

3RD QUARTER 2023

Thoughts, Information, and Innovation

A quarterly newsletter on
technical updates & news about
SGS Pakistan - Nov 2023

SAFER
GREENER
SMARTER

SGS

06
Key highlights



20
Technical
corner



26
Digitization



27
Events &
participations



33
Webinars &
workshops
organised



35
Highlights
from our other
services



42
Health and
Well-being



Contents

Click on the **image** in the contents to jump to individual articles.

To return to the contents section, click on in the upper left-hand corner of the pages.

Let us know your thoughts on this issue of the SGS Inside Newsletter [here](#).



Message from our Leadership



Abdul Razzak Lakhani
Managing Director - SGS Pakistan
Business Manager Industrial
Services – SGS Middle East

I hope this newsletter finds you and your family happy, healthy, and managing life to the best of your ability.

As you all are aware that SGS Pakistan was established in 1952 and was one of the first Swiss companies to be set up in a newly born country. Today, SGS Pakistan has evolved into a dynamic team of specialists in the related disciplines of quality verification, supported by state-of-the-art testing laboratories and advanced technology.

With the evolving times and various advancements, I am particularly glad to share that in SGS we have a culture to embrace innovation and to adapt new technologies to continuously bring improvement in the way we do business. Every day we deal with ample information related to global advancement and innovation and from a while I have been contemplating to give our thoughts and information a proper shape to keep our clients abreast of what's going on in SGS, primarily to stay in tune and touch with our valued clients. With this newsletter, I look forward to promoting our objective of knowledge sharing and most importantly to stay in touch with our valued clients.

Hope you have a good read!



Muhammad Aqeel
Business Manager –
Industries and Environment
Services - SGS Pakistan

I hope this newsletter finds you in good health.

I am glad to share with my fellow fraternity the 3rd quarterly Issue of I&E Newsletter 2023.

Like previous issue, the focus of this newsletter is to provide knowledge and information to our industrial stakeholders including students about the latest industrial trends, new developments and other technological advancements in the ambit of inspection and engineering.

In this newsletter, you will find technical papers, case studies on various topics that may be relatable and beneficial to your business. In addition, you will get to know few of the new experts who recently became part of SGS family.

With this newsletter, I look forward to promoting a culture of knowledge sharing and hope this proves to be a great way to stay in touch with you all.



Message from editorial board

Dear All,

It gives us great pleasure to bring forth our 3rd quarterly newsletter of the year 2023.

This issue covers many of SGS I&E recent developments, including new capabilities, new and expanded services that may benefit your business. In addition, case studies and technical papers are also included in this issue for more holistic reading on topics of technical interest.

Our usual gratitude to Muhammad Aqeel – Business Manager of Industries & Environment Services, SGS Pakistan, for his continued conviction and support in the creation of this newsletter.

Happy reading to all our valued readers.

Editorial Board

Ms. Urooj Fatima

Ms. Iqra Akbar



Inside this newsletter

01

Key highlights

- SGS honored with excellence award in the services industry at the 17th EFP OSHE awards 2022
- SGS earns prestigious award for sustainable solutions and innovation at the 9th international environment, health & safety summit & awards
- Unveiling insights: SGS health & safety summit 2023- shaping a safer future
- Your one-stop solution for ensuring project due diligence- explore our technical due diligence expertise
- SGS Pakistan celebrates safety month: stay safe at work and home
- Empowering competency – elevated team's skills with UT Level-I training
- Welcome our new team member

02

Technical corner

- High Temperature Hydrogen Attack (HTHA) detection with advance NDT techniques
- Prioritize safety with machine safety risk assessment
- Unlock global markets with product testing & certification
- Mitigating safety and environmental risks through Legionella Risk Assessment
- SGS Pakistan completed the Environmental Impact Assessment for Kashmir Highway Project

03

Bringing digitization and innovation

- Revolutionizing safety- remote visual inspection via robotics in Underground Tank Integrity Assessments

04

Events & participations

- SGS Pakistan celebrated the Independence Day with plantation drive and community building activities
- SGS exhibited in Pakistan Energy Exhibition & Conference – PEEC 2023
- Our expert delivered session on 4M – in 9th Int'l Environment, Health & Safety Summit & Awards
- CSR session on fire safety training in collaboration with the Chemical Engineering Department at Karachi University
- Our expert delivered session on electrical hazards identification & safety practices in utilities departments in two-day training session on industrial utilities landscape & sustainable practices
- Participated in 3rd international conference on Water, Energy and Environment for sustainability.
- Participated in Pakistan Expo on Disaster Risk Reduction 2023

05

Webinars & workshops organised

- Webinar on Lifting Equipment's Inspection as per LEEA Standard
- Webinar on Enhancing Structural Integrity through Sustainable Solutions
- Webinar on Guided Wave Ultrasonic Testing for Pipelines Inspection
- Webinar on Harnessing the Sun: Cultivating Solar Ventures
- Webinar on Corrosion Under Insulation and its detection using PEC technique.

06

Highlights from our other services

- SGS helps Pakistani exporters to clarify WRAP requirements via an awareness session in Karachi
- SGS showcased inspection and testing capabilities at the International Food and Agriculture Exhibition in Karachi
- Shared quality and food safety expertise at the World's Sesame & Peanut Conference in Jordan
- SGS Pakistan conducted an awareness session around testing of agricultural commodities
- SGS Pakistan enters in strategic collaboration with DUHS to develop health science services
- SGS participated in a session on analytical instrument for coal and cement analysis in Islamabad
- SGS attended a session on mining and the minerals industry in Islamabad
- Ways to develop the minerals sector discussed with the Government of Gilgit Baltistan
- Certifications & trainings- training leads to maximize staff competence and enhance client confidence & satisfaction
- SGS empowers industry professionals with comprehensive training program on sustainability and responsible chemical management.
- Enhancing textile quality by bridging gap between supplier and buyers

07

Health and Wellbeing

- Awareness of health and well-being of women at workplace
- SGS Trailblazer: Scaling New Heights as the First to Conquer the Mountain"

08

Reader's feedback



01 Key highlights

■ SGS honored with excellence award in the services industry at the 17th EFP OSHE Awards 2022

Safety is not just a practice; it is a culture, a commitment, and a way of life at SGS. This unwavering dedication to Occupational Health & Safety (OH&S) has recently received the highest form of recognition as SGS was honored with the prestigious Excellence Award in the Services Industry at the 17th EFP OSHE Awards 2022, a distinguished event organized by the Employer Federation of Pakistan. This momentous occasion unfolded on the 25th of September, 2023, in the bustling metropolis of Karachi, Pakistan.

Championing Occupational Health & Safety: At SGS, we hold the profound belief that Occupational Health & Safety is not just a regulatory requirement; it is a moral and ethical obligation that transcends industries. OH&S is not confined to a set of rules and guidelines; it is a living, breathing embodiment of our commitment to ensuring the safety and well-being of our employees, clients, and the communities we serve.

SGS is honored and humbled to receive the Excellence Award in Occupational Health & Safety at the 17th EFP OSHE Awards 2022.

We consider this recognition as a milestone in our journey toward excellence, a journey where safety is at the forefront. We pledge to continue championing OH&S, not just for compliance but because it's the right thing to do. Our commitment to creating safer, healthier, and happier workplaces remains steadfast, today and in the years to come.

Abdul Razzak Lakhani
Managing Director - SGS Pakistan
Business Manager Industrial
Services – SGS Middle East



[READ THE ARTICLE](#)



■ SGS earns prestigious award for sustainable solutions and innovation at the 9th International Environment, Health & Safety Summit & Awards

We are proud to announce that SGS Pakistan has been honored with the 9th International Award on Environment, Health & Safety 2023 in the category of "Innovation and Sustainable Solutions".

This recognition highlights SGS dedication to pioneering sustainable practices and innovative solutions in the field of environment, health, and safety. The EHS Award 2023 has been announced and presented in a graceful ceremony at the end of the EHS Summit held on 30 August 2023 at Karachi Marriott Hotel.

This event exemplifies SGS Pakistan's commitment to advancing environmental and safety standards, sharing knowledge, and contributing to the broader sustainability dialogue. We look forward to continued efforts in promoting a safer and more sustainable future.



[READ THE ARTICLE](#)

■ Unveiling Insights: SGS Health & Safety Summit 2023- Shaping A Safer Future

Unveiling Insights: SGS Health & Safety Summit 2023 - Shaping a Safer Future The SGS Health & Safety Summit 2023 concluded on 21st Sept in Karachi, leaving a lasting impact on attendees from diverse industries. The summit, themed "Stay Safe at Work-At Home," brought together professionals, experts, and thought leaders to discuss and share insights on the latest trends, best practices, and innovations in health and safety management. Speakers from regulatory bodies, Oil & Gas, Power, Pharma, Automotive, FMCG, Textile, and more shared their insights on critical safety topics.

Let's visit the key highlights and takeaways from this remarkable gathering.

The summit's agenda was carefully crafted to foster meaningful discussions and provide a platform for sharing invaluable knowledge. Attendees had the opportunity to hear from renowned health and safety experts, engage in interactive panel discussions, explore cutting-edge technologies, and network with industry peers. The event was not only informative but also a catalyst for collaborative efforts to promote a culture of safety.





One of the standout features of the summit was the diverse range of industries represented. Leaders from Oil & Gas, Power, Pharma, Textile, and other sectors converged to share their experiences and insights. This diversity enriched the discussions and underscored the universal importance of health and safety in the workplace where experts emphasize on following:

- Safety Culture Matters
- Effective HSE Communication
- Data Transformation for Safety
- Workplace Safety Prioritized
- Mental & Physical Health
- Contractor Safety
- Fire Safety Strategies



The SGS Health & Safety Summit 2023 was not just an event; it was a platform for cross-industry collaboration, knowledge sharing, and a commitment to shaping a safer future. Industry leaders, regulatory bodies, and professionals alike left with a renewed dedication to enhancing safety in their respective fields

Muhammad Aqeel

Business Manager - Industries
and Environment Services
SGS Pakistan



[READ THE ARTICLE](#)

■ Your one-stop solution for ensuring project due diligence- explore our technical due diligence expertise



One stop solution to ensure due diligence of project -providing competitive advantage through trust

Technical due diligence for a project

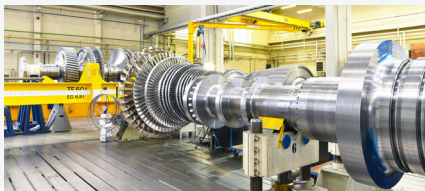
Whether investing in an existing asset or a developing from soil, owners, operators, investors, insurers and other stakeholders need to understand and mitigate a variety of technical, legal and socio-environmental risks before committing themselves to the undertaking. Risks that might compromise on a projects profitability in short, medium or long term, usually originate during the initial stages of project development. In this context, independent technical advisors such as SGS assist clients in evaluating the technical feasibility of their project by means of a Technical Due Diligence.

This process entails identifying both, the profitability of risk occurrence as well as their potential impact on the project. The goal is twofold; (1) to ensure the technical feasibility of the project makes for a sound investment, (2) to ensure that all factors have been accounted for in the development process. These objectives are achieved by reviewing all available assets thoroughly or provide data in order to reveal potential areas of concern.

Process framework

SGS conducts Technical Due Diligence for both new project developments and operating assets. SGS approach on Technical Due Diligence is based on a 12 step approach as mentioned below.





Identifying used/new plant and equipment as per clients' specification/requirements



Vendor audit



Decommissioning/dismantling of plant/equipment



Pre-shipment inspection to verify all the equipment parts/accessories are as per requirements and available for delivery



Post verification of all plant/equipment



Commissioning supervision and inspection after commissioning to make plant operational



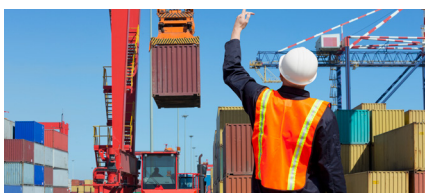
Preparing BOQs and technical specifications



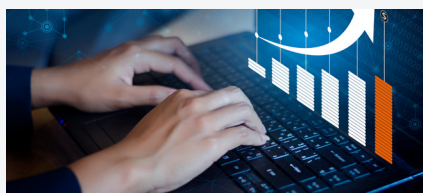
Feasibility study/analysis



Remaining life assessment/inspections to fulfill customs requirement



Loading supervision at port of loading and unloading supervision at port of discharge



Present market valuation



Recommendations based on findings for proper maintenance and increase utilization

Article Author: Mahira Yameen -
Team Lead – Supply Chain Services
Industries & Environment
Email: Mahira.Yameen@sgs.com

Article Author: Taha Amin - SEO
– Supply Chain Services
Industries & Environment
Email: Taha.amin@sgs.com

[READ THE ARTICLE](#)

SGS Pakistan celebrates safety month - stay safe at work and home

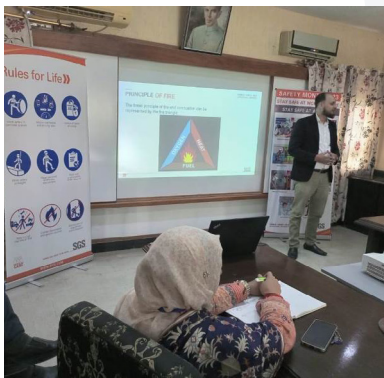


Every year, SGS globally dedicates the month of September as safety month. This commitment to safety transcends geographical boundaries and is celebrated with enthusiasm by SGS teams worldwide. In Pakistan, we have not only continued this tradition but also expanded our safety awareness initiatives to reach new horizons. This year, during safety month in SGS Pakistan, an array of activities and initiatives were undertaken to promote safety awareness and reinforce the importance of safety both at work and at home. Here are some highlights of the activities conducted:

Safety Session at M/s S.M.A Rizvi Textile Institute

A safety session was organized at the client's site, the M/s S.M.A Rizvi Textile Institute. Focusing Road safety & transportation safety. Engaged university students & staff with activities where audience actively participated, and top three winners of a safety quiz were rewarded with fire extinguishers.

[READ THE ARTICLE](#)





Firefighting training at Karachi University

In a proactive step toward enhancing community safety and fostering a culture of responsible corporate citizenship, SGS Pakistan I&E services recently conducted a comprehensive Corporate Social Responsibility (CSR) session on Fire Safety Training in collaboration with the Chemical Engineering Department at Karachi University (KU).



Face-to-face session with staff family members

SGS engaged with the family members of staff from NR-Minerals in a face-to-face session. Gas stove lighters and potholders were distributed as giveaways to promote home safety.





Face-to-Face Interactive Safety Sessions

Interactive safety sessions were conducted with staff from various lines of business, fostering a culture of safety among employees.





In-house basic firefighting training

SGS provided in-house basic firefighting training to the emergency response team, encompassing theoretical knowledge and practical demonstrations.



Home safety

Unsafe

Safe





Health safety summit 2023

SGS hosted a successful health safety summit, bringing together industry leaders to discuss and promote safety standards and practices.



[READ THE ARTICLE](#)

Emergency evacuation drill

An emergency evacuation drill was conducted to ensure that employees are well-prepared for unexpected situations.



Defensive driving session

Drivers received defensive driving sessions, aligning with SGS's Operational Integrity (OI) standards, to enhance road safety.





Fire safety equipment initiative

SGS initiated a program offering fire safety equipment at subsidized rates, making it more accessible to employees and their households.

Online safe talk session

Online safe talk sessions were conducted with users in Pakistan, spreading awareness about safety practices.

Online sessions on transportation and fire safety

Two online sessions focusing on transportation safety and fire safety, each accompanied by a quiz, were conducted. The top three winners of each session received fire blankets and fire extinguishers as rewards.

Conclusion

These initiatives and activities reflect SGS Pakistan's commitment to safety and its dedication to creating a safer work environment and homes for its employees and their families. Safety is not just a priority during Safety Month but is ingrained in the company's culture year-round, aligning with the global SGS mission to ensure the health and safety of all individuals, both at work and at home.

■ Empowering competency – elevated team's skills with UT Level - I Training

In a remarkable demonstration of dedication and expertise, ten of SGS's employees have recently achieved certification in Ultrasonic Testing LEVEL-I as per As per SNT - TC 1A and CP 189. This internal certification program is a testament to our commitment to excellence in the field of testing and inspection. Over the course of five intense days and 40 hours of rigorous learning, these individuals underwent comprehensive training, which included both theoretical knowledge and hands-on practical examinations.

Ultrasonic Testing LEVEL-I certification signifies their proficiency in the use of ultrasonic testing techniques, a crucial tool in non-destructive testing. The ten exceptional individuals are:

- Osama Aziz
- Abdul Rehman
- Muhammad Hamza Shaikh
- Qazi Muhammad Khazima
- Lakhmir Khan
- Farjad Fahmee
- Ali Abbas
- Muhammad Saad Moin
- Muhammad Zohair
- Shaikh Abdul Rafay

They have not only showcased their theoretical understanding of the technology but have also demonstrated their expertise in conducting real-world ultrasonic tests.

Their newly acquired skills are a testament to SGS dedication to excellence and unwavering commitment to providing top-tier services to our clients.

SGS proudly congratulates all of the newly certified inspectors on this remarkable achievement, reinforcing our commitment to maintaining the highest standards of competency and quality in the industry.

Muhammad Aqeel, Industries & Environment Business Manager, SGS Pakistan





The SGS Health & Safety Summit 2023 was not just an event; it was a platform for cross-industry collaboration, knowledge sharing, and a commitment to shaping a safer future. Industry leaders, regulatory bodies, and professionals alike left with a renewed dedication to enhancing safety in their respective fields

Muhammad Aqeel

Business Manager - Industries and Environment Services
SGS Pakistan



■ Welcome our new team member

In this section, we extend a warm welcome to our new team members. Let's take a moment to hear what they have to say about their experience in SGS Pakistan.



Ammar Ahmed

DT & I Project Engineer
Industries & Environment

"I am thrilled to be a part of the "Digitalization, Technology, and Innovation" team in SGS as a "DT&I Project Engineer". The warm welcome from my new colleagues has made my transition into this role both smooth and enjoyable. Drawing upon my expertise in digitization, programming, and automation, I am excited about the prospect of contributing to SGS's pioneering projects that redefine industry standards. The collaborative spirit and openness to new ideas within the team align seamlessly with my professional values, fostering an environment where innovation thrives. As we embark on this journey together, I am confident that our collective efforts will not only meet but exceed expectations. I look forward to working closely with each team member, leveraging our diverse skills to achieve great milestones and contribute to the continued success and innovation that defines SGS."



Syeda Aiman Irshad

Lab Engineer
Industries and Environment

Hello, My Name is Aiman and I am honored to join the SGS Family as a Lab Engineer for Civil Inspection and Material Testing Team.

With over 1.5 years of experience, I am excited to bring my expertise and knowledge to this role and contribute in my Team's Success. I believe in fostering a culture of collaboration and communication and I look forward to work with all of you.

Working at SGS has really inspired me to push the boundaries where it is possible. The company creates an environment where I feel supported as well as challenged, It's a place where I find inspiration and opportunity to make impact with my work and I am excited to be a part of this journey.





02 Technical corner

■ High Temperature Hydrogen Attack (HTHA) detection with advance NDT techniques- a underlying threat in industrial plants

High Temperature Hydrogen Attack (HTHA) is a damage mechanism with a significant impact in the power plants, fertilizers and refinery industry. The mechanism results in gradual and relatively slow degradation of the vessel material during particular time period, but more rapid degradation thereafter. This damage mechanism can be monitored by inspection surveys to identify degraded areas, and engineering assessments to assess fitness for continued service. The basic mechanism of HTHA is described, with reference to the influence of temperatures and pressures & Time. HTHA detection using advanced NDT and risk-based approaches are very effective. Specific attention is given to TOFD for Weld scanning, Advanced Backscatter by PAUT/FMC/TFM or TULA- TOFD Ultra low angle, Velocity Ratio, and Metallurgical Replication. The Fitness for Service (FFS) and Remaining Life assessment of equipment with identified damage, is discussed in the context of the API RP 579. The alteration and rerating of equipment that has suffered from HTHA are considered when FFS of HTHA equipment.

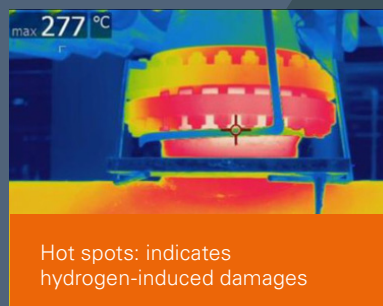
Introduction

Hydrogen is one of the fundamental elements in many industrial processes, but its presence can also be a potential source of damage. When hydrogen combines with high temperatures and pressures, the material characteristics of carbon steel or low alloy steel can be negatively altered. There could be various type of hydrogen induced damages which includes.

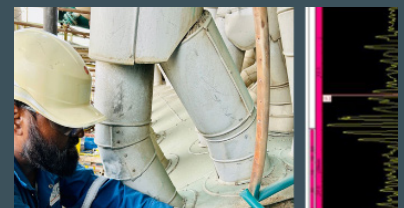
Types of Hydrogen damage

- Hydrogen Embrittlement
- Hydrogen Assisted Cracking
- Hydrogen Induced Cracking (HIC)
- High Temperature Hydrogen Attack (HTHA)

Article Author: Zahir Khan
Team Lead – NDT Services,
Industries & Environment - SGS Pakistan
Email: khan.zahir@sgs.com



Hot spots: indicates
hydrogen-induced damages



Example of HTHA
indication detected by TOFD

[READ THE ARTICLE](#)

■ Prioritize safety with machine safety risk assessment



Introduction

In today's industrial landscape, ensuring the safety of workers and the integrity of operations is paramount. With the ever-evolving machinery and technologies, companies must continually evaluate and address potential risks to maintain a safe work environment. SGS Pakistan is at the forefront of providing comprehensive solutions for Occupational Health & Process Safety. In this article, we will explore the critical importance of prioritizing safety through Machine Safety Risk Assessment and how SGS Pakistan offers tailored solutions that align with both national and international standards.

Client needs

In the industrial sector, businesses often face a dual challenge – optimizing production while ensuring the safety and well-being of employees. Companies seek to maximize productivity, efficiency, and profit margins while simultaneously minimizing risks and potential hazards. SGS Pakistan understands these challenges and recognizes the client's need for a structured, proactive approach to safety management.

Companies need to:

Identify Potential Hazards: It is essential to recognize and assess the potential risks associated with machinery and processes.

Comply with Regulations: Businesses must adhere to national and international standards, such as ISO 12100 and IEC 61508, to maintain a safe work environment.

Minimize Downtime: Companies aim to reduce the risk of accidents or equipment failures that can lead to costly downtime and production losses.

Solutions with Techniques and Standards

SGS Pakistan provides comprehensive solutions to address these client needs through Machine Safety Risk Assessment. By employing a systematic approach, SGS helps businesses identify, mitigate, and manage risks effectively. Below are some key techniques and standards incorporated in the assessment process:

- Hazard Identification
- Risk Assessment
- Compliance with Standards
- Safety Control Measures
- Documentation and Training

[READ THE ARTICLE](#)

Article Author: Faraz Ali
Manager - Process & Occupational Health Safety,
Industries & Environment - Sgs Pakistan
Email: Faraz.ali@sgs.com





■ Unlock global markets with product testing & certification

Your product's access to the world market

NEED OF PRODUCT TESTING AND CERTIFICATION

Product testing and certification should be a boardroom-level discussion, not simply the last step of research and development (R&D). Their implications can impact customer satisfaction, brand reputation, supply-chain partnerships, marketing strategies, and ultimately your bottom line.

Certification speeds up the product route to the world market, ensure quality and safety and reduce potential losses. Various countries instituted Conformity Assessment Programs to meet quality, safety and security requirement to protect customer's health and safety as well as environment.

Ensuring product quality and safety is critical for several reasons. First and foremost, it helps to keep people and property safe. Products that are assessed for performance and safety can also be more successful in the marketplace, enhancing brands and reputations. There are legal/regulatory requirements products must meet to be sold in certain markets.

More than 72% of Pakistan's export is based on Textile and Agriculture Products. Emphasis needs to be made on Industrial Products Export as well which includes Generators, Transformers, Switchgear, Solar Panels, Elevators, Pressure and Lifting Equipment etc.

Quality Assurance

Gives insight into System Level Functions

4 Reasons why Product Testing is Important for Manufacturers

Catch Product Defects early on

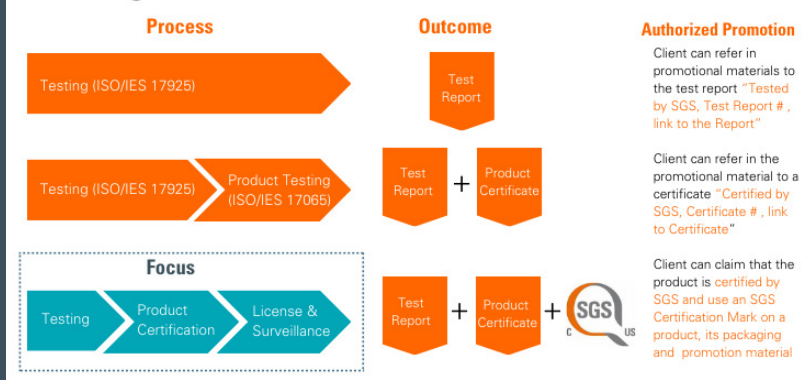
Find out what your Product can Endure

BENEFITS TO MANUFACTURERS

- Access to International Market
- Increased Visibility; Access to more consumers and business
- Diversifying market opportunities
- Revenue Growth
- Reduced Risk
- Efficient utilization of the existing factory, machines, and staff.
- Expanding the lifecycle of mature products



Testing vs. Product Certification



READ THE ARTICLE

Article Author: Mahira Yameen - Team Lead – Supply Chain Services Industries & Environment – SGS Pakistan
Email: Mahira.Yameen@sgs.com

Article Author: Taha Amin - SEO – Supply Chain Services Industries & Environment – SGS Pakistan
Email: Mahira.Yameen@sgs.com

■ Mitigating safety and environmental risks through Legionella Risk Assessment

Legionella bacteria pose a significant threat when present in a workplace or any other building where water is present. Conducting Legionella assessments helps organisations to ensure environmental protection, workers' health & safety and regulatory compliance are in place and to demonstrate they follow best practices to stakeholders.

Characteristics of Legionella's behaviour

Legionella bacteria are common and can be found naturally in environmental water sources such as rivers, lakes and reservoirs, usually in low numbers. Legionella bacteria can survive under a wide variety of environmental conditions and have been found in water at temperatures between 6°C and 60°C. Water temperatures in the range from 20°C to 45°C seem to favour growth. The organisms do not appear to multiply below 20°C and will not survive above 60°C.

They may, however, remain dormant in cool water and multiply only when water temperatures reach a suitable level. Temperatures may also influence virulence; legionella bacteria held at 37°C have greater virulence than the same legionella bacteria kept at a temperature below 25°C.

Legionella bacteria also require a supply of nutrients to multiply. Sources can include, for example, commonly encountered organisms within the water system itself such as algae, amoebae and other bacteria.

The presence of sediment, sludge, scale and other material within the system, together with biofilms, are also thought to play an important role in harbouring and providing favourable conditions in which the legionella bacteria may grow.





A biofilm is a thin layer of micro-organisms which may form a slime on the surfaces in contact with water. Such biofilms, sludge and scale can protect legionella bacteria from temperatures and concentrations of biocide that would otherwise kill or inhibit these organisms if they were freely suspended in the water.

How to mitigate Legionella risks

As legionella bacteria are commonly encountered in environmental sources, they may eventually colonize manufactured water systems and be found in cooling tower systems, hot and cold-water systems and other plant which use or store water.

To reduce the possibility of creating conditions in which the risk from exposure to legionella bacteria is increased, it is important to control the risk by introducing measures which:

- do not allow proliferation of the organisms in the water system;
- reduce, so far as is reasonably practicable, exposure to water droplets and aerosol.

[READ THE ARTICLE](#)

Article Author: Fahad Saleem
Manager – Environment, Climate Change & Sustainability Solutions,
Industries & Environment - Sgs Pakistan
Email: Fahad.saleem@sgs.com

■ SGS Pakistan completed the environmental impact assessment for Kashmir Highway Project



SGS Pakistan has successfully completed the Environmental Impact Assessment (EIA) study for "Construction of Kashmir Highway along River Jhelum" project.

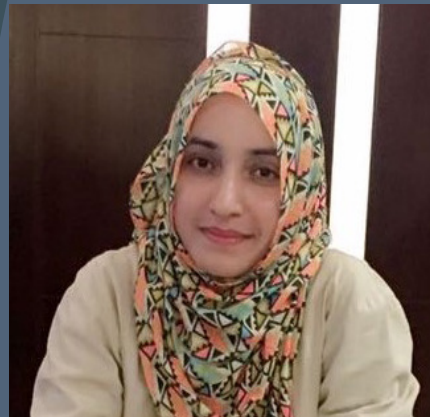
The Kashmir Highway along River Jhelum project (approx. length 140-142 km) has been initiated by the Government of Azad Jammu & Kashmir (AJK) through the Central Design Office (CDO). This project aims at providing direct link from G.T Road with Muzaffarabad and other major cities of AJK and is going to significantly reduce the travel distance between Mirpur and Muzaffarabad.

"Environmental Assessment is the main planning tool to ensure that development process is sustainable. EIA is a systematic process to identify, predict and evaluate the environmental impacts of proposed actions and projects. The process is applied prior to major decisions and commitments being made. Wherever appropriate, social, cultural and health effects are considered as an integral part of EIA Process."

EIA is a systematic process to identify, predict and evaluate the environmental impacts of proposed actions, in order to ensure a project's sustainability. Wherever appropriate, social, cultural and health effects are considered as an integral part of EIA.

Ammara Naqvi

Manager EHS, Industries & Environment, SGS Pakistan



[READ THE ARTICLE](#)

Article Author: Ammara Naqvi
Manager – EHS Services, Industries & Environment - Sgs Pakistan
Email: ammara.naqvi@sgs.com



03 Digitization



■ Revolutionizing safety- remote visual inspection via Robotics in Underground Tank Integrity Assessments

In the realm of industrial safety and operational reliability, the challenge of ensuring the integrity of underground tanks has long been a concern. The conventional approach, requiring human intervention in confined spaces, posed not only serious safety risks but also limitations in the thoroughness of inspections. To address this, a pioneering project has emerged - one that harnesses the capabilities of robotics for remote visual inspection of underground tanks, transforming the landscape of safety and efficiency in industrial operations.

Driven by a commitment to innovation, SGS Pakistan has also developed its own specialized equipment to cater to the specific needs of clients. This collaborative effort signifies a leap forward in the integration of robotic technology into the domain of tank integrity assessments.

At the heart of this initiative is the deployment of remote visual inspection via robotics, a visionary solution that seeks to assess the complete integrity of underground tanks without the need for human intervention. This not only mitigates the inherent safety risks associated with confined spaces but also elevates the accuracy and efficiency of inspections.

The value of this project is multi-faceted. With customer centric approach, firstly it introduces automated results, reducing reliance on manual labor and ensuring a consistent and precise inspection process. The advanced technology embedded in robotic inspections allows for defect localization with unprecedented accuracy, providing a detailed understanding of the tank's structural health. Perhaps most importantly, the removal of human entry into confined spaces contributes to a safer operational environment, mitigating the risk of accidents and incidents. The scope of the project is expansive, covering visual examination, ultrasonic thickness testing (UT), and coating integrity services – all performed remotely using robotics. A tangible testament to the success of this approach is the recent inspection conducted for our reputable clients, a validation of the efficacy and reliability of remote visual inspection via robotics.

In conclusion, the integration of robotics into the inspection of underground tanks represents a paradigm shift in industrial safety and reliability. This transformative approach not only addresses longstanding safety concerns but also augments the precision and efficiency of integrity assessments. As industries continue to embrace technological innovations, remote visual inspection via robotics emerges as a beacon of progress, ushering in a new era of safety and reliability in industrial operations.

Article Author: Sunia Shiraz
Digital & Innovation Coordinator - Sgs Pakistan
Email: sunia.shiraz@sgs.com





04 Events & participations

■ SGS Pakistan Celebrated the Independence Day with Plantation Drive and Community Building Activities

On August 14th, SGS Pakistan celebrated Independence Day with great enthusiasm, coming together for a heartwarming rendition of the national anthem. The event was made even more special with the announcement of the wellbeing team winner and the subsequent joy of ceremonial cake-cutting.

What truly added depth to the celebration was a purposeful plantation drive that spanned across all SGS stations including Karachi, Lahore, Islamabad and Peshawar. As a testament to our commitment to environmental sustainability, over 200 plants were planted during this initiative. These plants, distributed among employees and local communities, symbolize a collective dedication to nurturing and safeguarding the environment.

[READ THE ARTICLE](#)



■ SGS Exhibited in Pakistan Energy Exhibition & Conference – PEEC 2023



"A recap of the Pakistan Energy Exhibition and Conference"

SGS Pakistan is excited to bring you a glimpse of the recent "Pakistan Energy Exhibition and Conference" held in Lahore, which showcased our pioneering services in the energy sector, with a strong focus on sustainability on both supply and demand sides of the equation.

Event Overview:

From 14th - 16th September energy enthusiasts, industry experts, and stakeholders converged at the vibrant city of Lahore for the much-anticipated "Pakistan Energy Exhibition and Conference." This event aimed to address the critical energy challenges facing Pakistan and present innovative solutions to pave the way for a sustainable energy future.

The "Pakistan Energy Exhibition and Conference" successfully shed light on the critical issues and promising opportunities in the country's energy landscape. The event reaffirmed the importance of energy efficiency and green energy in Pakistan's energy landscape, with SGS Pakistan's active participation driving these discussions forward.

READ THE ARTICLE

Article Author : Zohaib Hanif
Assistant Manager - Industries & Environment – SGS Pakistan
Email: zohaib.hanif@sgs.com





Our expert delivered session on 4 M – in 9th Int'l Environment, Health & Safety Summit & Awards

SGS proudly took part in the 9th International Environment, Health & Safety Summit & Awards, held in a Karachi Marriott Hotel on July 20, 2023. Our notable presence included our Head of Environmental, Health, and Safety (EHS) Services Sajid Nazir, alongside Faraz Ali, our Subject Matter Expert in Process & Occupational Health Safety Services.

During the summit, Faraz Ali delivered a compelling presentation on the topic "Enhancing Health & Safety through the 4M Model (Man, Machine, Method & Material)." It was well received by the audience as he shared invaluable insights and best practices in the realm of workplace health and safety.



■ CSR session on Fire Safety Training in collaboration with the Chemical Engineering Department at Karachi University



Introduction:

In a proactive step toward enhancing community safety and fostering a culture of responsible corporate citizenship, SGS Pakistan I&E services recently conducted a comprehensive Corporate Social Responsibility (CSR) session on Fire Safety Training in collaboration with the Chemical Engineering Department at Karachi University (KU). The session was part of our ongoing commitment to promoting safety awareness and preparedness, aligning our initiatives with the university's educational objectives.

The CSR session at KU aimed to enlighten students, faculty, and staff about the critical aspects of fire safety, especially concerning with chemical engineering department students. The event was tailored to address the specific needs and challenges associated with chemical-related fire hazards, emphasizing preventative measures, emergency response protocols, and best practices in industrial fire safety.

READ THE ARTICLE

Article Author: Sumaira Khan
Deputy Manager – Training Services, Industries & Environment – SGS Pakistan
Email: sumaira.khan@sgs.com





- Our expert delivered session on electrical hazards identification & safety practices in utilities departments in two-day training session on industrial utilities landscape & sustainable practices

SGS actively participated in a two-day training session focused on the Industrial Utilities Landscape and Sustainable Practices, which took place at the Movenpick Hotel in Karachi on the 30th and 31st of August. During this session, our subject matter expert, Syed Hasham, delivered a comprehensive presentation on Electrical Hazard Identification and Safety Practices.

- Participated in 3rd international conference on Water, Energy and Environment for sustainability

SGS Pakistan participated in 3rd International Conference on Water Energy and Environment for Sustainability (IC-WEES) –2023 organized by SNS-NUST, Islamabad held from 16-18th, Aug 2023.

IC-WEES-23 provided a platform to address Energy, water, and environmental sustainability issues at the core level, with a number of speakers from different domains it covers the wide range of topic including Water resources management Wastewater treatment, recycling and reuse, air quality monitoring and management Urban planning for sustainable cities etc.

SGS Participation in this event shows our commitment to help authorities and communities to preserve our environment and keep it clean and safe for our future generations.

- Participated in Pakistan Expo on Disaster Risk Reduction 2023

SGS team was pleased to be part of Expo on Disaster Risk Reduction

National Disaster Management Authority (NDMA) Pakistan commenced its first ever national Expo on Disaster Risk Reduction (PEDRR 2023) at Pak China Friendship Centre, Islamabad, Pakistan on 16 August. 2023. Adeel Bari and Noman had the opportunity from SGS to participate in this prestigious event.



Webinars & workshops organised



Webinar on Lifting Equipment's Inspection as per LEEA Standard

SGS organized a webinar titled "Lifting Equipment's Inspection as per LEEA Standard." During this session, our subject matter expert Akbar Faheem delved into the essential aspects of inspecting lifting equipment in compliance with the Lifting Equipment Engineers Association (LEEA) Standard.

Participants gained valuable insights into the best practices and guidelines for ensuring the safety and reliability of lifting equipment. The webinar aimed to educate professionals in various industries about the crucial requirements for the inspection and maintenance of lifting equipment, contributing to a safer working environment, and preventing accidents.



Webinar on Enhancing Structural Integrity through Sustainable Solutions

SGS conducted an informative webinar on "Enhancing Structural Integrity through Sustainable Solutions." In this informative webinar, SGS brought together experts including Tanveer Ali – Head of civil structural integrity and Muhammad Mehdi Team lead civil service SGS Pakistan, to discuss sustainable approaches to maintain and improve the structural integrity of critical infrastructure and industrial facilities.

The webinar was attended by 200+ attendees including facility owners, consultant contractors and EPCs. During the webinar, participants gained a comprehensive understanding of sustainable solutions that not only





enhance structural safety but also contribute to environmental and economic sustainability. This webinar was designed to provide valuable insights for professionals involved in the management and maintenance of structures.

Enhancing Structural Integrity through Sustainable Solutions

23 Aug 2023 at 14:00-15:00 GST (Gulf Standard Time)



TAHA ZIA

Team Lead Civil Services
for Middle East, SGS



TANVEER ALI

Head of Civil Services,
SGS Pakistan



MUHAMMAD MEHDI

Team Lead Civil Services,
SGS Pakistan

SGS

Webinar on Guided Wave Ultrasonic Testing for Pipelines Inspection

SGS conducted a webinar on Guided Wave Ultrasonic Testing for Pipelines Inspection. This session was facilitated by our head of pipelines Integrity management Khurram Zaka. This session was attended by more than 250 industry professionals mainly from oil and gas sectors across Pakistan and Middle East.

During this session, attendees had the opportunity to learn about the latest advancements in guided wave ultrasonic testing techniques for pipeline inspection. The webinar aimed to educate industry experts on how to effectively utilize this technology to assess the integrity of pipelines, detect defects, and ensure the safe and efficient operation of pipelines.

Webinar on Harnessing the Sun: Cultivating Solar Ventures

Environmental concerns over use of fossil fuels, market dynamics and sustainable global policies have led to a paradigm shift towards inclusion of ReTs especially Solar PV in the energy generation mix. In order to disseminate knowledge among our industrial and commercial stakeholders, SGS organized an engaging webinar with the theme "Harnessing the Sun: Cultivating Solar Ventures" in the month of September 2023 for our Pakistan and Middle East clients.

In this session, our Solar Energy Zohaib Hanif, provided insights into the solar energy industry, focusing on the development and maintenance of solar ventures. Participants learned about the latest technologies, regulatory requirements, and best practices for ensuring the success and sustainability of solar projects.



Harnessing The Sun: Cultivating Solar Ventures

4th September 2023 at 11:00-12:00 PM GST (Gulf Standard Time)



HASHAM KHALID
Head of Electrical Services,
SGS Pakistan



ZOHAIB HANIF
Team Lead Solar Services,
SGS Pakistan



ATIF NASEEM
Team Lead Electrical Services,
SGS Middle East

SGS

Webinar on Corrosion Under Insulation and its Detection using PEC Technique

SGS hosted a webinar addressing the critical topic of "Corrosion Under Insulation and its Detection using Pulsed Eddy Current (PEC) Technique." Our subject matter expert Zahir Khan who is head of Advance NDT, talks in detail about the technique and its applications.

During this session, industry professionals were educated on the challenges and solutions associated with detecting corrosion beneath insulation in industrial equipment. The PEC technique was highlighted as an effective method for non-destructive testing in these scenarios. The webinar aimed to enhance participants' understanding of corrosion management and prevention, ultimately promoting the safety and longevity of industrial assets. This webinar was well received by audience and gave an interactive platform to the industry peers to share their questions which were answered by our experts in detail.

LIVE WEBINAR

Corrosion Under Insulation and its Detection using PEC Technique

19 Sept 2023 at 03:30-04:30 Pakistan time (UTC +5:00)



WITH
ZAHIR KHAN

Team Lead - NDT Services
Industries & Environment - SGS Pakistan

SGS





06 Highlights from our other services

■ SGS helps Pakistani exporters to clarify WRAP requirements via an awareness session in Karachi

SGS conducted an informative session on WRAP Compliance requirements. The aim was to equip manufacturers and exporters from various industries with a better understanding of the necessary standards for responsible production.

The session, held in Karachi, Pakistan, witnessed enthusiastic participation from more than 100 industry professionals from various industrial sectors representing textile, leather garments and tannery, accessories, packaging materials, thread and yarn etc.

SGS's commitment to knowledge sharing within these sectors was evident as they provided comprehensive insights into the WRAP certification process.

We recognize the importance of responsible manufacturing. By conducting this awareness session on WRAP requirements in Karachi, we aim to empower industry professionals with the knowledge needed to achieve compliance while ensuring social responsibility

Ali Akhter Khan
Director - Knowledge Solutions
SGS Pakistan

[READ THE ARTICLE](#)





■ SGS showcased inspection and testing capabilities at the international food and agriculture exhibition in Karachi

SGS Pakistan showcased its expertise at the esteemed International Food and Agriculture Exhibition by TDAP Pakistan on 10-12 August 2023 held in Expo Center Karachi.

This event served as a crucial platform to highlight our specialized services in Natural Resources and Health & Nutrition.

For both SGS and Pakistan's trading sectors, this exhibition was pivotal, enabling engagement with suppliers and buyers on a dynamic platform. With over 500 foreign delegates from diverse Asian, African, and European nations, alongside 200+ local exhibitors, the event facilitated valuable exchanges and potential collaborations.

The positive response received underscores the value of our efforts. SGS Pakistan remains committed to progress in agriculture & food sectors through advanced solutions and partnerships. We extend gratitude to all who visited our exhibit and engaged in meaningful conversations.

Faisal Nisar

Business Manager – Natural Resource (AFL, OGC) and Health & Nutrition, SGS Pakistan

[READ THE ARTICLE](#)



■ Shared quality and food safety expertise at the World's Sesame & Peanut Conference in Jordan

SGS Pakistan has been delighted to participate in the World's Sesame & Peanut Conference held on 3-5 September 2023 at Movenpick Resort & Spa, Dead sea, Jordan.

Business Manager from SGS Pakistan Faisal Nisar delivered an insightful presentation on "Pakistan Sesame Seed Quality and Food Safety" and shared valuable inputs as speaker and panelist.

[READ THE ARTICLE](#)





SGS Pakistan conducted an awareness session around testing of agricultural commodities

In July 2023, SGS organized an enlightening awareness session in Karachi Agriculture, Food and Life Laboratory.

The event served as an invaluable platform for knowledge exchange and collaboration within the agricultural industry.



[READ THE ARTICLE](#)

SGS Pakistan enters in strategic collaboration with DUHS to develop health science services

We are delighted to announce a step taken towards the development of Health Sciences segment in Pakistan. Strategic collaboration has been concluded with Dow University of Health Sciences (DUHS) through Institute of Biological Biochemical and Pharmaceutical Sciences (IBBPS).

DUHS is a multi-faculty university with schools of medicine, nursing, midwifery, dentistry, pharmacy, biotechnology, medical technology and business management which facilitate DUHS in collaboration with industry partners and a network of several public and private hospitals in Pakistan. Their vision is to bring innovation in the biological, clinical, and pharmaceutical sectors by providing research that improves patient quality of life.



[READ THE ARTICLE](#)



■ SGS participated in a session on analytical instrument for coal and cement analysis in Islamabad

In August 2023, SGS participated in a full day session organized by CKIC (Changsha Kaiyuan Instruments Co., Ltd) for the awareness and the latest developments on analytical instruments, especially for coal and cement analysis, at Serena Hotel Islamabad, Pakistan.

The event was graced by representatives of coal fired power plants, cement plants and various industries having coal fired boilers
Nutrition, SGS Pakistan

At SGS, we believe in sharing knowledge and expertise with our clients and industry stakeholders. This event provided an excellent opportunity for professionals in the coal and cement sectors to come together, exchange ideas, and stay updated with emerging trends

Syed Faseeh

Natural Resources – Minerals
Business Manager, SGS Pakistan

[READ THE ARTICLE](#)



■ SGS attended a session on mining and the minerals industry in Islamabad

Delegates of SGS took part in the first ever Pakistan Minerals Summit 2023 with the theme “Dust to Development: Investment Opportunities in Pakistan” focusing on unlocking the potential of Pakistan’s mineral resources.

Jointly organized by the Ministry of Petroleum and the Barrick Gold Corporation (Barrick), the goal of this event was to explore the potential of Pakistan minerals resources to boost the country’s development.



SGS Pakistan Managing Director, Abdul Razzak Lakhani, joined the summit along with Business Manager, Syed Faseeh heading Natural Resources, Minerals Services.

[READ THE ARTICLE](#)





■ Ways to develop the minerals sector discussed with the government of Gilgit Baltistan

Syed Faseeh, Business Manager of Minerals from SGS Pakistan, met with Lt. Col.(R) Abaidullah Baig, Senior Minister for Social Welfare, Population Welfare, Women Development & Youth Affairs, Department Government of Gilgit Baltistan.



The key discussion held on different minerals commodities services along with overview of the overall SGS profile as mentioned below:

- Minerals trade services
- Satellite mapping and satellite image processing
- Mines site surveys
- Geophysical surveys
- Analytical services
- Agri sector commodity like cherry consignments certification

[READ THE ARTICLE](#)

■ Certifications & trainings - training leads to maximize staff competence and enhance client confidence & satisfaction

SGS Pakistan NR-Mineral Services is pleased to announce and congratulate our colleagues for successful completion of below certification programs;

Certified Quality Inspector

Muhammad Kashif, Operation Manager – NR Mineral Services has satisfactorily completed and passed exam of “Certified Quality Inspector” from American Society for Quality (ASQ), which is known as a mark of quality excellence in the market.

By attaining this certification, our colleague has developed advance proven quality techniques which helps to boost our organization's bottom line. Becoming Certified Quality Inspector (CQI) confirms our commitment to quality, provides competitive edge and also leaves positive impression on our clients. Additionally, CQI evaluates hardware documentation, performs laboratory procedures, inspects products, measures process performance, records data, and prepares formal reports.

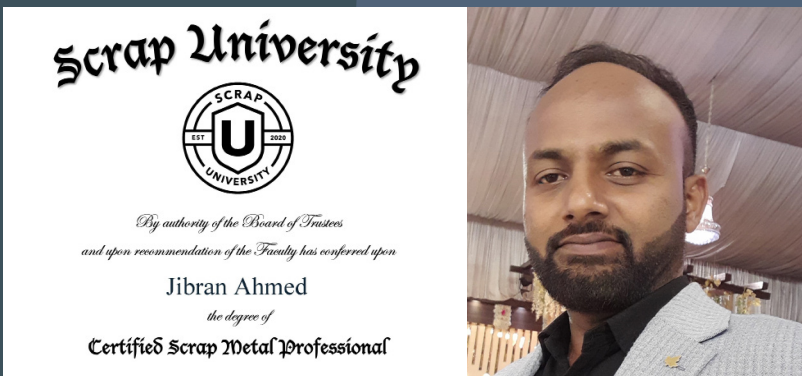


Certified Scrap Metal Professional Certification

Jibran Ahmed has achieved certification by completing 05 online training modules of "Certified Scrap Metal Professional (CSMP)" from the Scrap University. This course enables him to identify over 82 grades of Ferrous & Non-Ferrous Metals, the potential upgrades, and how they relate to the ISRI trading terms.

After the successful achievement of this prestigious certification, our colleague is able to perform this complex inspection more competently and generate more accurate reports to gain the confidence and trust of our valued clients.

We aimed to improve the awareness and competency level of our team, increased their skill and level of expertise in respective areas enabling them to perform their job in most effective manner and gaining edge on competition.



SGS empowers industry professionals with comprehensive training program on sustainability and responsible chemical management.

We are thrilled to announce that SGS has launched a specialized training program designed to empower businesses and organizations to embrace sustainability and responsible chemical management. This initiative aligns seamlessly with our commitment to environmental stewardship, safety, and compliance.

Recently we have completed our first Training Session on ZDHC Management System TIG (Technical Industrial Guide) for textile client in Lahore. Session was conducted by Naeem Minhas, 1st approved trainer provider (ATP) across Pakistan.



The training program aims to:

- Educate industry stakeholders on sustainable practices.
- Foster a deeper understanding of responsible chemical management.
- Equip participants with practical tools and strategies to reduce hazardous chemical use.
- Promote compliance with global standards and regulations.



Enhancing textile quality by bridging gap between supplier and buyers

In our ongoing commitment to elevate textile product quality and testing standards, we are excited to share a recent milestone in our collaboration with one of Pakistan's leading textile suppliers. We hosted an insightful orientation workshop at our laboratory, specially tailored for the quality managers.

The primary objective of this workshop was to familiarize the client's team with the testing methods and protocols mandated by one of Germany's prominent retail giants. Our focus was to ensure seamless alignment with the buyer's expectations and industry benchmarks.

Throughout the workshop, our dedicated attendees received a comprehensive introduction to the buyer program. We delved into the program's core objectives, its vital role in ensuring product quality, and how it aligns with prevailing industry standards.

To provide a practical dimension to the workshop, we organized live physical test demonstrations. These demonstrations showcased the precision and reliability of our state-of-the-art testing equipment, assuring our partners of our commitment to the highest standards of quality control.



Health and Well-being



■ Awareness of health and well-being of women at workplace

At SGS, we're deeply committed to women's empowerment, and it's a pleasure to share the success of our recent initiative. On August 24, 2023, we organized a special session dedicated to creating awareness about women's health and well-being in the workplace. This session aimed to equip our female workforce with knowledge and strategies to prioritize their health, achieve a fulfilling work-life balance, and excel in their professional lives.

We were honored to welcome a distinguished team from Rotary Club & MMIH who joined hands with us in this noble endeavor. Our Managing Director, Abdul Razzak Lakhani, expressed his heartfelt appreciation for the dedication of our female employees in taking a proactive stance towards their health and well-being by actively participating in this session.



READ THE ARTICLE

Article Author : Iqra Akbar
Deputy Manager - Industries & Environment – SGS Pakistan
Email: Iqra.akbar@sgs.com



■ SGS trailblazer: Scaling new heights as the first to conquer the mountain

Sky is the limit! Just one month ago, our colleague from C&P service Ramzan Javed has reached a breathtaking 6050 peak, climbing the Khosar Gang mountain in Northern Pakistan.

Ramzan joined SGS team in Lahore back in 2006 and is now working as Key Account Manager handling testing programs for textile, apparel, carton, leather, accessories etc. He has also been nominated as a Superuser for our Laboratory Information Management System (LIMS).

"I love nature and mountaineering is my passion," says Ramzan. "I've been trekking since 1998, and mountain climbing since 2018."

We believe that a passion for adventure fuels creativity and innovation in everything we do. It's incredible to witness our team members blaze trails both professionally and personally!



■ Reader's Feedback

- We welcome your feedback and suggestions about our newsletter at pkindiv.mkt@sgs.com
- SGS Pakistan encourages your contribution to our newsletter by sending in your Technical Articles at pkindiv.mkt@sgs.com
- Other SGS Middle East videos can be found here: [SGS Middle East](#)
- We also publish useful content on other channels:

LinkedIn: <https://www.linkedin.com/company/SGS>

Facebook: <https://www.facebook.com/SGSMiddleEast>

Instagram: <https://www.instagram.com/sgsmiddleeast>

Website: <https://www.sgs.com/en-pk>



The 17th EFP OSHE awards 2022



9th international environment, health & safety summit & awards



SGS Pakistan celebrates safety month:
stay safe at work and home



SGS Pakistan celebrated the independence day with plantation drive and community building activities





SGS helps pakistani exporters to clarify WRAP requirements via an awareness session in Karachi



Awareness of health and well-being of women at workplace



SGS trailblazer: Scaling new heights as the first to conquer the mountain



SGS.COM

WHEN YOU NEED TO BE SURE

