TQM-INDIA UNISON

19th & 20th April, 2024 at ABV-IIITM, Gwalior

Organised by QCFI - Headquarters
Hosted by QCFI Gwalior Chapter
In association with ABV-IIITM, Gwalior

Quality Governance
Key to transformation

THEME

Total Quality Approach
- Ultimate Growth Lever

Souvenir

KEY FEATURES

- TQM Success Stories by Eminent Experts & Panel discussions
- Technical/Research Papers
- All organisations eligible

Case Studies on

- Innovations
- Best Practices
- Any Good Improvement Work/Projects
- High Impact Work
- Growth Journeys

Conveying P-D-C-A Thought Process

- NCQC 2024 Qualification for teams above 70%
- ICQCC 2024 Qualification for teams above 80%

ESG - For Planet

Total Quality People
- A Global Solution

Sengol - Tamil word 'Semmai' - Righteousness
Sanskrit word - 'Sanku' - Shakha - Auspiciousness

CENTRE OF EXCELLENCE

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Quality Circle Forum of India

Gwalior Chapter

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Chairman and GC Members of Gwalior Chapter wish

TQM-INDIA UNISON 2024 GWALIOR

a grand success

TQM-INDIA UNISON

19th & 20th April, 2024

at ABV-IIITM, Gwalior

Theme : Total Quality Approach - Ultimate Growth Lever

Souvenir

Editorial Board

D. K. SRIVASTAVA

SUNIL SHRIVASTAVA

R. SRINIVASAN

MANOJ REDDY

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TQM-India Unison – Tentative Schedule

TQM-India Summit - 19th April, 2024	
7:30 AM to 9:30 AM	- Registration
7:30 AM to 9:00 AM	- **Networking** & Breakfast
8:30 AM to 10:00 AM	- Inaugural Function -
10:00 AM to 10:30 AM	- **Networking** & Tea
10:30 AM to 1:30 PM	- TQM Success Stories / Best Practices by CEOs
1:30 PM to 2:30 PM	- **Networking** & Lunch
2:30 PM to 4:00 PM	- TQM Success Stories / Best Practices by CEOs
4:00 PM to 4:15 PM	- **Networking** & Tea
4:15 PM to 4:45 PM	- Panel Discussions by CEOs / TQM Experts
4:45 PM to 5:45 PM	- Valedictory Function

TQM-India Conclave - 20th April, 2024	
7:30 AM to 9:30 AM	- Registration
7:30 AM to 9:00 AM	- **Networking** & Breakfast
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10:30 AM - 11:00 AM	- **Networking** & Tea
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2:30 PM to 3:30 PM	- Panel Discussions
3:30 PM to 4:00 PM	- **Networking** & Tea
4:00 PM to 5:30 PM	- Award Function

About the Venue:

Indian Institute of Information Technology and Management (IIITM) in Gwalior, Madhya Pradesh is an autonomous institute set by Government of India, MHRD (Presently Ministry of Education, Govt. of India) in 1997. It is an effort by MHRD (Presently Ministry of Education, Govt. of India) towards creating professionals in areas of management and information technology from the same institute. This institute was created for facilitating higher education, research, and consultancy in areas of information technology (IT) and Business Management. Initially started as IIITM, this institute was prefixed with ABV in 2002 to honour the then Prime Minister Shri Atal Bihari Vajpayee.

Gwalior is steeped in history and is packed with beautiful monuments and temples. Enjoy the rich cultural history, well connected by air, train & road.

Editorial Board

Shri D K Srivastava

Shri Sunil Shrivastava

Shri R Srinivasan

Shri Manoj Reddy

In Gratitude

Dear Participants / Readers,

Greetings !

At the outset, the Editorial board thanks the QC Fraternity and all those associated with TQM - INDIA UNISON for their excellent cooperation to make this grand event happen.

Good will messages from the dignitaries encourage the organisers and participants in their endeavour.

The souvenir lists out the events of TQM - INDIA UNISON besides the technical write-ups.

The editorial board appreciates and acknowledges the contribution made by the authors for their articles which will add value and learning to the readers.

Readers will find colourful Ads from the chapters who responded to our request, highlighting their achievements and extending their best wishes for the success of TQM - INDIA UNISON.

Last, but not the least the editorial board is grateful to the sponsors, advertisers and associates for their munificence enabling us to bring out this colourful edition of TQM - INDIA UNISON.

Our special gratitude to the host chapter Gwalior and ABV-IIIT, for their excellent support in making the summit a unique one.

Our sincere thanks to M/s Dhanalakshmi Graphics for bringing out this Colorful Souvenir in an attractive manner.

19-04-2024
Gwalior

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Shri Thomas Mathew	QCFI - Gwalior
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2	Control Room	Shri Thomas Mathew
3	Stage Management	Smt. Geeta Jadon, Smt. Jessy Mathew Smt. Prafull Nigam
4	Hall Management	Smt. Geeta Jadon
5	Delegate Registration	Shri Jackson Mathew
6	Catering	Smt Kiran Kaur, Shri Manish, Smt Vandana
7	Master Of Ceremonies	Smt Shelly Saxena
8	Visual Display	Shri Ajay Sharma & Shri Manoj Sharma
9	Press Conference	Shri Amit Bahal
10	First Aid, Fire Safety & Security	Smt Anushree Gaur
11	Internet Services	Shri Amit Bahal & Smt Preeti Sharma
12	Secretariat	Chapter Office Staff
13	Industrial Visit	Shri Akshaya Bhatnagar & Smt Vandana
14	Student Volunteers	Gwalior Glory High School
15	Cultural Programme	Gwalior Glory High School & Bhartiyam Vidya Niketan

List of JURY members

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Shri Tiwari

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TQM-India Unison 2024 Theme

Total Quality Approach - Ultimate Growth Lever

The TQM-UNISON theme is "Total Quality Approach - Ultimate Growth Lever" which focuses to bring out proven strengths of comprehensive Total Quality Approach; through not only from TQM success stories from CEOs of successful organizations, but also from creative, innovative, improvement projects using effective TQM practices.

The theme will see TQM experts and CEOs sharing their thoughts and success stories on "how all Effective TQM Practices synergize the technical and behavior excellence of the workforce across the entire hierarchy and have effectively aligned and delivered the expectations of all stakeholders". The theme will also emphasize the evergreen critical success factor of "Total Involvement of Total Quality People" which ensures seamless quality everywhere all-the-time, and builds the base for quantum, sustainable, inclusive growth.

About Quality Circle Forum of India (QCFI)

QCFI today is a "One-Stop Solution" for all Business Excellence needs of the organisations!

QCFI was formed in March 1982 by like-minded people from Industry, Indian Statistical Institute & Local State Government and Registered as a Non-profit body Under Societies Act 1350F of A.P. in December 1982 at Hyderabad.

QCFI's Headquarters is in Hyderabad.

In India, the Quality Circle movement was pioneered by the prestigious Public Sector Industry, Bharat Heavy Electricals Limited in January 1981 at its Ramachandrapuram Plant, Hyderabad, and JK Jute Mills, Kanpur in the private sector.

QCFI has 30 Chapters, 4 Sub-Chapters & 1 Center spread all over the country.

An Executive Board with Elected Directors from the members manages the affairs of QCFI. President elected by the Executive Board is the Head and Board also elects two Vice-Presidents and one Honorary Treasurer. Regular administration is with the Executive Director and he carries out the activities as per the Forum's policy and decisions taken by the Board from time to time.

President	- Sri. Avinash Mishra
President Emeritus	- Sri. S J Kalokhe
Advisor	- Prof. A K Mittal
Vice Presidents	- Prof Pradeep Srivastava
	- Sri G P Singh
Executive Director	- Sri D K Srivastava
Treasurer	- Sri B Srinivas

Each Chapter has a governing council that functions in line with QCFI policies and procedures. A Chairman, Vice-Chairman, Secretary and Treasurer are elected among its GC members.

QCFI is engaged not only in spearheading Quality Circles in the Member Organisations but also in Quality Team Concepts like 5-S, Kaizen, Simplified TPM, SMED, Lean Manufacturing, Six Sigma, Lean QC and Lean Safety Circle etc., all under the umbrella of Total Quality Management (TQM). QCFI extends service to education, health, the rural sector, etc., for propagating Quality Concepts. QCFI conducts certification audits for 5S and WCM.

QCFI brings out various publications on Quality Concepts from time to time for dissemination of knowledge to its practitioners. Also bi-monthly Journal 'Quality Circle India' is published and circulated to member institutions. This is also sent as E-Magazine. Similarly, chapters also send their Newsletter and E-Magazine to the members.

QCFI Membership Status

1.	Institutional Members	1884
2.	Life individual Members	9045

QCFI has a dedicated group of senior experts to advise, and a younger group of people to execute the plans.

QCFI is spreading its wings to Non-Member Organisations by giving free awareness program so that they can appreciate the usefulness of the concepts in their units. Thrust is now given for propagation, training & skill development thru' Quality Concepts with MSME Industries in India. WCM program is initiated in Parle Group of Industries and Karakuri Kaizen with the

association of Coimbatore Chapter and PSG College of Technology. Faculty and JURY development program are conducted online through video recorded modules on various Quality Concepts.

The Chapters are governed by the elected chairman, Vice chairman, secretary and elected members of the governing council members.

Chapter Conventions on Quality Concepts are conducted annually by the Chapters.

National Conventions by HQs - Annual Feature - 36 National Conventions were organised so far.

QCFI represents India in 14 Nation International Committee organizing International conventions annually by rotation.

4 ICQCCs were also hosted by QCFI India. The last one was conducted at HICC- Hitech City, Hyderabad in Nov. 2021.

QCFI also conducts annual National Conclaves on various topics.

QCFI has recently embarked upon the following thrust areas for TQM promotion across the country

- Developed a central pool of subject matters, imparts to cater to pan India, TQM solutions for WCM, TPM, HR, SAFETY, and EHS for all sectors.
- Launched a few fast-track holistic business solutions to reduce project cycle time by 1-3 months
  - i) Agile Business Performance improvement designs of
    - a. Agile Yellow Belt
    - b. Agile Green Belt
    - c. Agile Black Belt
  - ii) Agile RCM (Reliability Centred Maintenance) Solutions
  - iii) Agile Behavior Safety, Stress Management Interventions
  - iv) Cross-functional, Cross-level Dynamic small group (DSG) for faster better cheaper solutions

Any other tailor made QC concepts for client organisation as per their requirement.

Certificate

The FIVE-S Certification Body of
Quality Circle Forum of India (QCFI)
Jointly with
Union of Japanese Scientists and Engineers (JUSE)
Certified that

AUTOMOTIVE AXLES LIMITED,
MYSURU

has successfully implemented
FIVE-S Workplace Management System in their unit
An audit was performed and it was found that
all the requirements are fulfilled.

This certificate is valid until 30th November 2020

Total 5S Certified Organisations - 297

JUSE - QCFI Certified - 160

As on 15th April 2024

Message

Shri Avinash Mishra
National President
Quality Circle Forum of India

I extend a heartfelt welcome to everyone attending the second TQM-India Unison event organized by QCFI in collaboration with the Gwalior Chapter and ABV-IIITM on April 19th and 20th, 2024, in Gwalior.

We anticipate the participation of approximately One hundred teams, each presenting improvement case studies across 10 parallel halls. Additionally, senior management will share paper presentations and best practices in the auditorium.

This event offers an excellent opportunity for quality professionals nationwide to convene and exchange insights.

The theme of TQM-Unison, "Total Quality Approach-Ultimate Growth Lever," underscores the importance of implementing proven quality practices to achieve organizational excellence. The venue provides top-notch facilities for the convention, ensuring an enriching experience for all attendees.

My best wishes for a successful event ahead.

Avinash Mishra

Message

Shri Satish Kalokhe
President (Emeritus) QCFI

I am happy to welcome all of you for TQM-India UNISON at ABV-IIITM, Gwalior on 19 th & 20 th April 2024. This is a very good opportunity for all middle and senior level management people to learn from TQM success stories by Eminent Experts, Technical/Research papers and Case studies.

TQM is a set of systematic activities carried out by the entire organization to effectively and efficiently achieve company objectives so as to provide products and services with a level of quality that satisfies customers at the appropriate time and price. This is a definition of TQM in Deming Prize Committee.

Quality from the viewpoint of conformity to customer needs has three levels of evaluation. 1) Quality evaluated from functionality. 2) Quality evaluated from feeling 3) Quality evaluated from social aspects. This TQM-India UNISON will help all the participants to understand how to satisfy customers for their needs at all three levels.

Gwalior Chapter is rendering a great help towards organizing this UNISON with collaboration from ABV-IIITM. I thank all the governing council members of Gwalior Chapter for a grand success of this UNISON. I also thank the management of ABV-IIITM for their full-hearted support to make this UNISON a grand success.

Mr. Sunil Shrivastava, COO (TQM Division) and his team members from QCFI Head quarter worked very hard for the success of this UNISON. I thank all of them. Learn a lot in this TQM-India Unison. Implement your learnings at your workplace.

Enjoy your stay at the beautiful city Gwalior.

Satish Kalokhe

Message

Dr Ashok K Mittal
Chief Advisor
Quality Circle Forum of India

Dear Delegates

Congratulations for participating in TQM-INDIA UNISON, second national level Event being organized by Quality Circle Forum of India at lush green campus of IIITM Gwalior. Event will bring together Senior Managers to Grass root workers at a common platform to understand and appreciate philosophy and systems of TQM.

India is moving with a fast pace towards becoming ten trillion-dollar economy and in the process become a major global player in trade of goods and services. This will an un-precedented growth opportunity to many Indian manufacturing and service providers. Such a growth will not be possible without robust and effective systems on one hand and a dynamically changing requirements on its workforce on other hand.

Philosophy of TQM with emphasis on a Win- Win for all its stakeholders (Internal Customers, External Customers, investors and Communities) provides a platform to create such systems and manpower.

I congratulate QCFI to take this initiative and hope all of you will be benefitted with the exchange of ideas among yourselves.

Dr. Ashok K Mittal

Message

Shri D. K. Srivastava
Executive Director
Quality Circle Forum of India

TQM Friends ,

Greetings to all of you. I am happy to welcome you all in TQM-India Unison to be held on 19th and 20th April 24 at ABV IIIT college campus Gwalior. I am happy to state that the first convention held at Bengaluru on TQM Summit was a great success. As You know that QCFI is organising various conventions and conclaves mainly to give opportunity to quality practioners which provide good platform for sharing knowledge and best practises across industries on specific fields. Such periodic events provide very good professional interaction to choose best from industry and benchmark. In this regard you will be happy to know that QCFI is organising 1st International Conclave on Cement Industry on 10th & 11th May 2024 at Fortune Pandian Hotel, Madurai and 10th National Conclave on 5S on 15th June 2024 at Sri Krishna Collage of Technology Kovaipudur, Coimbatore. I am sure many of you will be able to participate in large numbers.

We have seen visible benefits of Quality concepts integrated with TQM like Kaizen 5S Lean QC Lean safety circle and TPM in various industries to improve operational efficiencies and reliability.

This TQM meet will give yet another scope for Quality Concepts fraternity for enhancing the scope of their performance. Senior Management staff will be delivering their success stories of their TQM journey while the teams will present improvement case studies. There are about One hundred case studies .

The venue at college premises provide excellent ambience for learning and I am confident all of you enjoy the stay and take aways of mutual learnings.

QCFI has opened up the programs of JDP and virtual clarification sessions starting from April 24 to develop the participants as Juries and internal resource persons. Please look for WCM sessions also through online. For details please log on to www.qcfi.in

With best regards

D. K. Srivastava

Message

Shri Sunil Shrivastava
Convenor – TQM-India UNISON, 2024; &
Head - Centre of excellence - QCFI
Secunderabad

Dear Quality Champions,

Greetings!

Amazing vibrations flow when we decide to come together for a cause at TQM-India UNISON - 2024 on 19-20 April 2024 at Gwalior! The TQM-UNISON orchestra has a Summit on 19th April to share knowledge, best TQM practises, insights and systems from successful organisations' leaders; and has a Conclave on 20th April with Plethora of TQM Case studies presentations from diverse sectors upholding the Indian spirit of creativity and innovation!

The "TQM-India UNISON" consolidates Indian eternal wisdom-pearls to evolve more meaningful and practical TQM-Model suiting to Indian organizations' needs!

The second annual TQM event by Centre of Excellence - QCFI, helps to explore, evolve and conclude on much-needed Indian TQM Model.

This Indian model being simpler, more effective has much less documentation and jargons and is much more economical making it affordable for all Indian Organizations. We'll be looking forward to its widest possible usages in the coming years for the country's faster GDP growth!

we, at QCFI, are proud enablers for such a practical breakthrough TQM model which establishes 'Righteousness' (*SEMMAI* – a Tamil-word meaning "right in each and every aspect" (a win, win for all) and "Auspiciousness" (*SHANKU* – a Sanskrit Word meaning welfare of all stakeholders **"सर्वजन हिताय, सर्वजन सुरवाय"**). This Indian concept of quality is much more comprehensive, meaningful and ignites the human mind and spirit! This propels much greater growth of India towards developed nation sooner than planned! We find the Indian TQM Model is symbolized most holistically by Indian words SEMMAI or SHANKU which are manifested in our TQM logo of "*SENGOL*"!

Look forward to much wider spread of practical quality interventions from QCFI best suited for Indian Organizations for accelerated growth synergising with their current systems' strengths,

My heartiest congratulations to all the participating Quality Ambassadors in teams and delegates; and wishing you all a great success in taking "SENGOL" spirit forward,

Best Regards,

Sunil Shrivastava

QUALITY CIRCLE FORUM OF INDIA
CHENNAI CHAPTER

Best Wishes from QCFI Chennai Chapter for the

TQM-India UNISON 2024

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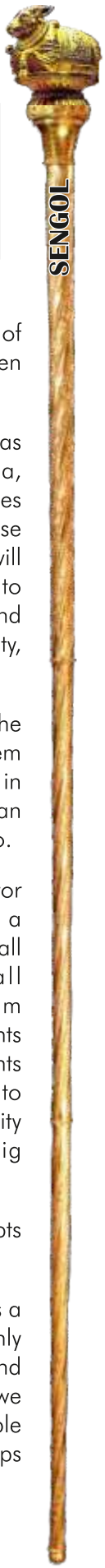


Use of Quality Concepts for Growth of the Organization

by **Shri Satish Kalokhe** — President (Emeritus) Quality Circle Forum of India

Development of economy leads to improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. This subject is of great importance to run the wheels of civilization. Today various types of manufacturing industries offer us resources worth of 1 billion US Dollars.

India Has the World's 6th Largest Manufacturing Output

Despite being having second largest population with good number of engineers and skilled workers; India is unable to utilize its resources due to lack of technological advancements and not utilizing human potential. There is very little awareness about using full potential of our human resources in India. We have not expanded it into a level that can boost our economy. This needed a lot of training to the people who are already in this area and also needed to increase the awareness among Indian people. Training can be of two types. One is hard core technical training of the subject and other is Managerial training.

Quality Concepts training is a part of Managerial Training. These are universal techniques which can be applied for Food industry, Energy industry, Transportation industry, Mining, Water Industry, Leisure industry and health industry. All above mentioned industries are important part of Economy. These industries are also part of Green Economy. Quality concepts are already being used in Green Economy and benefited the Green Economy a lot. Just to give you one example, QCFI organizes every year a National Convention in which more than 500 Indian industries participates by nominating 2000 teams to showcase their success stories. Annual benefit which these teams give to their organizations is Rs.1500 Crores through the improvement projects using these Quality Concepts. This is just the tip of the Iceberg. Less than 1% teams participate in the National Convention and so if we add the benefit of all the teams working on Improvement Projects then the benefit will be multiple times

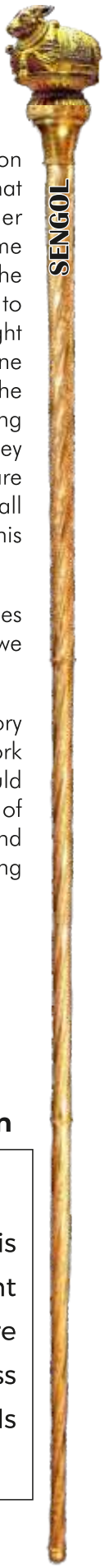
There are various types of Quality Concepts such as 5S, Quality Circle, Kaizen, TPM, TQM, Six Sigma, Lean Thinking etc. If we train the people of Industries working for Blue Economy for the use of these Quality Concepts then Employees themselves will eliminate lot of wastages in the processes/systems to reduce/eliminate non value adding activities and achieve World Class Level in quality, productivity, cost, delivery and safety.

Working with these Quality Concepts enhances the "Morale" of the employees and totally involve them in the Organization's working. This is experienced in the Green Economy Industries and similarly this can be experienced in the Blue Economy Industries also.

Lack of innovation in the manufacturing sector through R&D efforts is also a challenge. There is a statistic which says if you have 3000 very small improvements then you have 300 small improvements, then you have 30 medium improvements, then you have 3 big improvements and then 1 innovation. The small improvements through all employee involvement also help to sustain the benefit of the innovation. Quality Concepts are used for small, medium, big improvements

I give two examples of use of these Quality Concepts for the benefit of industry.

First example is from shipping industry. There was a severe competition in the shipping industry and only way of survival was to increase the productivity and reduce the cost. Some companies thought that if we improve the design of the ship engine and double the speed of the ship then we can double the trips and so can double the revenue. They spent lot of



money in improving the design of the engine to double the speed and they doubled the productivity but with a very heavy cost. Other few companies did not spend money for improving the design of the ship engine but they studied the total system of ship transportation. They observed that lot of time is wasted in loading/unloading of material at the ports. They improved the process of loading/unloading at ports by introducing "Containerized system" for loading/unloading at ports. With this improvement also they could double the trips and double the revenue and double the productivity with much lower cost. This was possible because of use of Quality Concepts involving all the concern employees.

The second example is of "Fish quality". Fishermen used to go to high seas to catch fishes and returned to sea sore after few days which used to deteriorate the fish quality and customers were complaining. Fishermen did some improvements and start using ice to store these fishes, this has improved the quality little bit and customers continue to complain about it. Fishermen further improved the quality by storing the fishes in deep freezer. This has further improved the quality. Customer complaints reduced but still there were some complaints. So, Fishermen further did improvement and started carrying water tank on the boat to store the fishes in the water tank so that the customers will get fresh fishes. Customer complaints reduced substantially but still some customer complain about the quality because in the water tanks there was no movement of fishes due to limited size of the tank which resulted in slight deterioration in the fish quality. So fishermen did one more Kaizen. They put few small shark fishes in the tank so that other fishes are always actively moving in the water tank to save their life. So by the time they reach the seashore after some days, still fishes are fresh. In the process, some fishes are killed by small shark fishes but other remaining fishes are fresh. This reduced the customer complaints near to zero.

From both the examples, it is clear that employees who are doing the work can improve their work if we train them with various Quality Concepts.

I appeal all management people from supervisory level to M.D. level that they should demand "Work improvements" from their subordinates and should not demand only "Work". This will create hunger of learning new things in the minds of employees and the organization can become a continuous learning organization which will lead to world class level.

All improvement happens project by project and in no other way

- Joseph M. Juran

Lean Quality Circles - Agile solution to achieve business goals.

This approach is a unique QCFI solution for project-by-project improvements and is highly effective due to implementation of 'top-down' & 'bottom-up' engagement simultaneously! It works out seamlessly by objectively formed teams which are cross functional & cross-levels (across the hierarchy) and addresses all business gaps across the entire gamut of organizational activities! It can use high-end tools as required by the project through competent QCFI facilitators!

Total Quality in Mining and Metal Sector

by **Shri Manoj Soni** — Vice President & Head Business Excellence
Hindustan Zinc Limited, Udaipur.

On the outset of TQM- India Unison 2024, we must acknowledge the immense contribution of QCFI in strengthening the culture of Total Quality across India. With the theme "Total Quality Approach- Ultimate Growth Lever", TQM- India Unison- 2024 is all set to become the benchmark.

In Today's ever changing and challenging business environment, continual improvement in sustainability, productivity and efficiency are vital to remain competitive. At the same time, it is imperative to sustain the pace of improvement in these aspects. Total Quality Management is one of such approaches that helps developing a culture focused on excellence in the organisation.

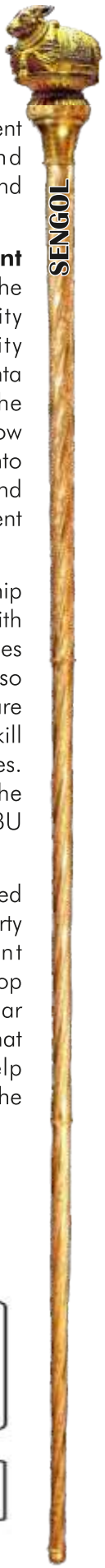
According to a study, Manufacturing and Service industries have experienced a steady increase in productivity and efficiency over last few decades. Ten largest companies of manufacturing and services have witnessed their productivity grows by 15 and 25 percent respectively, whereas top ten mining companies have seen their productivity growth at around 1 percent over the same period.

The public opinion sees mining as old, dirty, dangerous, and environmentally debateable industry, now a days, mining is extremely technology driven, safe & companies from mining sector have also started competing for global recognition on under various excellence model and reaping the benefits of the same. Quality is no longer considered as Lab Analysis rather; it is part of every employee's responsibility.

With the prime focus on Customer Supremacy and growth aligning to the vision/ purpose of the organisation, many Corporate Groups under common policies and procedures have developed their own customise business excellence model. TBEM- Tata Business Excellence Model, TMW- The Mahindra Way, GBEM- GMR Business Excellence Model, are the few BE model adopted by Indian Corporates. Largely these covers various aspects of Malcolm Baldrige/ EFQM of BE Model.

While Bharat i.e. India is aiming to become $5 T economy, Indian Foundation for Quality Management (IFQM) has also been set up to enhance prosperity and quality of life for all. IFQM with the mission of becoming a catalyst for Indian Businesses to become globally respected, will also advance the journey of Total Quality, apart from QCFI- Quality Circle Forum of India driving the Total Quality for Indian Mining and Metal Sector.

Like other corporate groups, **Vedanta Group** also have similar Business Excellence model split into three frameworks known as **Vedanta Sustainability Framework** (VSF), **Vedanta Quality Management Framework** (QMF) and **Asset Optimisation (AO) framework** to drive excellence. VSF covers various ESG and HSE aspects, whereas being an asset intensive industry, Asset Optimisation primarily focuses on the Asset performance to achieve the volume and cost targets. Similarly, Quality Management Framework focuses on Customer delight through quality assurance and quality control across value chain i.e. Mines to Market.



Vedanta Quality Management Framework: It consists of various modules under the buckets of Core Quality Modules, Enablers and Results.

Here QMS Modules (also referred as Core Modules) elaborates and sets the minimum requirements on various aspects of Suppliers, Processes and Customers while ensuring implementation of all possible improvement opportunities across the value chain.

Enablers are the sets of requirements to accelerate the implementation of frameworks in letter and spirit. These modules also ensure identification, evaluation and implementation of latest digital technologies and automations to enhance efficacy and efficiency.

Quality Management System

- Customer Quality
- Supplier Quality
- In Process Quality
- Continual Improvement

Enablers

- Leadership
- Skill Development
- Digitisation

Results

- Customer Complaints Management
- OTIF and COPQ Performance
- Benefits from Continual Improvement Programs

Results are the measures of effective and efficient implementation of various practices and requirements as elaborated in QMS modules and Enablers.

Implementing Vedanta Quality Management Framework: Leadership at Vedanta holds the Image Strategy Deployment Under Quality Framework Implementing Vedanta Quality Management Framework: Leadership at Vedanta holds the accountability of implementing the framework in letter and spirit. Image-3 shows how Senior Leaders' strategic planning are converted into Long Term, Mid Term and Short-Term plans. And ultimately implemented through Daily Management through Daily reviews.

To effectively implement the framework, Leadership identifies and empowers the right people with responsibilities; be its own employees or employees from Business Partners. These people are also known as Module Owners. These people are supported by resources, developed under skill development program to implement the practices. Module Owners are supposed to present the updates at regular intervals to the exco/ IBU leadership as appropriate.

Collaboration and Benchmarking: Every defined IBU at Vedanta undergoes independent 3rd Party assessment on the Quality Management Framework. This enables the IBU to pinpoint top performer across the Vedanta Groups in a particular module/s and replicate the best practices of that unit. Quarterly cross entity assessments help employees to witness various practices across the groups and exchange the ideas for improvement.

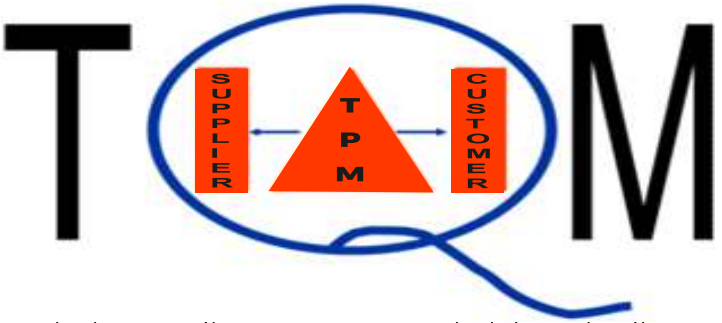
Reflections and Feedback: Like every corporate

business plan, implementation levels are gaged, and necessary upgradation are done with the requirements to raise the quality targets. What is applicable and implemented this year must be sustained with additional new requirements.

Mining and Metal Sector is largely volume driven. A small improvement in quality parameters like metal recovery leads to larger impact on natural resources conservation. Reduced ore dilution through quality control leads to reduction in GHG emissions and Cost on account of its transportation. With above examples, we can say; effective TQM practices can deliver the expectations of all the stakeholders in Mining and Metal Sectors.

Mining and Metal Sector, with the adoption of various technologies and smart equipments; will soon become as fluid, flexible and agile enterprise as other industries.

TOTAL QUALITY MANAGEMENT



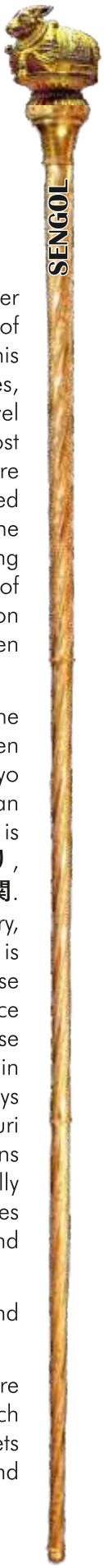
TQM is not a tool or a technique. It is a management philosophy. It is a way of thinking and working. The word 'Quality' is an adjective to the word 'Management' Adoption of TQM philosophy of management uplifts the very quality of management. The word 'Total' represents inclusiveness of everything that a company does. Hence TQM means quality in every activity and everything that a company does.

Thus, TQM is a set of systematic activities carried out by the entire organization to effectively and efficiently achieve company objectives so as to provide products and services with a level of quality that satisfies customers at the appropriate time and price.

The Indian concept of Total Quality is holistically manifested in word "SENGOL" which is derived from a Tamil word "SEMMAI" meaning 'Rightousness' in all aspects for everyone (win-win for all). SENGOL also comes from Sanskrit word 'Sanku'(Shankha) meaning Auspiciousness and stands for pious objectives (well being of all - inclusive growth - positive for the planet & the human-kind) !Let us strive and promote SENGOL - spirit beyond organization to all spheres of human engagement!

For the success of TQM, Total Employee Involvement (TEI) is a must. Through total employee involvement we have to go for Total Process Control (TPC) and Total Wastage Control (TWC) through SQC techniques with the help of small groups at all levels.

Courtesy: DK's Model of simplified TPM book



Karakuri – the common sense approach to kaizen automation

by **Dr. N Vivek**, Professor, PSG Institute of Management, Peelamedu, Coimbatore.

Historical Background of Karakuri equipment

With the amazing success of the Japanese manufacturing companies, particularly Toyota, people across the world have been trying to emulate them and have come to call the efforts kaizen. While the translation of kaizen is continual improvement, it is too concise and needs plenty of explaining to catch the exact implication of the process. Most people catch only a few of the concepts right and even then they only superficially understand the reasons for using a particular tool, be it 5S, jidoka, andon, TPM, Nemawashi, Nichigo Kanri, etc.

Very few are aware of the mother programs that gave rise to the modern edition which were called the Training within industry (TWI) programs, which were introduced into Japan in 1947 and again in 1952. Almost all of the Japanese improvement programs still use these programs in their original form, mostly unchanged. Very few are also aware of the classification of kaizen given by Taichi Ohno. Ohno mentioned three kinds of kaizen

1. People Kaizen
2. Equipment kaizen
3. Process kaizen

And Ohno also added one more kind of kaizen – namely Flow kaizen. Now the second point is rarely understood and people usually associate it with better usage of an equipment or with modifications introduced into the working of an equipment on the workplace. This is associated with the efficiency of using an equipment, also knows in TPM circles as the OE Efficiency.

Now onto point 3, process kaizen. This was derived from the Job methods program of the TWI group and is usually achieved by using the Eliminate-combine-rearrange-simplify (ECRS) approach. The simplify step too has not been very well understood or used although the first three points are well used in any improvement projects under kaizen, six sigma, etc. The original guidelines specified under the simplify approach was to use jigs, fixtures, use of gravity, available mechanical energy, etc. While this has been used to a limited extent in making chutes, sliders etc, it has rarely been taken beyond that level in most kaizen projects. The approach taken by most companies is to get automation machines which are extremely expensive and make use of advanced sensors and state of the art components. The difficulty here, apart from the expense is maintaining these equipment and servicing them in case of breakdowns. The use of very high cost automation equipment also affects the profitability of a firm even if it is running efficiently.

The Japanese have taken a totally different line towards the simplify function and equipment kaizen in general. Their inspiration is the Karakuri Ningyo which were mechanized puppets made in Japan between the 17th and 19th centuries. Karakuri is written in Japanese most commonly as **からくり**, but sometimes also as **絡繰り**, **絡繰**, **機巧**, or **機関**. It basically means gimmick, mechanism, machinery, trick, contrivance, or device. The key point here is some mechanical trickery. The feature of these robots was that they did not use any power source and were purely mechanical. Neither did they use any hydraulic forces in them. These puppets were in all forms and shapes and served in animation plays and puppet shows across Japan. The karakuri pupets were used to convey feelings and emotions by subtle abstract motions which were mechanically designed. Karakuri had three main categories

1. Butai Karakuri which are of medium size and used in regular puppet shows at theatres
2. Zashiki karakuri which are much smaller and used inside smaller rooms
3. Dashi karakuri which are much bigger and are used for performances on wooden floats which are used in religious festivals Karakuri puppets are a fusion between eastern traditions and western technology. This is the starting

point from where Japan's love of technology has developed. Professors Kato Ichiro and Mori Mashiro have been pioneers in the concept of creating life like puppets using principles of biomechanisms. They in fact visualize the puppets as having life and treat them as such. It is this great empathy that allows all Japanese to design and develop machines that are ergonomically exceptional.

Professor SUEMATSU, founder of the SUEMATSU Robotics Laboratory at Nagoya University emphasises that karakuri is one of the most important contributors to the industrial modernisation of japan.

Now onto modern times. The Japanese used all the above principles to come up with a concept of designing machines that run on gravity or mechanical power designed and made using standard components made of aluminium alloy. The main goal of a karakuri device is to improve work. This improvement can be towards safety, quality or productivity of work. This device uses only mechanical gadgetary and avoids electric, hydraulic or pneumatic power. Also avoided is the use of sensors and computers in the running process which emphasizes principles of mechanics to execute the work.

Main advantages of Karakuri equipment are

1. Cheaper: These mechanically run equipment are 90% cheaper than conventional automation equipment
2. Easy maintenance: Any snags can be fixed very easily as it is usually evident on the surface with no high tech components to trouble shoot
3. Easier to design: The design of these equipment can be done by local workers as they involve simple natural principles
4. Quicker try out: From design to trials takes just a few days to a week, unlike complex machines which may take months
5. Standard components: Making these equipment are like working with lego blocks. Same components can be used to assemble a variety of equipment. If the equipment outlives its usefulness, It can be disassembled and the components can be reused to assemble other equipment on site

Principles of Karakuri Kaizen

Karakuri is the art of creating machines that do not need an external power source. This involves the following principles to be considered

1. Power sources and Management

a. Human energy by hands or feet

b. Use of levers and pulleys to amplify human force

c. Energy from movement of other machines

d. Use of gravitational energy, especially for downward movement

e. Wind power in air vents

f. Spring compression to store energy for future use

g. Sea saw and swing principles to generate power

h. Magnets and water jets

2. Types of movement handled

a. Rotational

b. Linear

c. Swinging

d. Intermittent rotation

Applications of karakuri equipment

1. Material Transport.

Let us assume we have two operators A and B working in a facility. A makes the components for B to use. Now The components made by A should not be sent to B unless he is free to work on them. At the same time two workers are needed to transport the materials to B using a trolley. If you are to create an automation for dealing with these requirements of transport and at the same time reduce number of workers used to move the materials, you have an

option to wither buy an advanced conveyor with a sensor and a signalling option by B that he is free and a sending option at A to initiate the send operation. Now this same function can be achieved using karakuri at a fraction of the cost by using the principles of spring power, sea saw and a passive roller conveyor with a balancing central lever point. Operator A is given the option of a foot pedal to elevate his side of the conveyor by one foot to create an inclination towards operator B to initiate transfer of material using gravity sliding. Suppose B wants to control the inflow, he can also be given an option by which he can lock the inclination process from happening using a foot pedal and another spring. This simple design can be executed using standard components that need not be custom fabricated and can be assembled within a few hours at a very low cost and tried out on the workplace. In case it does not work, the components can be used to work with other ideas at the workplace

2. Reducing work Duration

The main impact of any automation equipment is to increase flow speed. Plus since machines are doing the work once done by humans, the volume of human work reduces automatically increasing the output.

3. Reduce stress and discomfort

Activities done repeatedly, especially with fine components and heavy components can cause a strain on the human body. By proper design the ergonomics of the process improves. This allows the workers to maintain longer periods of efficient work.

4. Orientation of materials

During assembly often a lot of time goes into orienting components before the actual assembling effort. This also causes strain on the fingers. Karakuri initiatives can achieve these by means of simple principles of magnets or chutes so that the cycle time is quicker.

5. Cost reduction

Karakuri saves both cost of setting up the automation and cost of running the process in addition to turning out a higher volume of production.

6. Quality improvement

Automation ensures that human errors are eliminated. Also routine tasks lime cleaning, movement, equipment working efficiency, elimination of process variations, etc

7. Safety improvement

Many karakuri devices are geared to work as a sort of jidoka, to work when an equipment fails. It works like a brake in such cases and arrests further damage. Also in handling of dangerous components automation prevents human health related hazzards

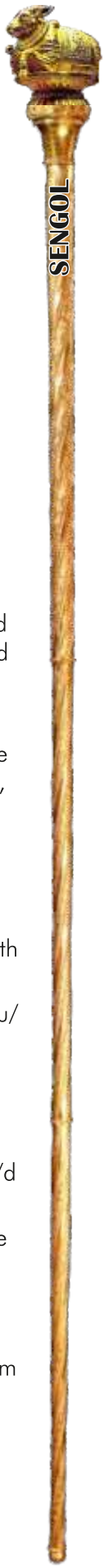
How to get started with Karakuri Journey

This journey involves more of an internal attitudinal change and orientation change rather than any expensive investment in tools and techniques. It involves the ability to see.

While the karakuri principles are easy and a lot of material is available in the internet for free, karakuri journey has to be a structured learning usually passing through three phases.

Phase 1: Understanding the principles of karakuri equipment and applying them to create requirements of karakuri equipment to achieve business and operational goals of the company. Here the focus is on freezing target outcomes of installing the equipment. Main focus is on mastering the big picture, namely ability to ask for specific equipment requirements. This involves the understanding of what karakuri can accomplish and cannot handle.

Phase 2: Designing Karakuri equipment based on requirements listed out at the workplace is the next phase of learning. Here it is essential to learn the properties of various standard components available in the karakuri world. These components are usually made of aluminium alloy to make them lighter and more precise with higher precision levels in dimensions. Once the component properties are mastered, the principles of movement are used to prepare a full equipment design with the bill of materials. This often involves the use of software tools like solidworks and proE. This stage also involves use of miniatures to test proof of concept



Phase 3: Once phases 1 and 2 are mastered, the next phase aims at workplace trials. Often design assumptions are proved incorrect during this phase and some adjustments have to be made. This phase involves assembling and commissioning of the equipment. It also involves maintenance plans and training the users on how to work with the equipment. This phase also involves getting the workers to continuously think on how to improve the equipment from its current performance, which is totally opposite of what we expect from regular automation equipment which are run for many years without a change.

Karakuri Careers

In Japan many entrepreneurs have set shop to design and assemble karakuri equipment for the bigger companies which keep getting these requirements as part of their continuous improvement initiatives. It does not involve much of investment as the components are usually standard and only upfront investment is in a good computer and component costs. This is a highly challenging job and involves making unique equipment each time with hardly any equipment resembling the previous ones.

In companies having their own engineering department, this creates an opportunity to design and implement low cost automation at a lightning speed in house.

Toyota has set up a karakuri studio, a sort of college in 2007 to train workers and engineers in the principles and design of karakuri machines. Thanks to this initiative spearheaded by Takeshi Uchiyamada, the chairman Toyota has set up a database of 2,000 low cost power saving short cuts

Karakuri Exhibition

The Karakuri concept is a national treasure in Japan and is currently supported and promoted by the Japan Institute of Plant Maintenance (JIPM) which organizes an annual karakuri exhibition at Nagoya where hundreds of karakuri devices are on display. Recently this exhibition is also being organized at Thailand. More details can be had from the website of JIPM

Some Karakuri equipment manufacturers in India

1. Standard units supply India pvt ltd
2. Endo Kogyo India pvt ltd
3. Bibus India pvt ltd

References

Karakuri Information:
http://www.karakuri.info/zashiki/index.html

Karakuri kaizen principles:
https://www.allaboutlean.com/karakuri-fundamentals/

Karakuri exhibition:
https://www.jipmthailand.com/,

https://jipmglobal.com/activity/karakuri-kaizen ,
https://jipmglobal.com/case/case01

karakurirobot.org(in Japanese), a recently formed NPO (Not for Profit Organisation) to educate and promote the Karakuri tradition internationally,

http://www.karakurirobot.org/

Karakuri Frontier(in Japanese) is a comprehensive website by the world's leading expert on Karakuri, Professor SUEMATSU

http://www.toyota-ct.ac.jp/~jimu/syomu/suematsu/karafro.html

Inuyama Cultural Artefacts Museum is where

TAMAYA Shobei IX has a workshop and annex with several Karakuri works on display

http://www.city.inuyama.aichi.jp/inuyama/kankou/bunka/e_bunka.html

Dondenkan in Inuyama, where four Dashi floats are on display which appear in the Inuyama Matsuri (festival)

http://www.city.inuyama.aichi.jp/english/kankou/donden/donden.htm

NALUSE is the only wadokei (traditional Japanese clock) maker in Japan

http://www.naluse.co.jp/

Inuyama Tourism,
http://www.city.inuyama.aichi.jp/english/index.html

Nagoya Tourism,
http://www.ncvb.or.jp/index_e.html

Smart Collar belt - an advance tool for monitoring dairy animal system

by **Dr. Shivkumar Ramrao Patil,**
Practice Head – PES (West), NDDB Dairy Services, New Delhi

ABSTRACT

Selection of Problem:

Now a days almost all dairy farms facing the biggest problem that is detection of heat at right time in dairy cattle which is one of the deciding factors of running farm at profit or loss. There are five major areas which will be monitored by using advance techniques. They are reproduction, health, nutrition, cow comfort and labour. These are the areas which brings profit to the dairy farms. After introduction of this new technology there were a lot of things we can monitor in area if feeding efficiency management, Health Monitoring, Reproduction Monitoring, Pre-Calving Distress Alert, Temperature and Humidity Index (THI), Heat stress and group monitoring module etc.

The socio economic conditions of small-scale farmers are very poor and become a consent of big financial loss for proactive farmers. Small dairy households are facing numerous challenges, which include low prices of milk, low genetic potential of dairy animals resulting in low productivity levels, nonavailability of institutional finance, poor animal health-care facilities, feed -fodder management poor extension services, and poor rural infrastructure. Waste of Money- excess consumption of semen straw for insemination- with no guidelines of identifying the right animal under heat Delayed, identification of Sick animal with loss of appetite virtually affecting the productivity of cattle's.

Linkage to company objective with target time

Average per Animal productivity of milk in India is less and correct identification of heat is concerned for main company objective for timely insemination and obtain optimum health for milk production.

Hence it became more imperative to carry out the project. The team was given two months' timeline to solve the problem and team responded with great responsibility by completing the project within stipulated time.

Development of solution and implementation

Sensor's systems that continuously monitor animal physiological conditions are enablers in the goal of maximising animal welfare and optimising farm productivity. Implementation of Collar belts having facility to track the animal movement in 500 x200m distance having, its highly waterproof IP68, highly operatable under -30-to-50-degree Celsius temperature, long battery backup for 7-year duration, light weight 98 gm applied over animal neck of the cattle with adjustable strap H*84mm*W 64mm*D15mm. Neck-mounted tri-axial accelerometer collars monitor cattle at an individual level for 24 h per day and provide a number of key animal behaviour, predominately 'restlessness' (an indication of oestrus), the basis for enhancing herd fertility.

It will help us to determine the overall precision of the algorithms that estimate heat stress. The integration of collar measurements with temperature and humidity data automatically provides the Temperature Humidity Index (THI) important to enhancing on-farm decision making. The approach provides the basis for a fully automated system that enables farmers to quantify the effectiveness of strategies e.g., water sprinklers to provide effective relief to their cattle and improve animal welfare.

Verification of implemented actions.

Initial trial implementation done in One cattle and later horizontal deployment was done in other cattle.

Benefits and Learning from The Project

- Cost Savings of Rs. 10500 per Annum per Cattle.
- Improved Efficiency and productivity.
- Suitable for farmers with mobile access interface

collar belts to cattle, especially smart collars, can offer several financial benefits to dairy farmers.
Let's explore how:

1) Boosted Reproduction:
Smart non-invasive neck collars monitor temperature, activity, and behaviour of each individual cow. These collars provide heat detection alerts, helping farmers treat affected cows promptly during estrus cycles. Improved reproduction rates lead to more calves and a healthier herd, ultimately contributing to increased profits1.

2) Increased Milk Yield:
By closely monitoring individual cows, smart collars help optimize feeding schedules, detect health issues early, and ensure cows are comfortable. Enhanced herd health and well-being result in higher milk production. Farmers report up to 15% higher milk yield compared to previous years1.

3) Labor Cost Reduction:
Smart collars streamline operations, reducing the need for manual monitoring. Farmers receive actionable recommendations, allowing them to focus on critical tasks rather than constant cow surveillance. Labor costs decrease as the system watches over the herd 24/71.

4) Antibiotic and Vet Visit Reduction:
Early disease detection is crucial for preventing outbreaks. Smart collars alert farmers when a cow is unwell, enabling timely intervention. Reduced veterinary visits and antibiotic usage lead to cost savings and healthier cows.

Profit Maximization:
Overall, smart collars contribute to better herd management, optimized operations, and improved productivity.

Increased lactation periods, better reproductive rates, and healthier cows translate to higher profit margins for dairy farms.

In summary, investing in smart collar technology can significantly impact a dairy farm's financial bottom line by enhancing efficiency, reducing costs, and promoting better herd health.

Kind Attention : For aspiring candidates for becoming Jury and Resource persons for Quality Concepts

JDP

JDP will be opened up from 1st April'24 to 31st Oct'24. Organization should take advantage to develop Juries from their organizations.

Registration Fee for participation / member Rs 12,000/- + GST

Virtual Clarification Sessions

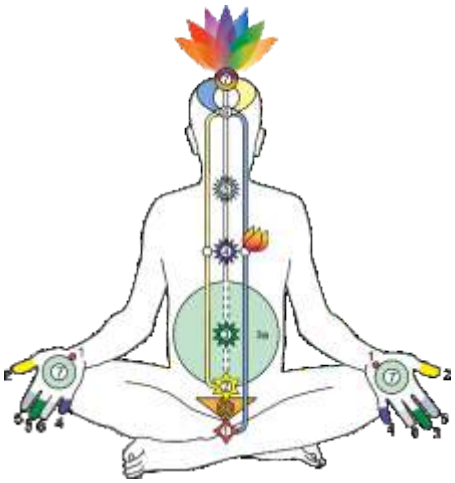
We have started on line clarification session on different Quality Concepts, tools and techniques by booking slots as per mutual agreed dates and time. Duration 3Hrs (1hr X 3) & 6Hrs (2hr X 3) **Book the slots in advance**

Faculty : Expert Faculty QCFI will guide and address your doubts through practical examples.

Fee : Rs 10000/- to 20000/-

Total Quality People through Sahaja Yoga

by **Shri Rahul Mohan Gupta,** Director Operations
Arvos Ljungstrom Energy India Private Limited



While mankind is propelling towards a future of ever-advancing Automation, Technologies and AI, what also garners our attention at the same time is the need to keep human beings Healthy – Holistically.

In these challenging times, it is imperative to search answers for evolution of mankind into peaceful and balanced beings capable of handling these developments in harmony rather than being at conflict with these.

Health, as defined by WHO is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. This is also an age where equal emphasis is being given to Emotional Quotient (EQ) and Spiritual Quotient (SQ) apart from Intelligence Quotient (IQ).

Thankfully, the solution lies within. This has been known for centuries to our Great Land, Bharat. Now this has been practiced and proven with Sahaja Yoga, which can transform people into dynamic yet balanced individuals working together for collective benefit. This science is based on the innate power within each human being which runs the Autonomous Nervous System and awakens tremendous potential of creativity, knowledge, and wisdom. This results in optimum energy levels of seven energy centers inside us which are responsible for our physical well-being apart from developing our creative powers. It also brings balance to our pendulum-like desires versus actions conundrum.

Sahaja Yoga gives us the knowledge to balance the three channels within us that represent IQ, EQ and SQ. It is e□ortless, available free of cost and brings about inner transformation to a person who becomes more productive because he/she is more at peace with himself/herself. Sahaja Yoga could transform the entire global workforce into a Balanced and Healthy, Productive workforce. As a result of this process, there would be a boost to the national economy as well.

This presentation is an atempt to introduce the participants to this wonderful discovery by H.H. Shri Mataji Nirmala Devi and its practical benefits.

TQM Implementation in Aluminum Industries

By **Shri Jitendra Ahirwar** — Head Business Excellence, Innovation, Asset Optimization, Reliability, CoE (Center of Excellence).
Vedanta, Bharat Aluminium Company Ltd. Korba.

Introduction:

We are in business of manufacturing Aluminum. The Hot Metal Area includes Carbon Plant and Main Smelting Area (Pot line). The Pot line includes Pot Room where, molten metal is continuously produced by Process of all Auxiliary Units like fume treatment plant, compressor house, Cranes, Pump houses, Pots, Rectifiers etc & then the molten metal is sent to cast houses and Rolled Product are for molding into different shapes as required.

Objective: TQM Implementation in Aluminum Industries

Abstract:

"Total Quality Management (TQM) has emerged as a vital strategic approach in the aluminum industry, aimed at optimizing product quality, streamlining processes, and enhancing overall performance. This abstract delves into the implementation of TQM within the aluminum sector, explaining its principles, methodologies, and transformative impacts.

At its core, TQM emphasizes a customer-centric philosophy, advocating for continuous improvement across all organizational functions. In the aluminum industry, this entails rigorous quality control measures throughout the production cycle, from raw material acquisition to final product delivery. By instituting robust quality assurance protocols and leveraging advanced manufacturing technologies, aluminum manufacturers can ensure consistency, reliability, and compliance with stringent industry standards.

Moreover, TQM fosters a culture of collaboration and empowerment among employees, encouraging active participation in problem-solving and decision-making processes. Through **Sahbhagita Event** we create a collaborative forum in our organization for grass root employees to showcase their initiatives and projects which are appreciated and recognized by the senior management in a monthly event , cross-functional teams perform their projects and create a forum of cross learning among stakeholders along with that we have organized **Sangam event** for teams to present their QC,KAIZEN ,DE ,FIP and lean projects in front of panel of judges who are highly experienced in their respective domains ,this forum provides them a platform to showcase their initiatives in front of the leaders and learn skills for better presentations and further enhance the continual improvement journey of our organizations cultivate a workforce equipped with the skills and motivation to drive quality excellence.

Supply chain management plays a pivotal role in TQM implementation within the aluminum industry, necessitating close collaboration with suppliers and distributors to uphold quality standards at every stage of the value chain. **Through implementation of Supplier Quality Management module** in our Quality management framework and by establishing strategic partnerships, implementing just-in-time inventory systems, and conducting regular audits, aluminum companies mitigate risks, reduce lead times, and enhance supply chain efficiency.

Customer relations constitute another focal point of TQM adoption in the aluminum industry, as organizations strive to meet and exceed customer expectations in terms of product quality, reliability, and service. **Through implementation of Customer management module ,Process optimization module and improvement process application module and through Vedanta Asset Optimization framework implementation** and by feedback mechanisms, satisfaction surveys, and proactive communication channels, aluminum manufacturers gain valuable insights into customer preferences and market

trends, facilitating targeted improvements and product innovations.

Despite its manifold benefits, TQM implementation in the aluminum industry is not without challenges. Cultural resistance, resource constraints, and operational complexities may impede the adoption and sustenance of TQM practices. However, through effective leadership, organizational commitment, and continuous learning, companies overcome these hurdles and realize the full potential of TQM in driving competitiveness, profitability, and sustainability.

In conclusion, the implementation of TQM in the aluminum industry represents a strategic imperative for organizations seeking to thrive in an increasingly competitive and dynamic market environment. By embracing TQM principles and methodologies, aluminum manufacturers achieve superior quality, operational excellence, and customer satisfaction, positioning themselves as industry leaders in the global marketplace."

Keywords: TQM (Total Quality Management), Sahbhagita Event, Sangam Event, Asset Optimization Framework ,Quality Management Framework , Process Optimization and Improvement Process Application.

Trigger Points

Productivity

Some Top Benchmarking Tips

Many Businesses Today practice benchmarking – finding what makes others companies successful and applying those ideas and techniques to their operations.

But the procedure requires some guidelines:

- Do not mindlessly copy others. Adapt and personalize ideas so they meet the needs of your situations.
- Do much of your benchmarking by phone. Restrict site visit to unique situations you will save lots of money.
- Do not view benchmarking as the latest management fad. It is a powerful tool that has provided itself for more than a decade.
- Do not restrict benchmarking efforts to large companies. You might find that some of the best innovative ideas come from the smaller firms.
- Research outside your industry for good ideas, you will find some of the best ones there. Just be alert to ways to transfer them to your operations.
- Realise that you must be willing to share your best idea with others companies. Do not expect to get information unless you are willing to give it. And never misrepresent your situations

By courtesy
NPB Singapoor

A True Countermeasure to improve Behaviour Based Safety An Abstract

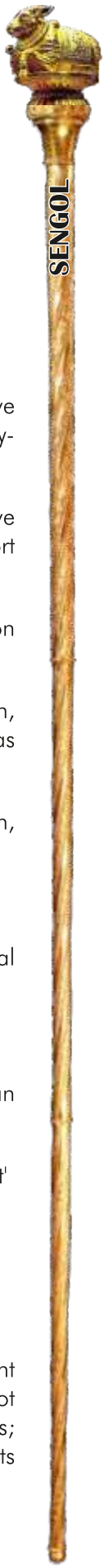
By- **Shri Sunil Shrivastava,** Chief Operating Officer – TQM , QCFI HQ.

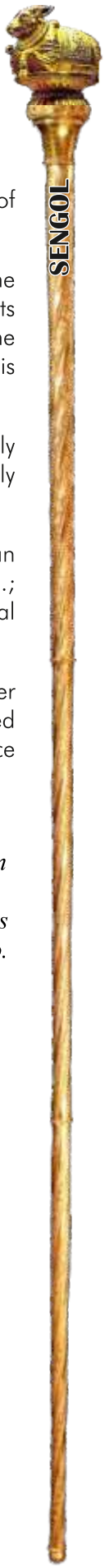
The Context

- Maximum accidents/ injuries occur due to the inappropriate behavior of the workforce, even if they have gone through rigorous safety trainings; and even if their organizations follow globally-recognized safety-systems!
- The perineal problem of "lapses in standard behavior of workforce" continues to haunt and give significant setbacks even if the state of "zero harm" / "zero accidents" seem to be achieved for short duration!
- Various Models for Behavior Based Safety (BBS) were developed /introduced with huge investments on trainings and utmost management-focus in recent decades.
- However, Almost all these BBS systems, despite huge investment of money, time, efforts, documentation, resources and extremely rigorous Management-systems/reviews, do not address the root causes as required.
- The root causes which affect the behavior of workforce of any industry, are independent of region, hierarchy, gender, literacy level, cast, creed, age etc.

The Analysis

- The loss of 'normal behavior state' and lapses in behavior is seen due to a state of mental and emotional pressure, commonly termed as stress -,
- Which leads to fear, worry, anger, anxiety, apprehensions, nervousness or excitement.
- Resulting in rush of uncontrolled flow of thoughts, keeping our minds in constant turbulence. is an internal process
- These thoughts may come from the 'past' or 'future', and diverts our attention and focus from the 'present' ongoing work/activities; causing the body to react in speedy and inefficient way.
- This results in lapses in normal-behavior state and the person misses the safety SOPs/precautions momentarily, causing injuries/ accidents!
- The rush of thoughts takes place within human-beings! The thought-process happens within the human being and needs be understood as 'intrinsic-phenomena'. It needs internal control mechanism as right countermeasure instead of external intellectual interventions/systems (which are almost always not experiential in nature with respect to human-internal Subtle-system of energy-channels and plexuses; and do not address root-cause correctly). The solution lies with human being for controlling thoughts and will slowly but surely move towards more sustainable BBS solution!





The Countermeasure

- In order to address internal root cause of "inability to control rush of thoughts", the eternal hypothesis of "using the internal coiled energy residing in Sacrum bone of every human being" was considered.

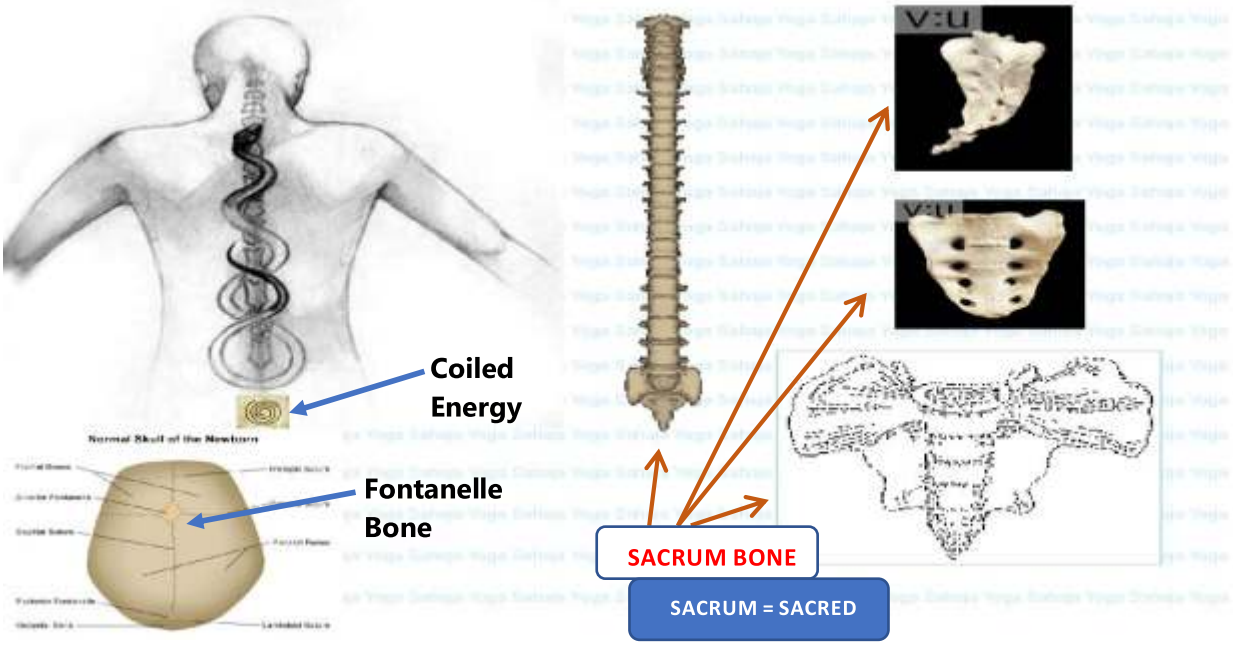
- When the dormant life-energy in 3.5 coils - coiled energy rises from Sacrum bone to the Fontanelle bone area and stays in the spinal cord central channel (central Autonomous Nervous System), it can stop thoughts of 'Past' or 'Future' and can bring the human being in a true state of 'present' from within. This increases the person's attention / focus on his activities/work and is able to practice all necessary safety tips from his trainings/advices without any distraction due to thoughts!

- The suggested hypothesis to activate this coiled energy is extremely easy-to-do, zero cost and calls for only about 15 minutes at-a-go. With regular practice and using numerous effective tips, this method can actually reduce behavior lapses significantly (can be measured) and increase safety multifold!

- This method also strikes the treasure within and gradually transforms people beyond imagination! This Indian Method is therefore now practiced in over 150 countries since for various other advantages of health etc.; and is a real solution to develop people towards 'Total Quality People' can contribute to QUALITY TEI (Total Employees Involvement).

For Industries and Organizations, a part of the above method was successfully derived and practiced after structured trainings of 1 Hour for the target mass before /after TBT (Tool Box talk) at the shopfloors! It is named as "Sahaja Yuj" and is provided free of cost from QCFI, Headquarters alongwith other Business Excellence Initiatives Trainings and Facilitations!

Coiled Energy in Sacrum bone can rise along the spinal cord and can pierce the fontanelle bone when a right meditation method is practiced.
Regular practice can bring down the rush of thoughts drastically reducing the safety-risk due to lapses in behaviour significantly. It improves the focus on the work and adds to productivity-improvement also.



Shri SVN Narasimha Kumar,
Sr. DGM (Quality)
BEL Bengaluru.

Bharat Electronics (BEL) since its inception in 1954 clearly understood its sustenance and growth is entirely depends on customer appreciation and loyalty. This can be achieved only by rendering products and services of high quality on a durable basis. Achieving Quality of products and services is only possible by having quality in all walks of life as Product and Service quality is not isolated but highly intertwined with each and every process performed by all employees of the Organization.

BEL in early 1990s collected all prevailing best quality practices in the company and developed a movement called TORQUE acronym for Total ORganizational QUality Enhancement and was equivalent to TQM.

The presentation details about the various aspects of TORQUE like fundamental principles, Scope, Initiatives, Integration into working culture, Committee structures, Implementation, Suggestion Schemes, QCC, Business Excellence, Quality Recognition Awards.

The presentation lists benefits derived by the organization by adopting the TQM in the form of TORQUE movement.

SVN Narasimha Kumar,

Quality Circle Forum of India

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Chairman and GC Members of Pune Chapter wish

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a grand success

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CHAIRMAN & GC MEMBERS OF
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Ankleshwar Chapter

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Chairman and GC Members of Ankleshwar Chapter wish

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Nagpur Chapter

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Nagpur Chapter wishes all delegates
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Ex. MR. JSW Steel Coated
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Ex. CGM Western Coalfied Ltd, Nagpur
Presently Working as Principal Tech
Advisor, Maha Mineral Mining & Benefication Pvt.Ltd

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Managing Director - Light House Info
System Pvt., Ltd, Nagpur

Rajesh Jain
Plant Head - JSW Steel Coated Products
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Vice Precident - Operations (Plant Head)
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General Manager - Marketing & Service
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Koradi Power Plant

N. K. Sinha
DGM (Operation)
Mahindra Logistic Ltd, Nagpur

Address

Flat No. 501, Sanskruti Appartment, Samata Layout, Yashwant Nagar, N.A. Road, Opp.,
Swimming Pool, Ambazari, Nagpur - 440033

Second Announcement

First International Conclave on Cement Industry

Jointly Organised by

MADURAI & AHMEDABAD

Chapters of

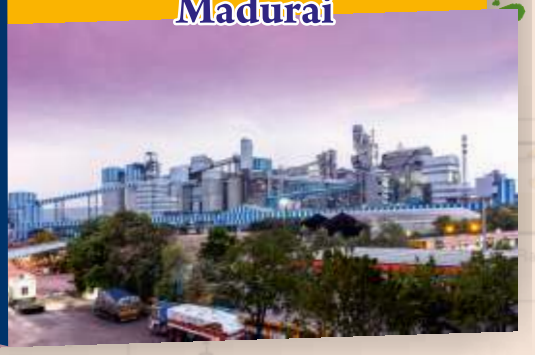
QUALITY CIRCLE FORUM OF INDIA

QUALITY CIRCLE FORUM OF INDIA

CEMENT CONCLAVE

10th & 11th May 2024

Fortune Pandian Hotel, Madurai



Theme :

"Cementing Sustainability Towards a Greener Future"

DAY 1

Inaugural Function
9.00 am -10.00 am (Main Hall)

Concurrent Sessions in 4 Halls
10.30 am -1.00 pm &
2.30 pm - 5.00 pm

DAY 2

Concurrent Sessions in 4 Halls
10.00 am -1.00 pm

Valedictory Function
2.30 pm - 5.00 pm
(Main Hall)

We invite original equipment and accessories manufacturers, suppliers to display their products in the stalls. Please reserve your stalls in advance to avoid disappointment.

Organizing Committee

- Mr D K Srivastava, Executive Director, Mobile: 98481 28732
- Mr Rituraj Mehta, Director, Mobile: 90990 05587
- Mr P Sugumaran, Secretary, Madurai Chapter, Mobile: 97886 70617
- Mr N Thevaraajhah, Joint Secretary, Madurai Chapter, Mobile: 99944 97864
- Mr Muthunagappan, Administration Manager, Coimbatore Chapter, Mobile: 94433 15503
- Mr S Ranjani, Senior Faculty, QCFI Headquarters, Mobile: 93935 11792
- Mr Sandeep Sethi – Lead – PMO Manufacturing, COO's Office, Mobile: 90042 45670
- Mr Kaushik Purohit, Member – Ahmedabad Chapter, Mobile: 90990 05034
- Mr Yogesh Patel, Vice Chairman & Head – Operations, QCFI Ahmedabad Chapter, Mobile: 98246 99697

Further details will be announced in the final brochure which will be released in March 2024.

Delegate fee per head
Rs.5000 + 18%GST.

Stall fee per stall
Rs.75000 + 18%GST

Foreign Delegate Fee per head
300 $

Convenor : **Mr M Sankarasubramanian,** Chairman, QCFI Madurai Chapter, Mobile: 94434 51586

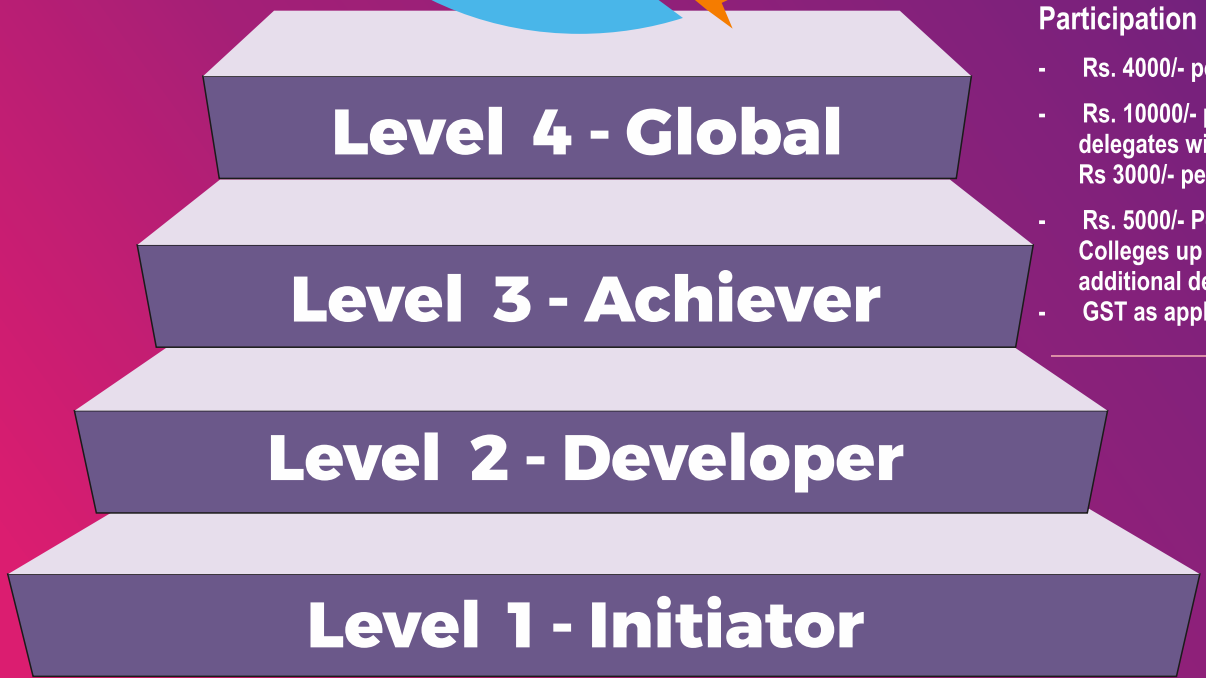
10th National Conclave on 5S

June 15th 2024

Organised by QCFI-HQ
Hosted by QCFI Coimbatore Chapter
in association with
Sri Krishna College of Technology SKCT,
Coimbatore

Participation Fees:

- Rs. 4000/- per presentation by Individual.
- Rs. 10000/- per presentation by group, up to three delegates will be allowed. For additional delegates, Rs 3000/- per delegate.
- Rs. 5000/- Per presentation for Schools and Colleges up to three delegates will be allowed. For additional delegate, Rs 1500/- per delegate.
- GST as applicable.



Venue:
Sri Krishna
College of Technology
Kovaipudur,
Coimbatore-641042

Par Excellence teams from TQM India Unison Qualify for ICQCC 2024 at Sri Lanka to be held in November 2024

Sri Lanka Association for the Advancement of Quality and Productivity (SLAAQP)

ICQCC 2024
Sri Lanka

International Convention on Quality Control Circles

Type	Early Bird (before July 31, 2024)	Regular (from August 1, 2024)
Onsite	$580/Person	$600/Person
Observer	$550/Person	$570/Person

HOSTED BY

Sri Lanka Association for the Advancement of Quality & Productivity
3G-21, BMICH , Colombo 7, Sri Lanka.
Registration: https://qcfi.in/qcfihq login using your QCFI membership details to nominate your teams
Email: icqcc.qcfi@gmail.com / qcfihq@qcfi.in