as engaged with digital technologies often prefer print materials. Additionally, print media can be particularly effective in niche markets where specialized publications are more likely to reach a dedicated and interested audience. By leveraging print media, marketers can tap into these specific segments that might be less accessible through digital channels alone.

Conclusion

In recent times, the significance of print media in promotion is far from obsolete. Its unique advantages—ranging from tangible engagement and local targeting to brand visibility and long-term value—ensure that print media remains a vital component of a comprehensive marketing strategy. When integrated with digital efforts, print media can enhance overall campaign effectiveness and offer a richer, more diverse promotional approach. As the media landscape continues to evolve, the enduring appeal and effectiveness of print media underscore its continued relevance in a dynamic and multifaceted marketing environment.











Glimpses of Promotion











Road Safety in India: Addressing Challenges and Embracing Solutions



Rohit Jamdagni Director Jamdagni Safety India Co.

India, with its vast network of roads and growing population, faces significant challenges in road safety. The country has one of the highest rates of road traffic accidents in the world, contributing to substantial loss of life and property. Improving road safety is critical not only for protecting lives but also for ensuring the smooth functioning of the nation's transportation system. This article explores the current state of road safety in India, identifies key challenges, and suggests effective solutions to enhance road safety across the country.

Current Road Safety Landscape

India boasts one of the largest road networks globally, spanning over 5.5 million kilometers. However, this extensive network is marred by high accident rates, which are often attributed to a combination of factors including poor road infrastructure, inadequate enforcement of traffic laws, and lack of public awareness.

Key Challenges in Road Safety

Poor Road Infrastructure

Many roads in India suffer from poor design, maintenance issues, and lack of essential safety features:

Road Conditions: Potholes, uneven surfaces, and poorly marked lanes contribute to accidents.

Signage and Lighting: Inadequate road signage and poor street lighting make roads hazardous, especially at night.

Traffic Violations and Enforcement

Traffic violations are a major contributor to road accidents:

Speeding and Reckless Driving: Excessive speeding, overtaking, and reckless driving are prevalent issues.

Violation of Traffic Rules: Non-compliance with traffic signals, ignoring road signs, and not using seat belts or helmets are common.

Enforcement of traffic laws is often lax, with penalties not sufficiently deterring violators.

Vehicle Safety and Maintenance

Vehicle safety plays a crucial role in preventing accidents:

Maintenance Issues: Poor vehicle maintenance, including faulty

brakes, worn-out tires, and malfunctioning lights, can lead to accidents.

Lack of Safety Features: Many vehicles lack advanced safety features such as anti-lock braking systems (ABS) and airbags.

Driver Behaviour and Training

Driver behaviour and training are critical components of road safety:

Lack of Training: Inadequate driver training and testing can lead to unskilled drivers on the roads.

Behavioural Issues: Aggressive driving, driving under the influence of alcohol or drugs, and distractions while driving are common issues.

Public Awareness and Education

Public awareness regarding road safety is essential but often insufficient:

Knowledge Gaps: Many drivers and pedestrians lack awareness about road safety rules and best practices.

Education Programs: Limited educational initiatives on road safety contribute to poor adherence to safety norms.

Effective Solutions and Recommendations

Infrastructure Improvement

Upgrading road infrastructure can significantly enhance safety:

Road Design and Maintenance: Invest in better road design and regular maintenance to address potholes and improve road conditions.

Enhanced Signage and Lighting: Install clear road signs and adequate lighting, especially in high-risk areas.





Strict Enforcement of Traffic Laws

Effective enforcement is crucial for compliance:

Increased Penalties: Implement stricter penalties for traffic violations to deter dangerous driving behaviours.

Use of Technology: Utilize technology such as traffic cameras and automated enforcement systems to monitor and enforce traffic laws.

Vehicle Safety Measures

Ensuring vehicle safety can prevent many accidents:

Regular Inspections: Implement mandatory regular vehicle inspections to ensure roadworthiness.

Promote Safety Features: Encourage the use of advanced safety features in vehicles through incentives or regulations.

Driver Education and Training

Improving driver education can lead to better driving practices:

Enhanced Training Programs: Strengthen driver training programs to ensure comprehensive education on road safety and vehicle handling.

Public Awareness Campaigns: Launch widespread public awareness campaigns to educate drivers and pedestrians about road safety rules and practices.

Road Safety Initiatives and Collaboration

Collaborative efforts can drive significant improvements in road safety:

Government Initiatives: Support and implement government-led road safety initiatives and policies.

Community Involvement: Engage communities in road safety efforts through local awareness programs and safety audits.

Conclusion

Road safety in India is a multifaceted issue that requires a coordinated approach involving infrastructure improvements, stringent law enforcement, vehicle safety measures, and enhanced driver education. By addressing these challenges and implementing effective solutions, India can work towards reducing road traffic accidents and creating safer road environments for all. Ensuring road safety is not just the responsibility of authorities but a collective effort that involves individuals, communities, and organizations working together towards a common goal: a safer and more secure road network.





The Significance of Fire Suits and Their Future Prospects

Rahul Sakhuja
Director
Free Fall Safety Industries

Fire suits, or firefighter turnout gear, are essential pieces of equipment designed to protect firefighters from the extreme conditions they face while battling fires. These suits are engineered to provide maximum protection against heat, flames, and hazardous materials, ensuring the safety and effectiveness of those who risk their lives to save others. As technology advances and firefighting techniques evolve, the design and functionality of fire suits are also undergoing significant changes. This article explores the importance of fire suits, their current state, and future prospects in this critical field.

Introduction

Fire suits, or firefighter turnout gear, are essential pieces of equipment designed to protect firefighters from the extreme conditions they face while battling fires. These suits are engineered to provide maximum protection against heat, flames, and hazardous materials, ensuring the safety and effectiveness of those who risk their lives to save others. As technology advances and firefighting techniques evolve, the design and functionality of fire suits are also undergoing significant changes. This article explores the importance of fire suits, their current state, and future prospects in this critical field.

The Importance of Fire Suits

- 1. Protection Against Heat and Flames
 - o Thermal Insulation: Fire suits are made from materials with high thermal resistance, such as Nomex, Kevlar, and PBI. These materials protect firefighters from extreme temperatures and prevent burns and heatrelated injuries.
 - Flame Resistance: The outer layer of fire suits is treated with flame-retardant chemicals to resist direct exposure to flames, ensuring that the suit does not ignite or deteriorate quickly.

2. Chemical and Biological Protection

- Hazardous Materials: Modern fire suits often include a layer designed to resist penetration by chemicals and biological agents, which is crucial in situations involving hazardous materials or environmental contamination.
- Decontamination: The materials used in fire suits are designed for easy decontamination, reducing the risk of exposure to harmful substances.

3. Durability and Comfort

- Structural Integrity: Fire suits are constructed to withstand the rigors of firefighting, including abrasion from rough surfaces and resistance to mechanical stress.
- Ergonomics: Advances in design focus on improving comfort and mobility, allowing firefighters to perform their duties more efficiently without sacrificing protection.

4. Visibility and Identification

- High-Visibility Features: Reflective strips and bright colors enhance visibility in lowlight conditions, which is crucial for safety in smoke-filled environments.
- Identification Tags: Modern suits often include identification tags and markers, helping in quickly locating and identifying team members in high-stress situations.

Current Innovations

1. Advanced Materials

- Nanotechnology: Research into nanomaterials has led to the development of fabrics with enhanced protective properties, including better heat resistance and lightweight construction.
- Smart Fabrics: Integration of sensors and smart textiles into fire suits can monitor the wearer's physiological status, providing real-time data on heat exposure and health conditions.

2. Enhanced Comfort

- Breathability: Innovations in breathable membranes and moisture-wicking fabrics improve comfort by managing sweat and temperature regulation.
- Custom Fit: Advances in tailoring and adjustable features ensure a more personalized fit, reducing fatigue and increasing mobility.

1. Integrated Technologies

- Communication Systems: Fire suits are increasingly incorporating communication tools that allow firefighters to stay connected with their teams and receive critical updates.
- Augmented Reality: Future designs may include augmented reality (AR) systems that provide firefighters with real-time information about their environment and structural conditions.

Future Prospects

1. Increased Use of Artificial Intelligence (AI)

- Predictive Analytics: Al can analyze data from smart fire suits to predict dangerous conditions or equipment failures, enhancing preemptive safety measures.
- Machine Learning: Machine learning algorithms can continuously improve fire

suit design based on feedback and performance data from actual firefighting scenarios

2. Sustainability and Environmental Impact

- Eco-Friendly Materials: Future fire suits may utilize more sustainable materials that are both high-performing and environmentally friendly.
- Recycling Programs: Development of recycling programs for fire suit materials will help reduce waste and promote a circular economy in firefighting gear.

3. Global Collaboration and Standardization

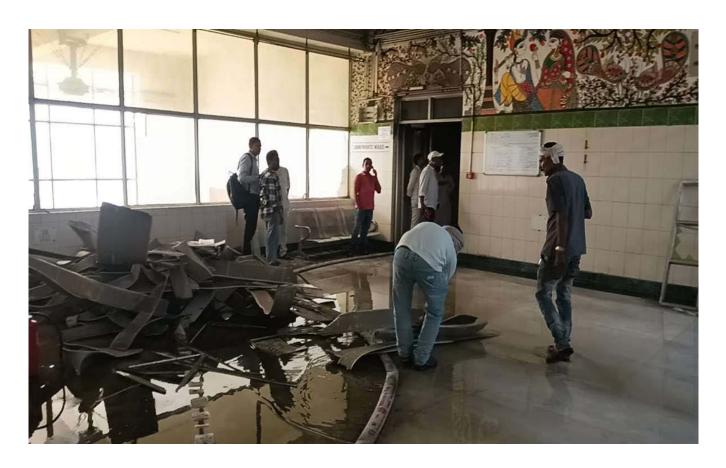
- International Standards: Efforts to establish global standards for fire suit performance and safety will ensure that firefighters worldwide benefit from the highest level of protection.
- Cross-Border Innovation: Collaboration between international researchers and manufacturers will drive innovations and distribute cutting-edge technologies across different regions.

Conclusion

Fire suits are indispensable for the safety and effectiveness of firefighters, offering crucial protection in hazardous and high-stress environments. As technology advances, the future of fire suits promises even greater enhancements in protection, comfort, and functionality. Continued innovation in materials, design, and integrated technologies will play a vital role in safeguarding firefighters and improving their ability to respond to emergencies. The evolution of fire suits reflects a broader commitment to enhancing safety and efficiency in one of the most demanding professions, ensuring that those who protect us are equipped with the best tools available.



Current Update



RAILWAY HOSPITAL PATNA CATCHES FIRE, PATIENTS EVACUATED SAFELY

Fire at railway hospital in Karbighiya, Patna broke out. The fire started at the first floor that created chaotic situation. People started to run for saving their lives.

Fire Brigade came in action after receiving call half of dozen fire vehicles rushed to spot & controlled the fire.

No causality reported in the incident. The reason for the fire is yet to be ascertained. The suspected reason is short circuit.

Patients are safe. Fireman climbed ladder and reached to the first floor where fire was initiated

through the window and pulled out trapped people inside the building.

Along with fire brigade local police was also present and helped in the operation to control the fire.

The fire brigade brought the fire under control which required massive efforts and patients were admitted to other hospitals and are safe.

Current Update



In Germany Ferries wheel catches fire at musical festival: Dozen Injured

Leipzig: East Germany: Two cable cars on a ferry wheel at a music festival caught fire. Four people sustained burn injuries and one person was injured by falling. At least 18 people were taken to the hospitals after coming in contact with smoke.

The cause of fire is to be investigated. As per local media festival resumed after the fire cordoned off. This is one of the biggest music festivals and around 25,000 attendees attend the festival.

The operator of the ferries wheel told local media that there were no passenger sitting in the gondola where was initiated. Exact no of causalities yet to be reported.



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Safety Practices in India: A Comprehensive Overview



Deepak Verma
Director
New Delta International

India, with its vast and diverse population, presents unique challenges and opportunities when it comes to safety practices. From bustling urban centres to serene rural areas, safety measures play a crucial role in ensuring the well-being of individuals and communities. This article explores various aspects of safety practices in India, highlighting key areas such as road safety, workplace safety, disaster preparedness, and public health.

Road Safety

India's rapidly growing urbanization and vehicle ownership have put road safety at the forefront of national concerns. The Indian government, alongside various non-governmental organizations, has been working to address this critical issue.

Legislation and Enforcement:

The Motor Vehicles Act of 1988 and its subsequent amendments lay the groundwork for road safety regulations in India. Key provisions include mandatory helmet use for two-wheeler riders, seatbelt requirements, and stringent penalties for traffic violations. Despite these laws, enforcement can be inconsistent, leading to calls for better implementation and increased public awareness.

Public Awareness Campaigns:

Numerous campaigns, such as "Drive Safely, Save Lives," aim to educate drivers and pedestrians about safe practices. These campaigns emphasize the importance of adhering to traffic rules, avoiding drunk driving, and maintaining vehicle safety.

Infrastructure Improvements:

Efforts are also underway to improve road infrastructure, including better road design, improved signage, and the implementation of smart traffic management systems. These changes aim to reduce accidents and enhance overall road safety.

Workplace Safety

With India being a major hub for various industries, including manufacturing, construction, and information technology, workplace safety is a significant concern.

Regulations and Compliance:

The Factories Act of 1948, the Mines Act of 1952, and the Occupational Safety, Health and Working Conditions Code, 2020, are pivotal in regulating workplace safety. These laws set standards for worker safety, health, and welfare. However, ensuring compliance remains a challenge, particularly in small and medium enterprises.

Safety Training and Awareness:

Many companies are now investing in regular safety training programs for their employees. These programs cover topics such as emergency response, use of personal protective equipment (PPE), and safe machinery operation.

Occupational Health:

Addressing occupational health hazards is crucial, especially in high-risk industries. Regular health check-ups, awareness programs about occupational diseases, and ergonomic improvements are key components of workplace safety practices.





Disaster Preparedness

India is prone to various natural disasters, including earthquakes, floods, and cyclones. Effective disaster preparedness and response strategies are essential to minimize damage and loss of life.

Government Initiatives:

The National Disaster Management Authority (NDMA) oversees disaster preparedness and response in India. The NDMA's guidelines cover aspects such as emergency planning, risk assessment, and community-based disaster management.

Community Involvement:

Local communities play a vital role in disaster preparedness. Training programs, mock drills, and awareness campaigns help communities understand how to respond to different types of emergencies.

Infrastructure Resilience:

Building infrastructure that can withstand natural disasters is a priority. This includes constructing earthquake-resistant buildings, improving drainage systems to prevent flooding, and ensuring that critical infrastructure, such as hospitals and schools, is resilient to disasters.

Public Health and Safety

Public health and safety encompass a broad range of issues, including sanitation, disease prevention, and emergency medical services.

Sanitation and Hygiene:

Improving sanitation and hygiene practices is critical in preventing the spread of diseases. Initiatives such as the Swachh Bharat Mission focus on increasing access to clean toilets, improving waste management, and promoting cleanliness.

Disease Control:

India has made significant strides in controlling diseases such as malaria, tuberculosis, and HIV/AIDS. Vaccination programs and public health campaigns play a crucial role in disease prevention and management.

Emergency Medical Services:

Access to emergency medical services is essential for public safety. The government has established emergency helplines and ambulance services to provide timely medical assistance in emergencies.

Conclusion

Safety practices in India are evolving to meet the challenges of a rapidly changing society. While significant progress has been made in areas such as road safety, workplace safety, disaster preparedness, and public health, continued efforts are necessary to address existing gaps and ensure the well-being of all citizens. Collaboration between government authorities, businesses, and communities will be key in advancing safety practices and creating a safer environment for everyone in India.

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FIRE STANDARDS

S. No.	Fire Equipment	Standard
1	Flexible Fire Fighting Delivery Hose (Non- Percolating)	IS 636:2018
2	Fire Fighting Hose (Controlled Percolating)	IS 8423:1994
(1)	Fire Fighting Hose (Unlined Flax)	IS 4927:1992
	Fire Fighting Hose Reel (First- Aid)	IS 884:1985
	Fire Fighting Double Male- Female Instantaneous Patern	IS 901:1988
	Fire Fighting Hose (suction)	IS 902:1992
7	Fire Hose, Delivery Coupling, Branch Pipes, Nozzels & Spanner	IS 903:1993
8	Fire Fighting 2 & 3 Way Suction Collecting Heads	IS 904: 1983
Ç	Delivery Breaching, Dividing & Collecting Instantaneous Patterr	IS 905: 1980
	Fire Fighting Revolving Branch	IS 906:1988
	Fire Fighting Suction Strainer (Cylinder Type)	IS 907: 1984
	Fire Hydrant (Standard Post Type)	IS 908:1975
	Fire Hydrant (Underground Type), Sluice Valve	IS 909: 1992
14	Hydrant Cover, Lower Valve, Combined Key for Hydrant	IS 910:1980
	Fireman Axe	IS 926: 1985
16	Fire Hook	IS 927: 1981
17	Fog Nozzle (for Fire Brigade)	IS 952:2012
	Foam Making Branch Pipes	IS 2097: 2012
	Fire Bucket (Galvanised Mild Steel)	IS 2546: 1974
	Fire Fighting Universal Branch Pipes	IS 2871: 1983
	Gas Cartridges for Fire Extinguishers	IS 4947: 2006
	Landing Valves	IS 5290: 1993
	Fire Hose Clamps & Bandages (Fire Brigade Use)	IS 5612: 1977
	Fire Fighting Hydrant Standard Pipe	IS 5714: 1981
	Fire Fighting Coupling, Branch Pipes, Nozzels (Used in Hose Reel.)	IS 8090: 1976
	Fire Beaters	IS 8096: 1992
27	Fire Fighting Foam Monitors & Standard Post Water	IS 8442: 2008
	Thermoplastic Hoses (Textile Reinforced)- Water General Purpσ ε	IS 12585:1988
	Fire Fighting Foam Concentrate (Producting Mechanical Foam- eg. PF, AFFF, FFFP & Synthetic Foam)	IS 4989: 2018
	Multipurpose AFFF Liquid Concentrate (for extinguishing Hydrocarbon & Polar Solvant Fire	IS 4989: 2018
31	AFF, PF, FFFP, FP (for both hydrocarbon & polar solvent fire)	UL- 162
32	International Maritime Organisation Fire Fighting Foam Concentrate for Fixed Fire Extinguishing System	IMO MSC.1/CIRC-1312
	Fire Fighting Foam Concentrate	ICAO
34	Fire Fighting Foam Concentrate	SP 2580 Method
	Dry Chemical Powder (for B & C class fires)	IS 4308: 2019
	Dry Chemical Powder (for A,B & C class fires)	IS4308:2019
	Dry Chemical Powder (for BC & ABC fires)	ISO 7202:2018
	Portable Fire Extinguisher (Performance & Construction)	IS 15683:2018
	Portable Fire Extinguisher (Performance & Construction)	ISO 7165
	Fire Extinguisher (for class A,B, C & K)	UL-711
	Portable Fire Extinguisher (Performance & Construction)	BS EN 3-7:2004+ A1: 2007
	Portable Fire Extinguisher (Construction)	BS EN 3-8:2006
	Fire Extinguisher (Wheeled)	IS 16018:2012
	Fire Extinguisher (Mobile)	BS EN 1866-1:2007



Comparison of Pellistor and Infrared Technology



Vikas Bajaj Director Three S Instrument Pvt. Ltd.

Safety professionals faced with the task of specifying economical gas detection systems for combustible gases and/or vapors have two choices: catalytic bead (pellistor) or infrared sensing systems.

While the time-honored catalytic bead is still available, low cost solution for many applications, recent improvements in infrared detection technology have made it the technique of choice for demanding environments. A more detailed look at these technologies will reveal why this is so.

Catalytic Bead Technology

Theory: A catalyst is any material capable of increasing the rate of a chemical reaction by providing an alternate (lower free energy) reaction pathway, without itself being consumed in the process. For gas detection purposes, an oxidizing metal dispersed on a porous, high surface area ceramic substrate provides sites for a series of bond-breaking and bond-forming reactions to take place. The activation energy for these catalyzed reactions is lower than for the uncatalyzed reaction pathway, therefore the rate of reaction is increased. Ignoring the intermediate steps, combustible gases coming into contact with a catalytic metal deposited on a ceramic bead are oxidized (burned) according to the following chemical reaction (using methane as an example):

CH4 + 202 = CO2 + 2H2O = energy

The energy released changes the electrical resistivity in one arm of a Whetstone Bridge circuit containing the catalytic bead, causing a current to flow, which is approximately proportional to the amount of combustible gas, consumed.

Practice: Coils of platinum wire are embedded inside a matched pair of 1mm diameter ceramic beads which form part of the Whetstone Bridge. A current flow between 200 to 320 mA heats the catalytic beads resistivity to about 450 degrees C. One of the ceramic beads is impregnated with a catalytically inactive; it is included in the circuit so that environmental pressure, temperature and humidity effects can be factored out. Ceramic bead pairs are carefully matched to avoid introducing additional error into the system due to differences in thermal mass, density, etc.

As might be expected, the response of the catalytic bead varies according to the nature of the gas being oxidized. While

predictions can be made based on reaction enthalpy and diffusion rates, for practical purposes the actual response must be determined empirically for a particular catalytic bead design. The target gas is applied and readings of the sensor output in millivolts versus known LEL percentages are tabulated; the response of the target gas can then be reported as mV% LEL. Sample sensitivities are given in Table 1.

Advantages and Disadvantages of Catalytic Bead Sensors

The main advantage of catalytic bead sensors is their low cost, a not inconsiderable advantage when working on a project with a fixed budget. A base model sensing head for a 4-20 mA output can be purchased for under \$500. For this small investment, the user gets a reliable instrument capable of detecting a wide range of combustible hydrocarbons, which provides safety protection on a broad scale.

But catalytic bead sensors have several disadvantages also:

- 1. Poisoning: This can occur when compounds containing sulfur, phosphorous, silicon, or lead form strong bonds with the catalyst surface, permanently tying up active sites and gradually diminishing the sensitivity of the sensor. Carbon deposits left behind by byproducts of combustion can also poison the catalyst. It should be noted that poison-resistant sensors have been developed to combat this problem.
- **2. Polymerization:** Monomers such as styrene can polymerize in contact with the high temperature catalytic bead, again blocking active sites.

3. Oxygen Requirements

- Since at least 10-vol.% oxygen must be present for efficient combustion to take place, catalytic beads do not work in inert atmospheres, such as nitrogen.
- At high concentrations of combustible gas, insufficient oxygen results in incomplete oxidation, causing the signal to drop. This causes a peak in the output versus combustible gas concentration curve, which can lead to 'false safe' signal outputs.

Infrared Detection Technology

Theory: Electromagnetic radiation interacts with atoms and molecules in different ways, depending on the wavelength, and hence the energy, of the radiation. High energy x-rays, for example, can penetrate deeply into the electron shells of atoms and excite the inner electrons to higher energy states. Ultraviolet rays, having less energy, affect only the outer electrons. Infrared (IR) radiation, with less energy still, causes no change in the electron energies of a molecule. Rather, it interacts with the bonds holding the atoms of a molecule together, which are in constant motion, bending and stretching at a characteristic frequency that depends upon the strength of the bond and the masses of the atoms (or group of atoms) it is holding together. When IR radiation of the characteristic frequency impinges on a vibrating molecule, , it is absorbed by the molecule, thus attenuation will be greater as the number of absorbing molecules in the path increases, so information about the concentration of the molecules present can be obtained. This is the basis of the detection of combustible gases using IR detectors.

Practice: For combustible hydrocarbon gases, the characteristic 3.3 wavelength corresponding to the stretching of a C-H bond is monitored. To eliminate the contributions to absorption caused by environmental factors such as dust and humidity, a second wavelength (typically 3.0) is monitored as a reference. This reference wavelength is one that will have no contribution from the C-H stretch interaction, so that absorption due to dust and humidity can be factored out.

A single IR light source shines through the cuvette containing the sample of gas being monitored. After passing through the gas sample, the light beam is split and sent through two filters, one at the 3.3 analytical wavelength, the other at the 3.0 reference wavelength, and onto the detectors.

Advantages and Disadvantages of Infrared Sensors

This first generation of IR detectors represented a large improvement over the catalytic bead sensor in the following ways:

- 1. Combustible gases can be monitored in inert atmospheres, since the presence of oxygen is not required.
- 2. The problem of 'false safe' readings due to insufficient oxygen for combustion at high concentrations of combustible gases is eliminated since the IR detector is unaffected by oxygen depletion.
- 3. Compounds that poison catalytic beads have no effect on the enclosed optical system of an IR unit.
- 4. IR detectors require less routine maintenance. Calibration intervals can be less frequent since the optoelectronic system is

inherently stable and will not tend to drift.

5. Self-diagnostic tests can be built into the IR detector to inform the operator of potential fault conditions.

The main disadvantage of infrared sensor typically costing in the range of 2 to 3 times that of a catalytic bead sensor. In addition, gases such as hydrogen, which are easily detected by combustion methods, do not absorb infrared energy and so are not detectable by this method.

The Second Generation of Infrared Sensors

Despite many advances, the first generation of IR gas detectors left some room for improvement. compensation for drift due to ambient temperature fluctuations and for effects due to the aging of the light source or detector were incorporated into the second generation. improvements were achieved through 'double-compensating' optics with the introduction of second lamp whose light shines only within the detector assembly, never into the outside atmosphere. This internal lamp compensates for the changing characteristics of a detector or lamp with age or because of ambient temperature fluctuations; it is not influenced by the external gas concentration. The frequencies of the two lamps are modulated to provide another pair of signals, giving a total of four signals at the detectors. In the final calculation, all effects due to external influences cancel out, leaving only the gas concentration as desired.

Conclusions

Table 2 summarizes the features of catalytic bead and infrared sensing technologies. Clearly, there is room for both techniques in the modern gas detection scheme. Where initial investment cost is the primary concern, the catalytic bead sensor is a time-tested product with sensitivity to a broad range of combustible compounds. However, the initial savings may be consumed by maintenance and sensor replacement costs, especially in conditions where poisoning or polymerization might occur. The comparatively high initial cost of infrared technology could pay off in the long run through higher reliability and reduced maintenance bills. The information presented here should make the decision-making process easier for safety professionals charged with specifying gas detection systems.





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Ashish Shah
Director
Ambetronics Engineers
Private Limited

Moreover, its flameproof design allows for non-intrusive programming, enhancing user convenience and safety. Optional features such as RS-485 communication and customizable alarm settings cater to specific industry requirements, making it a versatile choice for diverse applications.

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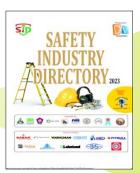
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