3RD TQM SUMMIT – 2025

6th & 7th February, 2025 at Udaipur, Rajasthan

THEME

" Innovations in TQM approaches and systems"

Organised by
Centre of Excellence - QCFI HQ
Hosted by
QCFI - Rajsamand Chapter
In Association with
Udaipur Chamber of Commerce and Industries, Udaipur.

Summit Venue : UCCI, Chamber Bhawan, Chamber Marg,
Mewar Industrial Area, Madri, Udaipur, Rajasthan 313003

Souvenir

CENTRE OF EXCELLENCE
TQM Division - Quality Circle Forum of India
Contact : Sunil - 7894400702 Email : tqmqcfi@gmail.com

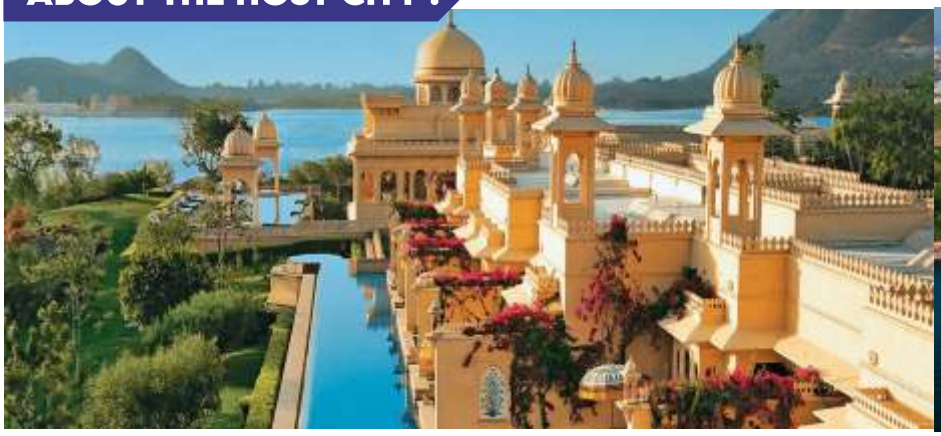
306, 3rd Floor, Navketan Chambers, 62,
SD Road, Secunderabad - 500003, Telangana
M : 99896 97930, 78944 00702, 97136 97501
E-mail: qcfihq@qcfi.in; Website: www.qcfi.in

TQM SUMMIT - 2025 - TENTATIVE SCHEDULE

6 February 2025	
9:15 AM to 9:45 AM	- Registration
10:00 AM to 11:30 AM	- Inaugural Function -
11:30 AM to 11:45 AM	- **Networking** & Tea
11:45 AM to 1:15 PM Plenary Session	- Best Global TQM implementation practices by Eminent TQM Expert
1:15 PM to 2:15 PM	- **Networking** & Lunch
2:15 PM to 3:45 PM **Plenary Session**	- TQM journey at Toyoda Gosai South India Bengaluru - Human productivity innovation - expert from Bank of America
Concurrent Sessions	- TQM case studies by teams / Leaders
3:45 PM to 4:00 PM	- **Networking** & Tea
4:00 PM to 5:30 PM **Plenary Session**	- TQM journey for Deming Award- RANE Group - Lean Management insights by SME
Concurrent Sessions	- TQM case studies by teams / Leaders

7 February 2025	
9:15 AM to 9:45 AM	- Registration
10:00 AM to 11:30 AM **Plenary Session**	- Grand Deming Award journey of CEAT Group - World Class Manufacturing - Indianised Model
Concurrent Sessions	- TQM case studies by teams / Leaders
11:30 AM to 11:45 AM	- **Networking** & Tea
11:45 AM to 1:15 PM **Plenary Session**	- Agile TQM implementation by Business @Turbo Roadmap - TQM journey for Deming Award- A case-study
Concurrent Sessions	- TQM case studies by teams / Leaders
1:15 PM to 2:15 PM	- **Networking** & Lunch
2:15 PM to 3:45 PM **Plenary Session**	- Industry 4.0 by SME - TQM Execution Strategies by SME
Concurrent Sessions	- TQM case studies by teams / Leaders
3:45 PM to 4:00 PM	- **Networking** & Tea
4:00 PM to 5:30 PM	- Valedictory Function

ABOUT THE HOST CITY :



Udaipur is the historic capital of the kingdom of Mewar in the former Rajputana Agency. Udaipur is a popular tourist destination and is known for its history, culture, scenic locations and the Rajput-era palaces. It is popularly known as the "City of Lakes" because of its sophisticated lake system. It has seven lakes surrounding the city.

Besides lakes, Udaipur is also popular for its massive historic forts and palaces, museums, galleries, natural locations and gardens, architectural temples, as well as traditional fairs, festivals and structures.

TQM-SUMMIT - 2025

06th & 07th February, 2025

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Editorial Board


Shri D K Srivastava


Shri Sunil Shrivastava


Shri R Srinivasan


Dr. N K Sharma


Shri Manoj Reddy

In Gratitude

Dear Participants / Readers,

Greetings !

At the outset, the Editorial board thanks the Quality practioners and Fraternity and all those associated with 3rd TQM - SUMMIT 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 3rd TQM - SUMMIT 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.

The editorial board is grateful to the sponsors, advertisers and associates for their munificence enabling us to bring out this colourful edition of 3rd TQM - SUMMIT.

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

06-02-2025
Udaipur

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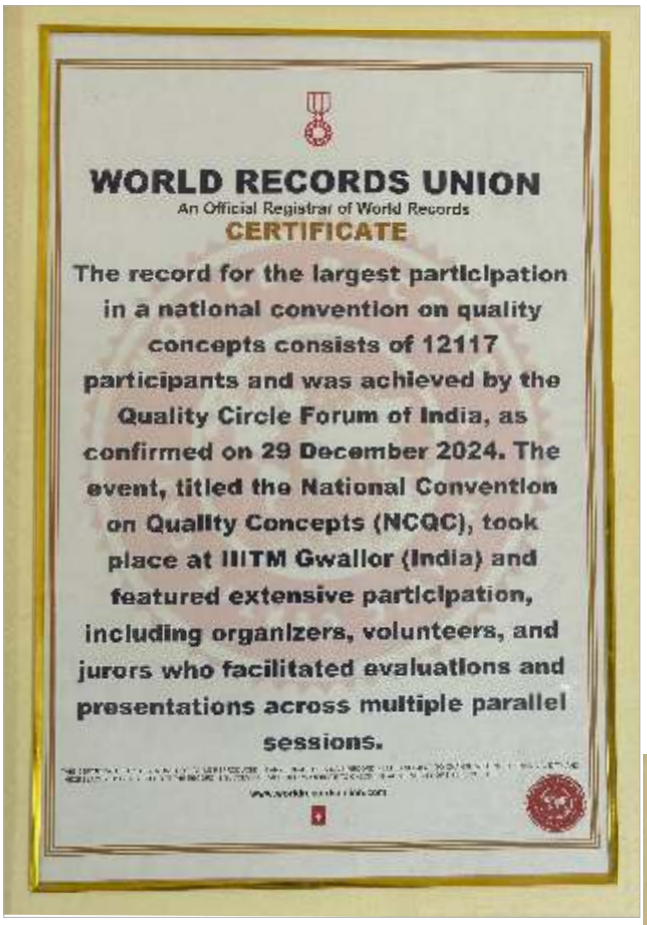
TQM SUMMIT - 2025 THEME

" Innovations in TQM approaches and systems".

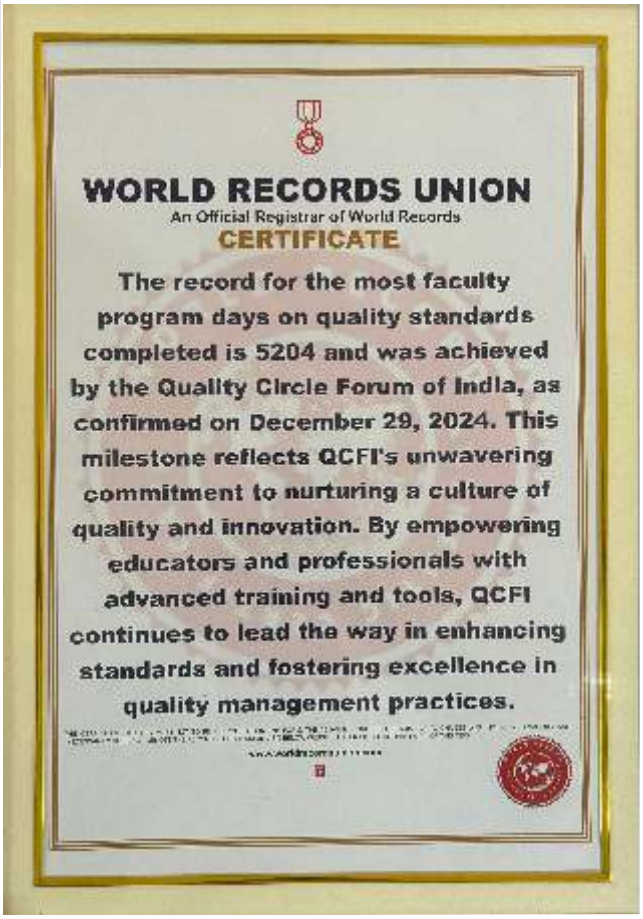
A lot of innovations are happening across the wide spectrum of industries in India for doing things differently, effectively and more productively. This is required for the leaders to really take initiative and keep on innovating and sharing such best practices for system improvements and people development. Such innovative work and management practices contribute to develop - Total Quality Management approaches. The required structured approaches are clearly visible in their PDCA (Plan- Do- Check-Act) thought-process which is judiciously implemented also. This Summit would invite leaders from all sectors and functions with their success stories through innovative improvement approaches and systems for cross learning and replication across the country.

QCFI – PROUD WINNER OF 2 WORLD RECORDS



WORLD RECORDS UNION
An Official Registrar of World Records
CERTIFICATE

The record for the largest participation in a national convention on quality concepts consists of 12117 participants and was achieved by the Quality Circle Forum of India, as confirmed on 29 December 2024. The event, titled the National Convention on Quality Concepts (NCQC), took place at IIITM Gwalior (India) and featured extensive participation, including organizers, volunteers, and jurors who facilitated evaluations and presentations across multiple parallel sessions.



WORLD RECORDS UNION
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CERTIFICATE

The record for the most faculty program days on quality standards completed is 5204 and was achieved by the Quality Circle Forum of India, as confirmed on December 29, 2024. This milestone reflects QCFI's unwavering commitment to nurturing a culture of quality and innovation. By empowering educators and professionals with advanced training and tools, QCFI continues to lead the way in enhancing standards and fostering excellence in quality management practices.

About Quality Circle Forum of India (QCFI)

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
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.

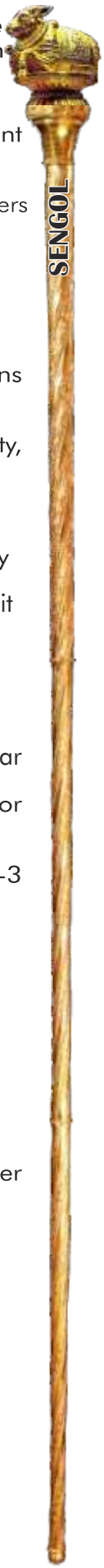
QCFI Membership Status

1.	Institutional Members	2151
2.	Life individual Members	9294

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

Video modules of QC & 5S concepts, trainers program for auditors, jury development program, PSTs and WCM are available on online for QC fraternity to enhance their learning through out the year. For details please contact QCFI

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 - 38 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

QCFI has formed 'Centre of Excellence' located in 6th floor of the same Navaketan Chamber were it caters to entire spectrum of business excellence initiatives as a one stop solution.

Indian TQM Award system with the high impact nation wide has been launched in 2025

QCFI is the proud winner of two world records (for largest number of participants in the National convention on Quality Concepts and highest number of faculty days imparted in training in one year

- 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 - 449

JUSE - QCFI Certified - 151

As on 27th December 2024

भारत इलेक्ट्रॉनिक्स
BHARAT ELECTRONICS
भारत इलेक्ट्रॉनिक्स लिमिटेड
(भारत सरकार का उद्यम, रक्षा मंत्रालय)
पंजीकृत कार्यालय : आउटर रिंग रोड,
नागवारा, बैंगलूर - 560 045, भारत
Bharat Electronics Limited
(Govt. of India Enterprise, Ministry of Defence)
Registered Office : Outer Ring Road,
Nagavara, Bangalore - 560 045, INDIA.
CIN : L32309KA1954GOI000787
फोन/Phone : +91 (80) 25039200, 67009200
फैक्स/Fax : +91 (80) 25039211, 67009211
वेब/Web : www.bel-india.in

MESSAGE

It is with great pride and enthusiasm that I welcome you all to this year's Total Quality Management (TQM) Summit, themed "Innovations in TQM Approaches and Systems." This summit is a testament to our collective commitment to driving excellence, fostering innovation, and continuously improving quality in our organizations.

TQM is a comprehensive management approach that focuses on long-term success through customer satisfaction. It is a philosophy that integrates continuous improvement, employee involvement, and customer-focused processes into all aspects of an organization. TQM is not just a methodology - it's a culture of excellence that organizations embrace to achieve sustainable growth and success.

With advancements in technology and business methodologies, TQM is evolving to incorporate AI-driven quality control, automation, Lean Six Sigma, Industry 4.0, and digital transformation to enhance quality processes.

In today's rapidly evolving business environment, innovation in TQM is not just an option - it is a necessity. New technologies, evolving customer expectations, and global challenges demand that we rethink, reimagine, and refine our quality management approaches. This summit serves as a platform to explore ground breaking ideas, share best practices, and collaborate on transformative strategies that will shape the future of quality excellence.

As we engage in discussions, workshops, and knowledge-sharing sessions, I encourage each of you to embrace innovative thinking, challenge conventional methodologies, and seek out new solutions that will elevate quality standards in our industries. Let this summit ignite fresh perspectives, inspire actionable strategies, and pave the way for a more dynamic and effective TQM landscape.

Thank you for your participation, dedication, and passion for excellence. Together, let us drive innovation in TQM and build a future of continuous improvement and sustainable success in our journey to realise the dream of *Viksit Bharat* (A developed, powerful, and self-reliant nation).

(Manoj Jain)
Chairman & Managing Director

Message

Arun Misra, CEO – Hindustan Zinc Limited

Dear Quality Enthusiasts,

In today's dynamic and rapidly evolving business environment, the principles of Total Quality Management (TQM) serve as a guiding beacon for sustainable success. Since the liberalization of India's economy in the early 1990s, Indian companies have not only showcased their competitiveness in cost efficiency but have also demonstrated a remarkable ability to deliver on global quality standards. By rapidly embracing ISO 9000 standards and with many achieving the prestigious Deming Quality Medal, Indian corporations have proven that excellence is not just a goal but a continuous journey. This shift is driven by a multiplier effect centred around engineers, designers, and the very institutions that uphold top-quality principles, notably the Quality Circle Forum of India.

At Hindustan Zinc, we firmly believe that quality is intrinsically linked to customer satisfaction and delight. This belief forms the foundation of our TQM approach across every aspect of our business—from the manufacturing of zinc, lead, and silver to our operational processes and governance frameworks. By prioritizing quality at every step, we strive to exceed customer expectations, ensuring that our products and services consistently deliver value.

Innovation in quality management has become more crucial than ever in our pursuit of excellence. As we look toward the future, it is essential that we adopt cutting-edge systems and innovative approaches to further enhance our TQM practices. By doing so, we not only uphold the highest standards in our production processes but also inspire confidence among our stakeholders, driving us closer to our vision of operational excellence.

Let us take this opportunity to recommit ourselves to the principles of quality management and customer delight. It is through an unwavering commitment to TQM that we will continue to set benchmarks in our industry and contribute to India's journey toward becoming a global leader in manufacturing and sustainability.

Together, let us ensure that every step we take is a step towards excellence, making India synonymous with quality worldwide.

Best Wishes,

Arun Misra

Message

Shri Avinash Mishra
National President
Quality Circle Forum of India

It gives me immense pleasure to extend my warm greetings to all participants, dignitaries, and stakeholders at the National TQM Summit organized by QCFI in collaboration with the Udaipur Chapter and Udaipur Chamber of Commerce & Industries.

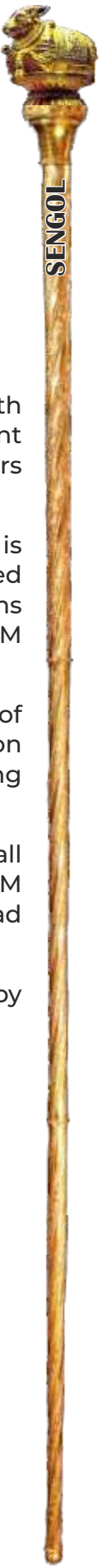
The theme of this summit, "Innovation in TQM Approaches and Systems," resonates with the current industrial and organizational need for creative solutions and agile systems to sustain quality excellence. In a world driven by rapid technological advancements, innovation is the key to redefining Total Quality Management (TQM) practices and building resilient, future-ready organizations.

This summit provides an exceptional platform for thought leaders, industry experts, and practitioners to share knowledge, best practices, and strategies that emphasize creativity, adaptability, and holistic growth in TQM frameworks. I encourage all participants to explore how innovative approaches can enhance operational efficiency, drive customer satisfaction, and foster organizational excellence.

Let us collectively embrace this opportunity to challenge conventional boundaries, envision novel possibilities, and commit to shaping a sustainable future through innovation-driven quality systems. I am confident that the insights gained here will inspire actionable ideas and impactful outcomes across industries.

Wishing the summit grand success and fruitful deliberations.

Avinash Mishra
President,



Message

Shri Satish Kalokhe
President (Emeritus) QCFI

I am happy to welcome all of you for 3rd TQM Summit at Udaipur Rajasthan on 6th and 7th February 2025. 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.

The TQM summit theme is "Innovations in TQM approaches and systems". TQM concept is in use in the world for more than fifty years. There are tremendous changes happened during last fifty years and now there is a need to modify TQM approaches and systems keeping basic TQM principles intact. This summit will accelerate innovations in TQM approaches and systems.

Majority countries in the world are aging where as India is having maximum number of young people. It is necessary to make use of this tremendous energy of young generation to become super power of the world. TQM can show the right direction to this young generation to make our country a super power.

Rajsamand Chapter is rendering a great help towards organizing this summit. I thank all the governing council members of Rajsamand Chapter for a grand success of this TQM summit. Mr. Sunil Srivastava, COO (TQM Division) and his team members from QCFI Head quarter worked very hard for the success of this TQM summit. I thank all of them.

Learn a lot in this 3rd TQM summit. Implement your learnings at your workplace. Enjoy your stay at the beautiful city Udaipur.

Satish Kalokhe

President (Emeritus) QCFI

Message

Dr Ashok K Mittal
Chief Advisor
Quality Circle Forum of India

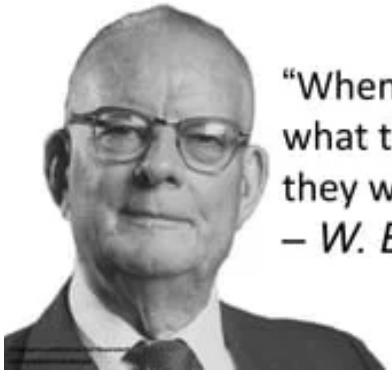
Welcome to city of lakes Udaipur and TQM summit with appropriate theme of Innovation in TQM approaches and systems .

All of us are endowed with the ability to innovate ,which simply put implies ability to do something new and different then what is being done. Human race has been innovating from time immortal and some of the most valuable innovations are wheel, cooked food, and harnessing of the fire. Innovation is not a complex process and all of us are capable of innovation. It starts with questioning ,what we are doing and why are we doing and ends up with finding a different and better way by developing a new product or process. It is disruptive in nature as it disrupts the existing product or process. It is not incremental improvement.

So think about everything you do, question why and how you are doing, and come out with an answer different then what you are doing.

My best wishes to all the delegates for participating in this summit not with a mindset of accepting all that which is being done but with mindset of doing it differently.

Congratulations to organisers for organising this summit with innovative theme.



"When people try to do what they can not do, they wish to give up."
– W. Edwards Deming

Message

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

I am happy to note that Centre of Excellence - QCFI is organizing 3 rd TQM India Summit on 6 th and 7 th Feb at Udaipur.

Indian industry has made significant progress on quality of the products and services in the last 3 decades. In this endeavor, QCFI is putting lot of efforts through propagation, training, implementation and application of various quality concepts as an integral part of TQM. This journey of excellence was achieved by rigorous training programs and practices of Quality Management by the employees at all levels from team members to leadership in the shop floor. We are happy to state that many companies are approaching for Total Quality through total process control and total wastage control with the help of Total Employee Involvement.

QCFI has made significant contribution to this journey through 5S Workplace Management and WCM implementation. The team members and team leaders have now developed process-oriented thinking and also give significant focus on breakthrough solution through creative thinking.

I am sure that the participants at 3 rd TQM Summit will evolve a working strategy where in the continual improvement becomes the way of work life and contribute to the organizational growth besides promoting self and mutual development.

I congratulate Center of Excellence for their excellent efforts in organizing TQM summit.

Wishing the Summit, a grand success.

Message

Shri Sunil Shrivastava
Convenor – TQM-SUMMIT-2025 &
Head - Centre of Excellence - QCFI
Secunderabad

Dear all,

The 3rd national TQM event by Centre of Excellence, QCFI ensures a steady resilient effort to spread the quality-approach awareness across the nation!

Gratitude and congratulations to all quality ambassadors who actively contributed in this quality movement over past three years.

It is heartening to see that the practising experts are coming from all over India to share their successful TQM cases, experiences and insights making this organizing a national event in true sense. The quality presentations from grand Deming award winning companies and experts make this summit a significant quality event of India!

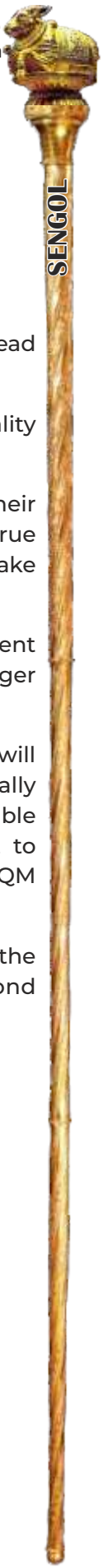
The greater objective of this summit is on more participation of Delegates from senior management of respective organisations, which is largely fulfilled and will pave the way for much larger applications of quality concepts in their respective organisations.

This summit also announces TQM Award System by Centre of Excellence, QCFI, which will differentiate and recognize the organisations in the highest Award categories only when they really uphold the human values in the organisation as a regular way of working against the measurable criteria! The Award-Cycle will spread over a year and provide extensive feedback report to organizations on 'Areas for Improvements'. Any big or small organisation can participate in this TQM Award process and can make a quantum jump in their achievements in much shorter time!

Looking forward to everyone joining hands in this National TQM movement and unleashing the inbuilt Indian-quality to wide-spread applications raising their per capita income beyond 'Developed Nation' norms much sooner than planned!

Best wishes

Sunil Shrivastava



Message

Dr. N.K. Sharma
Chairman
QCFI - Rajsamand Chapter

I extend a warm welcome to all attendees of the TQM Summit in Udaipur, organized by the Centre of Excellence QCFI and hosted by the QCFI Rajsamand Chapter in association with the Udaipur Chamber of Commerce on February 6th and 7th, 2025.As Chairman of the Rajsamand Chapter, I am honored to have been involved from the very beginning as the host of this Summit. Esteemed speakers will deliver plenary sessions on various TQM topics. In addition, QIT teams from renowned companies will present case studies and improvement projects, enriching our collective knowledge.The historic city of Udaipur, with its numerous tourist attractions, will provide a picturesque backdrop for our Summit. I trust you will not only gain valuable insights but also enjoy exploring the city in the evenings.

Best wishes,

Dr. N.K. Sharma

Chairman,

Rajsamand Chapter

An Abstract on Quality 4.0

Mr. K Krishan Agrawal Advisor, BEL.

Abstract:

Quality 4.0 as subset of Industry 4.0 is essentially the Quality aspects part of Industry 4.0 i.e. The Fourth Industrial Revolution, where we talk of in general Smart Manufacturing.

Actually Quality 4.0 is much more than that. It is not limited to Manufacturing Quality aspects. It encompasses all aspects including Marketing, R&;D, Manufacturing and also Supply Chain.

With deeper understanding developed as the result of implementing Q 4.0 at various DPSUs, a unique definition of Quality 4.0, which is apt and relevant for our Indian Industries is evolved as follows:

"Its Secured Automation of Process of Processes with Wisdom leading to Stake Holders' Delight Enhancement."

Focussing on technologies alone in relation to Quality 4.0 is a very limited view of Q 4.0. Quality 4.0 is essentially about People, Processes and Technology.

Lets elaborate on the above definition to evolve the broader aspects of Q 4.0

1. Many a times Digitalization is taken as the basic philosophy for Q 4.0. Well there are four levels of Digitalization:

Data to Information to Knowledge and finally Wisdom.

Talking of Digitalization, most of the time, it is limited to mere data or information. Sometimes to Knowledge level, but rarely to Wisdom. This is the stage of Wisdom out of the Digital Data that actually leads to real benefit out of Q 4.0 implementation.

2. Whatever, we implement as part of Q 4.0 implementation, ultimate objective has to be delight enhancement of Stake Holders. Technologies (AI, ML, Bulk Data, Data Analytics, 3 D Printing, Cloud Computing, IOT, Virtual Reality, Augmented Reality ...) are only the ways and means. We need to make wise use of appropriate technology as per the application.

3. When we talk of Process of Processes, we mean complete integration, both Horizontal as well as Vertical.

4. Automation is aimed towards making our man power available for more Imaginative and Innovative Processes.

5. Secured is equally important aspect of Q 4.0 implementation particularly in the present environment, where application of AI is becoming more and more challenging like Deep Fake Videos and Audios than its contribution in making our life more comfortable and contributing.

In conclusion, we say that Q 4.0 is a wonderful evolutionary concept not a Standard. Hence implementation to aim for Stake Holders' delight enhancement commencing with low hanging fruits and then reaching for higher and higher levels of implementation impregnated with wisdom.

Lessons in Driving Innovation

Mr Vivek Shrivastava,

Abstract:

In this session, I will share insights into leveraging innovative frameworks and strategies to achieve transformational results in Process Excellence and Sustainability. Drawing on real-world examples from my work at Aditya Birla Group, we will explore the integration of cutting-edge technologies and global startup collaborations to tackle complex manufacturing and environmental challenges.

Key Topics:

Process Innovation Frameworks: How structured innovation funnels can identify and scale high-impact solutions.

Collaborative Ecosystems: The role of academia, startups, and partnerships in driving breakthrough projects, such as carbon capture, energy storage, and water treatment.

Capability Building: Enabling cross-functional teams through ideathons, knowledge-sharing platforms, and targeted innovation programs.

Attendees will gain actionable insights on aligning innovation with business strategy, overcoming scalability challenges, and embedding a culture of innovation to ensure sustained competitive advantage.

Brief Profile of Mr Vivek Shrivastava,

Senior Vice President – Group Innovation, Aditya Birla Group

Vivek is a seasoned Innovation and Business Excellence leader with over 25 years of experience in driving transformational projects across diverse industries such as mining, continuous process, discreet manufacturing, Telecom, and Insurance. A Mechanical Engineer from NIT- Kurukshetra and a Six Sigma Master Black Belt, Vivek has spearheaded initiatives in Process Improvement, Innovation and Sustainability.

Currently serving as Senior Vice President at Aditya Birla Group, Vivek leads the group's Process and Advanced Material Innovation initiatives, focusing on cutting-edge projects like energy storage, carbon capture, and Industrial Automation. His leadership has resulted in the successful execution of 44 innovation projects creating significant financial and operational value.

Previously, Vivek led TQM initiative at Idea Cellular yielding annual financial savings exceeding ₹1500 crore. His expertise spans Business Excellence frameworks like EFQM and World Class manufacturing, Lean, Six Sigma, and digital transformation, making him a key enabler of sustainable business growth.

Earlier he has worked in companies like Wipro and Samtel.

TQM Brief presentation

Mr Vipul Seth, Bank of America - GBS
Senior Vice President; Operational Excellence

Vipul Seth is working as a Senior Vice President, aligned to the COO office for the past 17 years in the India captive unit of Bank of America. In his current role he is responsible for driving Operational Excellence and Innovation for all teams aligned to front line units, enterprise functions, consumer and wealth operations, as well as those aligned to Consumer Banking and Wealth Technology.

Vipul's key role is to guide teams to deep dive into processes, identify tech solutions and guide submissions of business cases into Bank's initiative planning cycle to obtain funding, to streamline identified bottle-necks. In addition, his teams are also responsible for driving the Innovation agenda, as well as, providing analytical support to enhance Bank's fraud strategies.

He is having overall experience of 26 years focused on leading operational excellence, analytics, consulting, strategic research, change and innovation. He is US Bank Certified Master Black Belt (2008-2009 batch), US patent holder for innovation in cash-management and billing.

He is a travel enthusiast and a practitioner of Sahaja Yoga Meditation for 30+ years. Has been conducting sessions on Stress Management and Personality Development via Sahaja Yoga Meditation, for over 10 years in corporate like Wipro, Tech Mahindra, Accenture, IBM, Cognizant, Bank of America, Convergys, Air India, schools and engineering colleges.

TQM Brief presentation

Dr.Giriraj Nyati, Director, Techno India NJR Institute of Technology

Dr Nyati would share some Innovative concepts that he implemented related to each of 4 pillars of TQM in organizations he worked for.

1. Customer Focus
2. Continuous Improvements
3. Employee involvement &
4. Process-Oriented approach

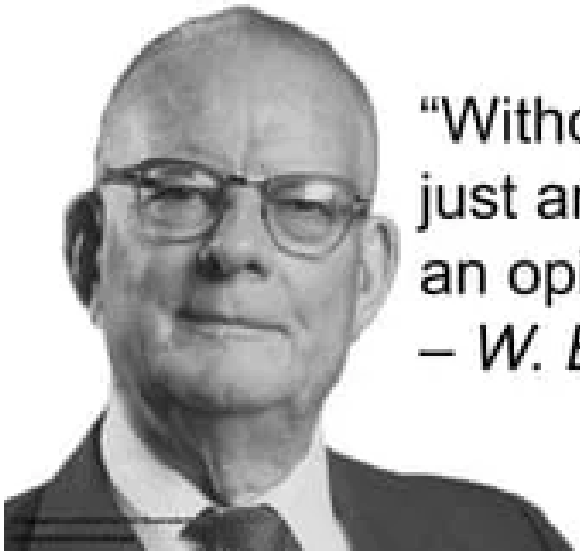
Often most people associate TQM implementation to operational setups only that too in manufacturing organizations, whereas concepts of TQM are universal & ubiquitous and hence can be applied across all walks of life & industries (including service sector). He will also touch upon Lean & Industry 4.0 implementations that benefitted organizations he worked for immensely.

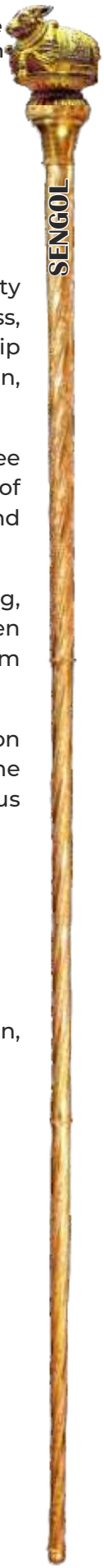
Agile TQM Implementation Business @ Turbo Roadmap

Mr Sunil Shrivastava,
Head - Centre of Excellence - QCFI

Abstract

The presentation briefs on breakthrough TQM paradigm namely 'SAMPOORN'(-The Whole) and dwells into a comprehensive " Turbo Roadmap" to implement evergreen fourteen TQM principles prescribed Dr Deming! The presentation also gives a curtain raiser on innovative quality tools and techniques which is a unique blend of approaches & behaviours interventions to make a quantum difference in people-process-system performance leveraging TQP (Total Quality People) development to organizations. It enables them to challenge highest levels of Awards in 'SAMPOORN' - Indian TQM Award System - launched on 6th February 2025 by Centre of Excellence, QCFI - Headquarters.





TQM Brief presentation

Mr Ashish Kumar,
Group CHRO Jindal Power

ABSTRACT

The presentation outlines a roadmap to achieving HR excellence by integrating Total Quality Management (TQM) principles. It emphasizes core values such as credibility, respect, fairness, pride, and camaraderie. The HR excellence model includes key components like leadership alignment, talent acquisition, workforce planning, performance management, compensation, and diversity, equity, and inclusion (DEI).

TQM principles like customer (employee) focus, continuous improvement (Kaizen), and employee involvement are fundamental to the strategy. The presentation stresses the importance of employee-centric initiatives, governance, and digital transformation to ensure compliance and foster an inclusive culture.

Talent development is highlighted through continuous learning programs focused on up skilling, reskilling, and career enhancement. Process improvement efforts, such as Six Sigma and women leadership programs, drive diversity, efficiency, and inclusion. Tools like the GPS 411 system enhance goal-setting, task management, and collaboration.

Employee engagement is promoted through leadership connects (e.g., townhalls), recognition programs, health and wellness activities, and platforms for innovation and career progression. The presentation concludes with a strategic roadmap that prioritizes leadership, continuous improvement, and employee involvement to achieve long-term HR excellence.

Abstract of the Presentation: HR Excellence through TQM

1. Core Values and Vision:

- Emphasis on credibility, respect, fairness, pride, camaraderie, communication, collaboration, and integrity.
- Focus on TQM (Total Quality Management) as a foundation for HR excellence.

2. HR Excellence Model:

- Key components:
- Leadership and strategy alignment.
- Talent acquisition and workforce planning.
- Learning and development (L&D), performance management, and compensation.
- Integration of processes, technology, and DEI (Diversity, Equity, and Inclusion).

3. Integration of TQM in HR:

- Three main pillars:

1. Employee focus (viewing employees as internal customers).
2. Continuous improvement (Kaizen).

3. Employee involvement and leadership engagement.
4. Employee-Centric Initiatives:

- Programs to enhance the employee experience:
- Quality of life improvements.
- Smooth onboarding, workplace adaptation, and career fit support.
- DEI policies to promote an inclusive culture.
- Digital transformation for compliance and HR operations.

5. Talent Development and Learning Programs:

- Continuous skill enhancement and career growth.
- Approaches include:
- Refresher training and capability building.
- Upskilling, reskilling, and the "Learn-Unlearn-Relearn" strategy.
- Leadership and role-readiness training.

6. Process Improvement and Special Initiatives:

- Implementation of Six Sigma for efficiency and data-driven decisions.
- Women leadership programs to foster diversity, improve reputation, and drive social impact.

7. Performance and Skill Management:

- Tools and processes for continuous improvement:
- GPS 411 system for goal-setting and progress tracking.
- Role mapping and task clarity to improve teamwork and accountability.

8. Employee Engagement and Wellbeing:

- Initiatives to enhance engagement and morale:
- Leadership connects through town halls and discussions.
- Recognition programs (monthly, quarterly, and annual awards).
- Health and wellness programs, including sports activities and expert consultations.
- Innovation through suggestion portals and platforms.

9. Career Progression and Leadership Development:

- Development of high-potential employees through:
- Individual Development Plans (IDPs).
- Leadership training and career progression pathways.

10. Roadmap to HR Excellence:

- Focus on long-term strategies centered on continuous improvement, leadership development, and employee engagement to achieve sustainable HR excellence.

CEAT Magical Transformation Journey

Vikrant Deshpande
General Manager- QBM
+91 6357303011
CEAT RPG House, 463 Dr.Annie Besant Road, Worli, Mumbai 400 030

CEAT wins the prestigious 2023 Deming Grand Prize

CEAT Ltd., a flagship company of RPG Enterprises, has embarked on a transformative journey through Quality Based Management (QBM) to achieve its purpose of "Making Mobility Safer & Smarter. Everyday."

Before initiating the Quality-Based Management (QBM) journey, CEAT was not a top-of-the-mind choice for customers when purchasing tyres. The company was predominantly seen as a price player with no differentiated product to offer. The journey began in FY08 when CEAT faced dissatisfied customers, inconsistent quality, operational inefficiencies, low morale, slow growth, and a lack of a unified strategic direction. Additionally, there was a need for skill development among employees and a more structured approach to problem-solving and process improvement.

In FY09, CEAT decided to adopt Total Quality Management (TQM) as its management system, practising it under the name of Quality Based Management (QBM). This approach incorporated tools and techniques from the Toyota Production System (TPS) and Total Productive Maintenance (TPM).

The QBM journey at CEAT can be divided into three phases: QBM Initiation (FY09-FY11), QBM Promotion (FY12-FY18), and QBM Advancement (FY19-FY24). During the period from FY09 to FY18, CEAT focused on laying the foundation for its transformation journey through various initiatives. The company implemented the QBM model, which emphasized continuous improvement in products, services, processes, and systems through employee involvement. CEAT focused on enhancing employee involvement, customer satisfaction, and the deployment of purpose, vision, and strategy. Key initiatives included implementing policy management, daily management, cross-functional management, and improvement approaches such as human error prevention and development programs like Parichay for new joinees. CEAT also conducted benchmarking exercises to compare its performance with industry leaders and identify areas for improvement.

Winning the Deming Prize in 2017 was a significant milestone for CEAT, marking its journey towards TQM and customer-centricity. Guided by the purpose of "Making Mobility Safer and Smarter. Everyday," CEAT focused on strengthening its key enablers, including digitalization, customer-oriented R&D, winning through distribution, lean practices, sustainability, and the QBM way of working. The company aimed to offer a superior customer experience across all in-store and post-purchase touchpoints.

The journey did not stop there. CEAT continued to refine its processes, focusing on quality initiatives and embedding the QBM way into its culture. By 2023, CEAT's relentless pursuit of excellence led to winning the Deming Grand Prize, making it the first tyre company and one of only 33 companies globally to receive this honor. This period saw CEAT executing over 100,000 kaizens, 1100 Quality Control Circles, and more than 500 high-level problem-solving projects. The company also achieved significant milestones, such as being recognized as the first Lighthouse recognized tyre facility globally by the World Economic Forum and reaching a highest revenue in FY24.

CEAT's magical transformation journey through TQM exemplifies how a structured approach to quality management can drive significant organizational change and success. The company's commitment to TQM and the PDCA cycle has led to remarkable achievements, including enhanced customer satisfaction, improved operational efficiency, and recognition as a leader in the industry

Rane's TQM Journey

S. Sridhar, Vice President Opn. Rane Group

Rane was incepted as a company in 1929, distributing Automobiles and components. Aided by the Government Policy changes, the group launched its manufacturing venture in the late 1950's with the commencement of manufacture of Engine Valves and later other components followed. By 1970's Rane had become a successful and well-known name in India in the field of automobile components.

With the opening up of the Indian Economy in 1991, major automotive companies across the world set up manufacturing operations in India and were ready to source components from Indian manufacturers, provided they met their quality levels and cost targets. This gave Rane group a huge Opportunity for growth, but called for a total re-appraisal of its competencies and Business Processes in order to meet the stringent global standards.

The group's introspection indicated requirement of major improvements in Management methods, Education & Training and Total Employee Involvement. The improvement areas identified were a strong forte of the Japanese Management Principles. As cultural similarities also existed between Japan and India, the group decided to adopt the Japanese way of TQM as an answer to the challenges.

The TQM journey of the group commenced in the year 2000 and pursuit of TQM became an integral part of the group's mission and values. Rane believed that leveraging the TQM principles would be a strategic path to not only improve product & service quality, but also drive profitable growth. Under the guidance of Prof. Washio from JUSE, all the businesses in the group embarked on the TQM journey. The Major elements of Japanese TQM learnt were

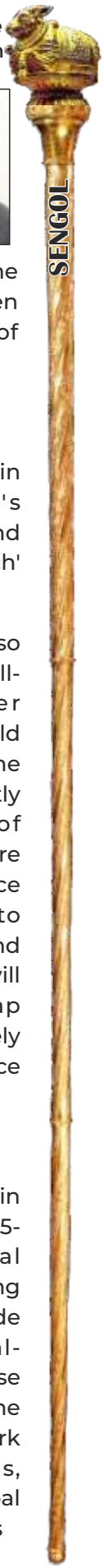
- Customer Focus.
- QC way of thinking
- Daily Routine Management
- Total Employee Involvement.

The companies in the group focused on the above elements to become world class.

TQM has helped the Rane group to improve its overall business performance in terms of Revenue and profits and also its operational performance in terms of Quality, Cost & Delivery. Between the year 2003 to 2018, all the five companies in the Rane Group were awarded the coveted Deming prize and three of the companies went on further to win the Deming Grand Prize. The Group revenue crossed 800 Mn USD in FY 2023-24 with a 11% CAGR over the last 10 years and 24% of the revenue coming from International markets. All the companies in the group are the first supplier of Choice to the major OEM's in India, in their respective businesses.

The group has a Business Excellence Council headed by the Chairman of the group, which conducts periodical Business Excellence audits based on the TQM fabric, across the companies, in ensuring the sustenance of the TQM practices.

Developed India by 2040: A Wholistic Roadmap - "Sampoorn" QUALITY AT ITS BEST – For a Noble Purpose



FOREWORD: This article is an alert for all the leaders / strategists everywhere and is written for the sole purpose of achieving a vision which every true Indian really aspires for. The article is written from actual working experience and hands-on implementation across wide variety of organizations in most organization functions.

Sunil Shrivastava - Head – Centre of Excellence, Quality Circle Forum of India – sunil@qcfi.in

1.0 The Vision

The vision of 'Developed India' is aspired by one and all in the country to achieve much higher per capita income simultaneous to all-round growth, happiness and peace. Everyone cherishes a dream to regain the status of 'Golden Bird' (Sone Ki Chidia) achieving a developed nation status much sooner than planned.

2.0 The Challenge

The challenge is magnanimous. The approaches and recommended solutions are also almost as many as nos. of people in the country. There have been great thinkers and implementers in the country since India's independence in 1947 who contributed towards this 'All-important' vision of wholistic growth! Even after more than seventy-five years since independence, the achievement of this vision remains an uphill task and needs acceptance and efforts by each and every citizen in aligned ways!

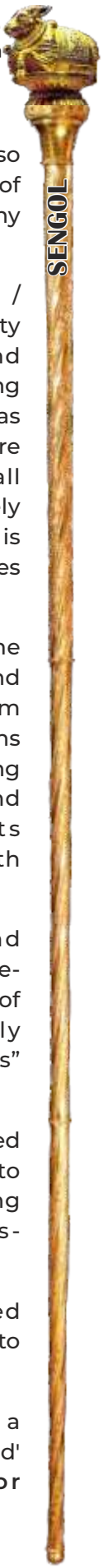
There is also a dire need to create **widespread awareness** and sensitize /educate each and every citizen on their **role clarity** to help them gear-up and respond with raising their **achievable productivity by atleast fifty percent every twelve months** without an iota of compromise on their work-life balance and happiness!

There is also a need to evolve a more comprehensive enabling roadmap encompassing/ addressing all such efforts in large sub-domains of the country's performance-systems to address each and every citizen as well as each and every 'inch' (area) of the country.

The **sustainability of "achieved status"** is also an equally challenging task. It calls for all-pervasive engineered efforts under comprehensive enabling Roadmap to uphold strong performance-fundamentals so that the country's status remains intact as 'constantly improving' GDP. The sustainability of widespread performance systems in the entire spectrum of organizations/entities will face the challenge to keep the variations to minimum addressing all special causes and arresting the performance-slippages. This will need a robust comprehensive roadmap providing common approach to aggressively start turning-around the whole performance everywhere in a sustainable manner.

3.0 Eureka – The countermeasure developed

3.1 The solution evolved steadily, especially in last 40 years, built-up over base period 1945-2002 considering worldwide industrial revolutions. It was evolved by closely observing and questioning everything happening inside and outside the 'formal-organizational-boundaries', across communities from diverse geo-political domains across the globe! The critical inputs for evolving this framework came from extraordinary Indian brains, workers, leaders from all spheres of life, global thinkers, strategists, social dynamics, citizens



of India, and above all, from ultimate rich Indian culture heritage. Since 2002-03, these inputs were gradually synergised into a vibrant roadmap knitting together strengths from most effective interventions/systems and resulting into the gradual evolution of 'Sampoorn' – The wholistic roadmap as solution to achieve the cherished vision.

3.2 A brief connecting background is vital to understand why "Eureka" happened.

3.2.1 Resounding success of the Quality management in Japan proved to many countries that they also should go for it. There were several management concepts and structured improvement systems which were defined for the industries and organizations in eastern and western countries since 1960's targeting wholistic improvements. The word 'Quality' and 'Total Quality' started being perceived as panacea and became the most-wanted interventions for most progressive organizations and helped them to varying extent. The world saw the significant turnaround happening in Japan after "world War – 2". Japan was proving to be an eye-opener for conservative technocrats who continued to believe that the technical/functional excellence alone can make or mar the business. Japan was actually using "structured problem-solving team-based approaches" under TPM/TQM umbrella, and started revamping its economic growth aggressively leveraging 'people creativity and teamwork' evolving Deming Award. Their nation-wide belief in learning and applying "structured thought process" is often quoted all over the world along with their disciple and values practiced by their citizens. The western world saw emergence of Six Sigma in Mid 1980's and evolution of Malcom Baldridge Awards, EFQM awards and IMEA awards to name a few. India also saw emergence of Quality-Organization Awards like RABNQAs, CII , IMeA etc awards.

3.2.2 Major Roadblocks – Misplaced focus also was visible in abundance in this base period of years 1945-2002. The scene in India was not any different. To mention a few:

I. There continued a technical / functional bias with technocrats that quality approaches are an additional work and hinders their natural analysis, decision making and fast implementation actions. Their bias continues widely still today that their core technical knowledge is sufficient for all business solutions. This bias is still widely prevalent in India and Quality Department is an ornamental entity for various compliances and awards.

II. Trainings and certifications became one of the prime businesses. The trainers' and consultants' world found it a premium business to deliver trainings and certifications only (not followed by facilitation for applying the tools, techniques, methodologies and systems) on these golden concepts everywhere and their mushroom growth happened across the countries.

III. The focus of many trainers and consultants was to market their expertise-areas as per ongoing trends and preferences of organizations and were inadvertently promoting "Quality-trainings as business" instead of 'Quality of business'.

IV. The training and consulting happened for Quality interventions more to cater to organizations preferences as per ongoing trends rather than objective needs-assessment.

V. The quality-jargons were evolved objectively but were practiced inadequately to derive their real benefits.

VI. Organizations also started deriving a pride by being in the 'Trained and certified' category. There was a **mad race for 'prestigious awards'** by the organizations to

achieve and boast of status of being the best of Quality organizations. In the process, the bigger objectives of Quality-interventions for actual transformation were compromised. **The real benefits from structured approach were not realized** to the desired extent for people orientation, creativity-stretch, workforce happiness, work-life balance etc.

VII. **The force-fitting of ongoing improvements** branding them as Quality interventions started becoming a standard practice and is compromising – rather destroying - the real image and potential-spread of 'quality-approach' in right earnest.

VIII. **The workforce and teams perceive the Quality function as 'Additional Work'** or just **an opportunity to make tours and external visits** for competitions and awards etc.

XI. **Work-life balance took a back seat** and was highly compromised.

X. The expected benefits of quality approaches in **absence of effective trainings with mandatory handholding** at shop floor was highly compromised diluting significance of good quality interventions/systems.

XI. India suffered a big opportunity loss at large especially in past 50 years due to above reasons in absence of an integrating 'Easy-to-understand-and-Do" Quality-solution. India, despite being a rich natural resources country and having best brains in the world, remains an 'Developing Nation'.

4.0 'SAMPOORN' (The 'Whole') FRAMEWORK – The INDIAN 'DIFFERENTIATOR' – An overview

4.1 The essence of word 'Quality' – which is an English imported word – is much more comprehensively represented by the **Indian heritage symbol – SENGOL** – which means as Tamil word "SEMMAI" meaning **RIGHTEOUSNESS**; and Sanskrit word – "SANKU" – SHANKHA – meaning **AUSPICIOUSNESS.**

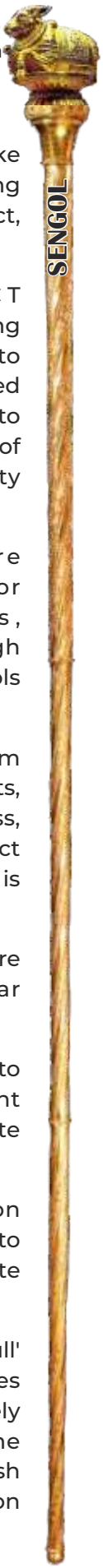
This Indian perspective of word 'Quality' conveys 'win-win' for all in its true sense upholding the spirit of Indian global concept 'Vasudhaiva kutumbakam' (The whole world is one family) and is fundamental to sustainable collective growth promoting Total People Involvement and wellbeing within and around each and every formal entity (Organization) covering 'all' on earth.

4.2 The Framework SAMPOORN addresses this Indian perspective in true sense and proves as a real differentiator. On one hand, it provides comprehensive implementation roadmap for all necessary noble quality prescriptions including 14 principles by Dr Deming, TPS (Toyota Production System); and on the other hand – it encourages Indian organizations from the entire sectors to participate in our **'Indian Quality Award System' - SAMPOORAN,** which motivates, improves, recognizes and creates a roadmap for quantum performance jump year-over-year for the entire gamut of industries and organizations by practicing this roadmap termed as **"Business @ Turbo Roadmap"!**

4.3 The Overview of SAMPOORN Framework

4.3.1 Completely aligned to all stakeholders, it is executed to deliver vision, mission, objectives, strategies, long term and short-term goals; addressing people, process, systems and culture in wholistically way expanding the pockets of excellence every day by all involved everywhere in all the 'working' domains of the formal boundaries of organizations across entire Supply-Chain to begin with – And then followed by implementing same in the communities / organizations around!!!

4.3.2 In the Core of it - **An IMPROVISED project-based improvement-framework** is practiced which is completely aligned and connects directly with / under an overall encompassing TQM framework which is extremely focused.



4.3.2.1 It is **executed in most agile ways** slicing off redundant traditional quality tools /improvising methodologies using innovative Agile Simple tools like 'Agile BSA (Agile Business System Analysis), hybrid brainstorming, Turbo APRM etc.

Few other major differentiating features of 'SAMPOORN' are:

I. This is easily / equally accepted by the leaders and workforce as they are able to easily co-relate these tools and approach with their work to chieve their targets and do not find this 'Quality' initiative a burden or additional work.

II. The business owners and CEOs can clearly see a sharp focus on improvement of business performance numbers simultaneous to people-competence building, processes streamlining, systems and procedures consolidation leading to a vibrant culture of learning and innovations propelling quantum growth on sustainable basis.

III. It creates a much more vibrant learning organizations raising the bar project-by-project every 2-4 months or Kaizen-by-kaizen on daily basis.

IV. The Business System Analysis (BSA) provides vital competency-gaps and strengthens aspects like customer-orientation, Change management, business acumen, entrepreneurship, innovation, etc.

V. The 'SAMPOORN' addresses almost all the issues popped up especially in last five decades in India and practices golden global state-of-the-art management approaches in agile ways without using jargons to keep it simple-to-understand, effective and implementation-oriented.

VI. The SAMPOORN neither excludes the most advanced AI tools, Start-ups, Design for zero defects, Quality 4.0 etc. interventions from its approach nor it loses focus on intrinsic human values and engagement to make human-growth -thereby not compromising on vital human values/factors of care, respect, trust. Empathy, etc..

VII. The IMPROVISED PROJECT MECHANISM has several milestones following evergreen 'PDCA' roadmap and pauses to address critical competency-gaps emerged from BSA for 'core' and 'extended' teams to evolve 'Model Business Area' as 'Pockets of Excellence' leveraging TQP (Total Quality People) .

VIII. The project competencies are inculcated amongst the workforce for measurements, data analytics, implementation and sustenance through effective conventional and improvised tools and techniques.

IX. Smooth linkage for project-team members with Advanced teaming concepts, meeting effectiveness, Team Effectiveness, development of internal trainers from Project team-members for Internal transformation' is provided by 'SAMPOORN'.

X. All the functions and departments are facilitated to define projects with clear measurement of performance-matrix.

XI. Leaders and managers do not need to force-fit any easy solutions into different Quality Methodologies nor need to create unnecessary documents and presentations.

XII. This makes the whole intervention exciting for the entire workforce from CEO to doorman and enables them to participate enthusiastically and happily.

XIII. The intervention creates a natural 'pull' across the entire organization and creates 'Happy Hours' at work place very objectively with a sense of purpose. As a result, the managers at all levels do not need to push workforce any longer after the intervention matures in the organization within a year or

two considering its baseline!!!

XIV. SAMPOORN is executed in five comprehensive 'IMPROVISED' steps using commonly prevailing five English verbs viz. Define, Measure, Analyse, Implement and Control. Its execution is led by critical 'potential' Mass of the organization from higher management-levels to make it really Top-down and Bottoms-Up which makes the drive sustainable.

XV. The teams can participate in all prevailing competitions spreading the vital approaches for win-win for all!

XVI. The unified roadmap eliminates the need of multiple drives in the organization which cause confusions / overlapping of efforts / credit-fight and provides real synergy for the wholistic growth!

XVII. The management Dashboards for reviews also are simplified and nos of management-reviews go down drastically consuming much less time on reviews and adding up to innovation-time.

XVIII. A simplified reward and recognition is created for the required momentum alongwith performance driven growth under a unified system – SAMPOORN.

XIX. The system of SAMPOORN provides opportunity to create own benchmarks to achieve better than the best.

XX. New horizons for new businesses / Customers / markets / Communities are natural opportunities for vertical integration and horizontal replications contributes by design towards taking forward the momentum across the nation.

XXI. The roadmap is available at practically negligible investment from Centre of Excellence, QCFI and can be started at earliest by the organizations.

XXII. The Indian TQM Awards launched by Centre of Excellence in its 3rd TQM Summit on 6th February 2025 is a phenomenal improvement-vehicle to propel the GDP-growth for the Nation in an unprecedented manner.

5.0 The Way Forward:

All the organizations can take full advantage of this Roadmap "SAMPOORN'; and emerge as a contributing entity for collective-transformation-efforts in their respective influencing-domains to spread the culture across the country as a war against inefficiencies and low-per-capita-income to make our country a developed country by 2040 leveraging Total Quality People in a manner which is faster, cheaper and better than the best.

The organizations can feel free to connect and clarify their doubts to remove any hurdle on way to transform India back into golden era of "Sone ki Chidia" (The Golden Bird). Let us work together.

Sunil Shrivastava - Head – Centre of Excellence, Quality Circle Forum of India, **Mobile -7894400702**

Innovations in TQM approaches and systems

Sub Theme : Challenges & Implementation Strategy for Total Quality Management (TQM)

Dr. Narendra Kumar Sharma
Chairman - QCFI Rajsamand Chapter

Introduction

In today's highly competitive and ever-evolving business landscape, organizations must continuously seek ways to enhance their operational efficiency, improve customer satisfaction, and foster innovation. One of the most effective methodologies for achieving these objectives is Total Quality Management (TQM). The core concept of TQM is that every member of an organization plays a crucial role in ensuring that quality is maintained at all stages of production or service delivery. TQM is a comprehensive approach to improving the quality of products and services within an organization by involving all members of the organization in the process. It encompasses a wide range of strategies, techniques, and practices aimed at improving performance at every level of the business.

The implementation of TQM requires the active participation of employees at all levels, a strong commitment from leadership, and a consistent focus on meeting customer needs and expectations. This article explores the TQM implementation strategy, its key components, and the steps involved in successfully applying TQM in an organization.

Understanding Total Quality Management (TQM)

Before delving into the implementation strategies, it is essential to define Total Quality Management (TQM). TQM is a management philosophy that focuses on improving the quality of products and services through ongoing improvements in processes, customer interactions, and employee involvement. It is a holistic approach that integrates quality management into every aspect of an organization's operations, from strategic planning to day-to-day activities.

TQM's main goals include:

1. Customer satisfaction – The primary focus of TQM is to meet and exceed customer expectations.

2. Employee involvement – All employees are encouraged to contribute to the quality improvement process.

3. Process improvement – Continuous improvement of processes and workflows to enhance efficiency and quality.

4. Leadership commitment – Strong leadership and management support are crucial to the success of TQM.

Key Principles of TQM

There are several key principles that form the foundation of Total Quality Management:

1. **Customer-Centric Focus:** TQM revolves around understanding and meeting the needs and expectations of customers. The organization must prioritize customer satisfaction and create processes that consistently deliver high-quality products and services.

2. **Continuous Improvement:** TQM is driven by the philosophy of continuous improvement. This involves regularly evaluating processes, identifying inefficiencies, and making changes to enhance quality and performance.

3. **Employee Involvement:** Every employee is encouraged to participate in the quality improvement process. Employees at all levels are seen as valuable contributors to enhancing the overall quality of the organization's output.

4. **Process-Oriented Approach:** TQM emphasizes improving processes rather than focusing on individual tasks or outcomes. It promotes the idea that quality is built into the processes themselves, and improving these processes will lead to higher-quality results.

5. Data-Driven Decision Making: Decisions should be based on accurate data and analysis rather than intuition or assumptions. TQM encourages the use of statistical tools, performance metrics, and other data-driven approaches to assess and improve quality.

6. Integrated System: TQM is not limited to a specific department or function. It is an organization-wide approach, involving all departments and employees. A quality management system that aligns with the strategic objectives of the organization is essential for achieving the desired outcomes.

Steps in TQM Implementation Strategy

The successful implementation of TQM in an organization requires a structured approach. The following steps outline a typical implementation strategy for Total Quality Management:

1. Top Management Commitment

The first step in implementing TQM is securing the commitment and support of top management. Without strong leadership, the implementation of TQM will likely fail. Top management must understand the importance of quality and take ownership of the quality management process. They should provide the necessary resources, set clear objectives, and foster a culture that prioritizes quality.

Key actions for top management include:

· Setting quality-related goals and objectives aligned with the overall business strategy.

· Allocating resources for training, tools, and technology that will support TQM initiatives.

· Creating a supportive environment for employee involvement and feedback.

· Leading by example, demonstrating their commitment to quality in all aspects of the business.

2. Establish a Quality Policy and Vision

A well-defined quality policy and vision are essential to guide the implementation of TQM. The quality policy should articulate the organization's commitment to providing high-quality products and services and outline the approach to achieving this goal. The vision should focus on long-term goals related to quality improvement, customer satisfaction, and process optimization. The quality policy must be communicated effectively to all employees, ensuring that everyone understands the organization's objectives and the role they play in achieving them.

3. Employee Involvement and Training

One of the key principles of TQM is employee involvement. Employees at all levels must be engaged in the quality improvement process and be given the tools and training necessary to contribute effectively. This can be achieved through:

· Training Programs: Offering ongoing training in quality management principles, tools, and techniques. This can include training in areas such as problem-solving, process mapping, root cause analysis, and statistical process control.

· Employee Empowerment: Encouraging employees to take ownership of quality improvement initiatives, make decisions related to quality, and provide feedback on processes.

· Quality Circles: Forming small groups of employees from various departments who meet regularly to identify problems, discuss potential solutions, and implement improvements.

4. Define and Map Processes

TQM emphasizes a process-oriented approach, so it is important to define and map key processes within the organization. This includes:

· Identifying all the processes that impact the quality of products and services.

· Mapping these processes to understand their flow, inputs, outputs, and interdependencies.

· Identifying areas for improvement and establishing performance metrics to track progress.

Process mapping allows the organization to visualize the entire workflow, identify bottlenecks, inefficiencies, or quality issues, and make necessary adjustments to improve performance.

5. Set Clear Quality Objectives and Metrics

For TQM to be effective, it is essential to set clear, measurable quality objectives. These objectives should be aligned with the organization's overall strategic goals and customer expectations. Establishing key performance indicators (KPIs) and metrics helps monitor progress and ensure that the organization is moving in the right direction.

Common quality metrics include:

· Customer satisfaction scores: Measuring how well the company meets or exceeds customer expectations.

· Defect rates: Tracking the number of defects or errors in products or services.

· Process efficiency: Evaluating the speed and cost-effectiveness of key processes.

· Employee engagement: Measuring the involvement and motivation of employees in the quality improvement process.

6. Implement Continuous Improvement Practices

The essence of TQM is continuous improvement. Organizations should adopt a systematic approach to identify and implement improvements on an ongoing basis. Some of the most widely used tools and techniques for continuous improvement include:

· PDCA (Plan-Do-Check-Act): A cycle used to plan, implement, evaluate, and refine quality improvement initiatives.

· Six Sigma: A methodology that focuses on reducing defects and variability in processes through the use of statistical analysis and data-driven decision-making.

· Kaizen: A Japanese term for continuous, incremental improvement that involves all employees in making small, gradual improvements.

· Root Cause Analysis: A technique used to identify the underlying causes of problems or defects so that solutions can be implemented to prevent recurrence.

7. Monitor, Measure, and Evaluate Performance

Regularly monitoring and evaluating performance is crucial for the successful implementation of TQM. Organizations should track progress against established quality objectives and metrics, identifying areas where improvements have been made and areas that still need attention.

Key activities for monitoring and evaluation include:

· Conducting regular audits and assessments of processes, systems, and products.

· Analyzing customer feedback and complaints to identify trends or recurring issues.

· Reviewing quality data and performance reports to determine whether objectives are being met.

· Adjusting strategies and tactics based on evaluation findings.

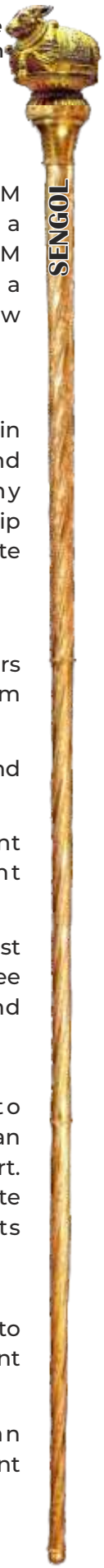
8. Foster a Culture of Quality

Finally, the implementation of TQM should be viewed as a long-term cultural shift within the organization. Creating a culture that prioritizes quality involves:

· Promoting the values of quality, customer focus, and continuous improvement throughout the organization.

· Celebrating achievements and recognizing employees who contribute to quality initiatives.

· Encouraging open communication and feedback about quality issues and improvement opportunities.



A strong culture of quality ensures that TQM becomes embedded in the organization's DNA and continues to drive improvements over time.

Challenges in TQM Implementation

Implementing TQM can be challenging due to several factors:

· Resistance to change: Employees may be resistant to new processes or changes in organizational culture, especially if they are accustomed to old methods.

· Lack of commitment: If top management does not demonstrate strong commitment to TQM, the initiative may lack the necessary resources and support to succeed.

· Insufficient training: Without proper training and education, employees may lack the skills and knowledge necessary to contribute effectively to quality improvement efforts.

· Poor communication: Effective communication is essential to ensure that all employees are aligned with the organization's quality goals and objectives.

Some examples where companies failed in implementing TQM:

1. Ford Motor Company (Early 1980s)

· Problem : In the early 1980s, Ford attempted to implement TQM under the leadership of then-CEO, Donald Petersen. However, they faced challenges in fully committing to the principles of TQM. The company focused too much on short-term financial performance rather than fully integrating TQM across all levels of the organization.

· **Failure Points:**

o Inadequate training and involvement of all employees.

o Lack of a strong commitment from all management levels to sustain TQM efforts.

o Insufficient communication about the long-term vision for quality.

· Outcome: Despite initial efforts, Ford's TQM program faltered, and it took the company a long time to recover. The full benefits of TQM were not realized until later, after a restructured quality approach under new leadership.

2. Xerox (1980s)

· **Problem:** Xerox initially embraced TQM in the 1980s, aiming to improve quality and reduce costs. However, the company struggled with a lack of consistent leadership and a failure to make TQM part of the corporate culture.

· **Failure Points:**

o Resistance from employees and managers who were skeptical about the long-term benefits of TQM.

o Insufficient focus on customer needs and expectations.

o A lack of alignment between different departments, leading to inconsistent implementation.

· Outcome: Despite being one of the first companies to adopt TQM, Xerox did not see immediate results and had to revisit and overhaul its TQM efforts in the 1990s.

3. Kmart (1990s)

· Problem: Kmart made efforts to implement TQM in the 1990s as part of an attempt to compete with rivals like Walmart. However, the company failed to fully integrate TQM practices across all aspects of its operations.

· **Failure Points:**

o A top-down approach that neglected to involve employees in the quality improvement process.

o Focus on cost-cutting rather than investing in long-term quality improvement initiatives.

o Poor communication and lack of coordination between different divisions of the company.

· Outcome: Kmart's TQM efforts were inconsistent and ultimately unsuccessful. The company continued to struggle with quality and service issues, which contributed to its decline.

4. W. Edwards Deming's Experience with the US Auto Industry (1950s-1970s)

· **Problem:** W. Edwards Deming, who is considered a pioneer of TQM, tried to implement quality improvement techniques in U.S. auto manufacturers during the 1950s. However, many companies in the U.S. were initially resistant to his ideas.

· **Failure Points:**

o Management was focused on short-term profits and was not ready to invest in the long-term process of quality improvement.

o A failure to understand that quality management required a cultural shift across the entire organization, not just isolated efforts.

o The companies didn't commit to the training, employee involvement, and statistical methods that Deming emphasized.

· Outcome: The U.S. auto industry initially ignored Deming's ideas, which allowed Japanese manufacturers, like Toyota, to gain a competitive advantage by adopting TQM principles and continuously improving their processes.

5. Motorola (1980s)

· **Problem:** Motorola is often credited with helping pioneer Six Sigma, a key component of TQM, but its initial TQM efforts faced challenges. Early implementations did not yield the expected improvements.

· **Failure Points:**

o The focus was primarily on defect reduction and didn't fully address the need for a broad cultural change.

o Resistance to change from employees who were accustomed to traditional management approaches.

o Overemphasis on technical aspects without enough focus on leadership and employee involvement.

· Outcome: Motorola eventually refined its approach and integrated Six Sigma more effectively. While TQM initiatives initially struggled, the later emphasis on data-driven decisions and leadership support helped turn the company around.

In summary, these examples highlight common reasons why TQM initiatives can fail, such as inadequate leadership commitment, lack of employee involvement, failure to focus on long-term goals, and insufficient training. For TQM to succeed, it requires a holistic approach, continuous employee engagement, and unwavering leadership support.

Conclusion

The successful implementation of Total Quality Management (TQM) requires a strategic, systematic approach that involves every member of the organization. By focusing on customer satisfaction, continuous improvement, and employee involvement, organizations can achieve significant improvements in quality, efficiency, and performance. The key to TQM success lies in strong leadership, clear objectives, effective training, and a commitment to fostering a culture of quality that permeates all aspects of the business.

When properly executed, TQM can help organizations not only enhance their products and services but also gain a competitive edge in the market, improve customer loyalty, and foster a positive work environment that drives innovation and long-term success.

Total Quality Management – TQM 4.0

Vellingiri.P,
Director-QCFI-South zone

Introduction: Total Quality Management (TQM) is a comprehensive approach to organizational management that seeks to improve the quality of products and services by involving all employees in the continuous improvement process. The focus is on customer satisfaction, systemic problem-solving, and improving organizational processes.

Origin and Evolution of TQM: TQM evolved from the industrial quality movement in the early 20th century and gained prominence in the 1950s, particularly through the work of quality pioneers like W. Edwards Deming, Joseph Juran, and Kaoru Ishikawa.

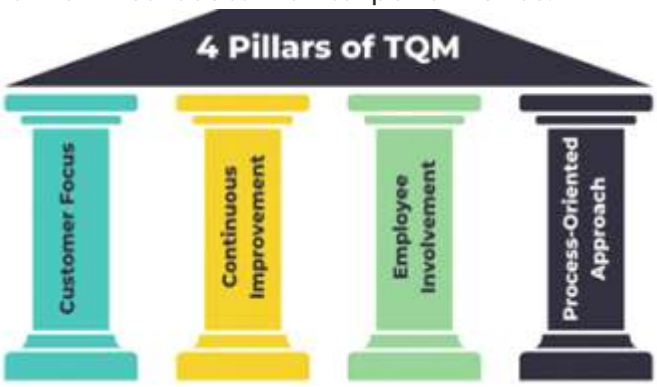
It was heavily influenced by the Deming Cycle (PDCA) and principles of statistical process control.

- **1920s:** Statistical quality control emerged.
- **1940s-50s:** Japan adopted quality principles after World War II under guidance from Deming and Juran.
- **1980s-90s:** TQM became a global phenomenon, with companies like Toyota and Motorola demonstrating its effectiveness.

TQM is an organization-wide philosophy focused on Customer satisfaction, Employee involvement, Continuous improvement and Systemic approach - Integrating quality into every aspect of the business.

TQM Structure: The structure of TQM revolves around aligning organizational processes and culture to achieve quality goals. It includes:

- **Leadership Commitment:** Top management drives the quality agenda.
- **Customer Focus:** Understanding and meeting customer needs.
- **Process Orientation:** Focusing on processes rather than outcomes.
- **Employee Involvement:** Empowering employees to participate in quality initiatives.
- **Measurement and Analysis:** Using data-driven methods to monitor performance.



The Historical Evolution of TQM

Components of TQM:

- **Customer-Focused Approach:** Delivering value to customers by meeting or exceeding their expectations. Regular feedback mechanisms to understand customer needs.
- **Leadership Commitment:** Establishing a clear vision for quality. Leaders actively engage and inspire employees to prioritize quality.
- **Continuous Improvement:** Using methods like Kaizen, PDCA (Plan-Do-Check-Act), and benchmarking. Encouraging innovation and incremental improvements.
- **Employee Involvement:** Cross-functional

teamwork and training. Providing employees with tools and authority to solve quality problems.

- **Process-Cantered Approach:** Mapping processes to identify bottlenecks and inefficiencies. Standardizing procedures to ensure consistent quality.

- **Data-Driven Decision Making:** Employing statistical tools like control charts and Six Sigma to analyze performance. Using data to drive improvements and reduce variability.

- **Integrated System:** Aligning quality management practices with organizational goals. Ensuring all departments work cohesively toward quality objectives.

TQM Journey:

1) **Commitment and Planning:** Leadership establishes a quality vision. Teams are formed to plan and implement quality initiatives.

2) **Initial Implementation:** Training employees on TQM principles and tools. Introducing pilot projects to demonstrate **success.**

3) **Process Optimization:** Mapping and improving key processes. Incorporating customer feedback into process design.

4) **Embedding TQM in Culture:** Making quality improvement a continuous activity. Recognizing and rewarding employee contributions.

5) **Sustained Improvement:** Adapting to changing customer demands. Refining processes based on performance data.

Benefits of TQM:

- Improved product/service quality.
- Increased customer satisfaction and loyalty.
- Enhanced employee morale and engagement.
- Reduced costs through waste elimination.
- Better organizational reputation and competitiveness.

TQM is more than a set of tools; it is a cultural transformation that fosters collaboration, innovation, and a relentless focus on quality. Companies that adopt TQM can achieve long-term success, as seen in examples like Toyota and Motorola. However, its implementation requires strong leadership, employee involvement, and a commitment to continuous improvement. By placing quality at the heart of all processes, TQM ensures sustainable growth and enhanced customer satisfaction.

Comparison Between Total Quality Control (TQC) and Total Quality Management (TQM): While both TQC and TQM aim to improve the quality of products and services, they differ in scope, philosophy, and approach. Below is a detailed comparison:

Aspect	TQC	TQM
Definition	Process and product quality focus	Organization-wide quality philosophy
Focus	Product quality	Customer satisfaction
Scope	Specific departments	Entire organization
Philosophy	Product-centric	Customer-centric
Methods	Inspections, SPC	PDCA, Six Sigma, FMEA, QFD
Employee Role	Limited involvement	Full employee participation
Customer Role	Indirect	Central
Leadership	Led by quality managers	Leadership-driven
Approach	Reactive	Proactive

TQC is a precursor to TQM, laying the foundation for modern quality practices. However, TQM takes quality management further by embedding it into the organizational culture, involving all employees, and aligning quality goals with customer satisfaction. Both are valuable, but TQM is more comprehensive and adaptable to diverse industries.

TQM 4.0: Industry 4.0 and Quality 4.0 evolved over a period of time in line with technology development. We can also define TQM 1.0, 2.0, 3.0, and 4.0 as the development stages of TQM, aligned with the evolution of industry1.0 to 4.0,Quality 1.0 to 4.0 and technological advancements. Each stage integrates progressively advanced tools and philosophies to enhance quality management.

TQM 1.0: The Foundation Stage

- Era: Early 20th century to 1950s
- Focus: Inspection and quality control.
- Characteristics: Reliance on inspection-based systems to ensure quality in production.
- Reactive approach: Identifying and rectifying defects after production.
- Tools: Statistical Quality Control (SQC), sampling, and defect tracking.
- Leadership limited to production departments, with little cross-functional involvement.
- Limitations: High dependence on inspections.
- Limited focus on customer needs and organizational culture.
- TQM 2.0: Process-Oriented Quality Management
- Era: 1960's to 1980s
- Focus: Process control and prevention of defects.
- Characteristics: Shift from inspection to process-oriented approaches like Deming's PDCA cycle and Joseph Juran's quality trilogy.
- Proactive approach: Focus on preventing defects during production.
- Tools: Statistical Process Control (SPC), Fishbone Diagrams, and Pareto Analysis.
- Involves middle management in quality initiatives, with early cross-functional teams.
- Innovations: Emphasis on continuous improvement (Kaizen).
- Early integration of customer feedback.
- TQM 3.0: Customer-Centric and Systemic Integration
- Era: 1990's to 2010's
- Focus: Customer satisfaction and systemic quality integration.
- Characteristics: Quality management expanded across the entire organization.
- Customer-centric approach: Products and processes aligned to meet customer expectations.
- Tools: Six Sigma, Quality Function Deployment (QFD), Failure Mode and Effects Analysis (FMEA), and benchmarking.
- Employee involvement becomes central, with training programs and empowerment.
- Technological Support: Use of Enterprise Resource Planning (ERP) and early data-driven decision-making tools.
- Integration of Lean principles to minimize waste.
- TQM 4.0: Digital and Smart Quality Management
- Era: 2010s to present
- Focus: Smart systems, real-time data, and AI-driven quality improvement.
- Characteristics: Integration of Industry 4.0

technologies: IoT, AI, big data, and automation.

- Predictive and prescriptive analytics to identify quality issues before they arise.
- Tools: Digital twins, advanced simulation, machine learning models for defect prediction, and IoT-enabled quality monitoring.
- Full organizational adoption with emphasis on collaboration and real-time quality control.
- Key Innovations: Cyber-physical systems to monitor production and quality in real time.
- Use of blockchain for supply chain transparency and quality traceability.
- Cloud-based platforms for seamless quality data sharing across locations.
- Customer Focus: Personalized customer experiences using AI-driven insights.
- Feedback loops directly integrated into product design using tools like digital QFD.

Summary Table of TQM Stages:

Stage	Focus	Key Tools	Technological Integration
TQM 1.0	Inspection and defect correction	SQC, sampling, defect tracking	Minimal (manual processes)
TQM 2.0	Process control and prevention	SPC, PDCA, Pareto charts, Fishbone diagram	Early adoption of statistical methods
TQM 3.0	Customer satisfaction and systems	Six Sigma, QFD, FMEA, Lean tools	ERP systems, data-driven decision-making
TQM 4.0	Digital and smart quality	IoT, AI, digital twins, blockchain	Advanced automation, big data, real-time analytics

TQM 4.0 evolved in line with Industry 4.0 and Quality 4.0 aligning with technology development in automatic inspection, testing, real time monitoring and digitalisation of data, analysis and various digital tools including AI-Artificial intelligence for TQM and for both preventive and corrective measures to meet

- quality in all functions of integrated supply chain management, including design and development and support functions.

Benefits of TQM 4.0

1) Real-Time Quality Management: Instant defect detection and correction.

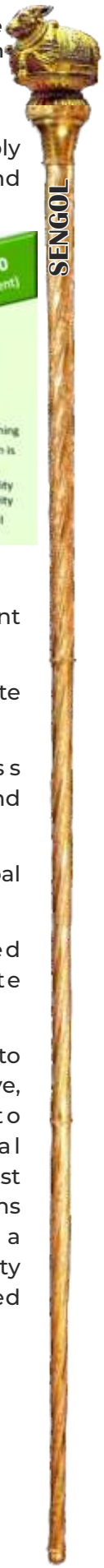
2) Predictive Analytics: Using AI to anticipate issues.

3) Integrated Systems: Seamless communication between departments and systems.

4) Scalability: Easily applicable across global operations.

5) Sustainability: Optimized resource utilization and waste reduction.

The evolution of TQM from TQM 1.0 to 4.0 demonstrates a shift from reactive, inspection-based systems to proactive, smart, and digital approaches. By leveraging the latest tools and technologies, TQM 4.0 aligns closely with Industry 4.0, offering a comprehensive framework for quality excellence in modern, fast-paced industries.



Total Quality - A Journey to remember

Mr Sankarasubramanian,
Chairman, QCFI Madurai Chapter.

Dr N Vivek, Professor of Practice,
Great Lakes Institute of Management,
Chennai.

We were visiting a Toyota group company. Having heard about the legendary perfection at Toyota, we had high expectations. But what we saw was out of the world. It just blew us away.

As we entered the premises, the first thing the driver told us was, he was in a hurry and requested us to get off a little fast. We were surprised as drivers rarely tell us that unless there was some pressing commitment. But what we heard stunned us. He told us that the factory was short of a few workers due to leave and that he had to change his dress and start operating the machines in the shift. He also told us that all the drivers were fully trained not only to operate the machines, but also to do the autonomous maintenance for each machine they operated. We had never heard of anything like this in any other company. This was very much surprising as we have seen that drivers were waiting near their vehicles invariably.

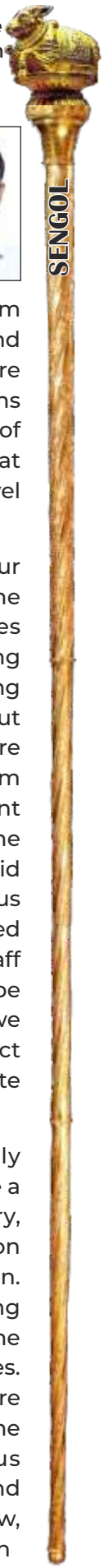
Next we got off the car. We found the Vice President, Operations waiting for us at the doorstep in spite of his very busy schedule. He proceeded to help us with the security clearances and even personally got us the safety equipment like shoes and helmet. He personally told us the safety points to note. First time a top boss spent so much time with us at the entrance to any guest with personal touch

Next he straight took us to the workplace and introduced his team and assigned an experienced staff to guide us through the facility. Amazingly he knew about every department, every machine, every production requirement, etc even though he belonged to only one department. We came to know later that all their staff have been trained that way.

Amazingly this company picks people from the villages, many only 10th class pass and train them to this level. By the way, all are Indians. So we started believing that Indians have it in them to achieve such high levels of commitment. This made us to understand that everyone can be groomed to the required level with proper training.

We did find a few points of improvement in our little way. When we mentioned this, everyone took notes and had finished the changes within 30 minutes. No cribbing, no offering excuses. A bigger surprise awaited us during the tea break. The machines kept running, but all the workers were off, having tea. .We were astonished to see the managerial staff from the HR department, the finance department including the Vice president running the machines. This plant had this practice to avoid stopping the machines. Now we were curious about the quality levels of the plant that used drivers and other department managerial staff to produce products. We expected it to be variable. But when we saw the figures, we were pleasantly surprised.to note their defect levels at 1.5 ppm. We were speechless to note this.

Then came lunch time. We had a lovely vegetarian lunch and were surprised to note a pure vegetarian only menu in the factory, because we guess Japanese eat a lot of non vegetarian foods. Great example of adaptation. During lunch we were joined by the managing director of the company. He too sat just like the rest of us and exchanged some pleasantries. Then we had finished the first course and were looking for curd which was finished in the counter. The managing director saw us struggling, got up, went into the kitchen and got us two cups of curd each personally. Wow, we were really touched by this level of concern



for totally unknown people, for this was our first visit to this firm. Then we noticed a sign behind which read, "Respect for people".

After lunch, they were having a kaizen award ceremony. Usually these are private affairs in companies. But we were called on stage, asked to give the gifts to the winners and they insisted on clicking photos of this event with great pride. We saw for the first time how each small detail is dealt with great care in this amazing organisation.

We then heard some stories about incidents which are usually never disclosed in any organisation. They were reviewing the planning for the next day production and cross checking inventories stocks. To their surprise, once one of the components in the bill of materials was not available. The marketing head was also taking care of the purchase then. He openly admitted that he had forgotten due to work pressure. What followed was a testimony to this great organisation. Each and every employee called everyone in the market for the component, had it delivered within one hour and the production schedule was completed well in time. They famously state," Once a problem is declared, it is the ownership of the entire plant". They take pride in the fact that they have never fired any employee or staff except in the case of indiscipline or criminal activities.

We decided to look into their production planning process, to see the famed Toyota pull system. What awaited us was the next level production planning stuff. They showed us their stock levels. This plant was operating on 35 minutes of stock! Yes, we are not misstating the numbers. This is in an environment where other companies work on one to three months stocks. We then asked them if their suppliers were having three months stock. We were surprised to note that they too operated on one day stocks only.

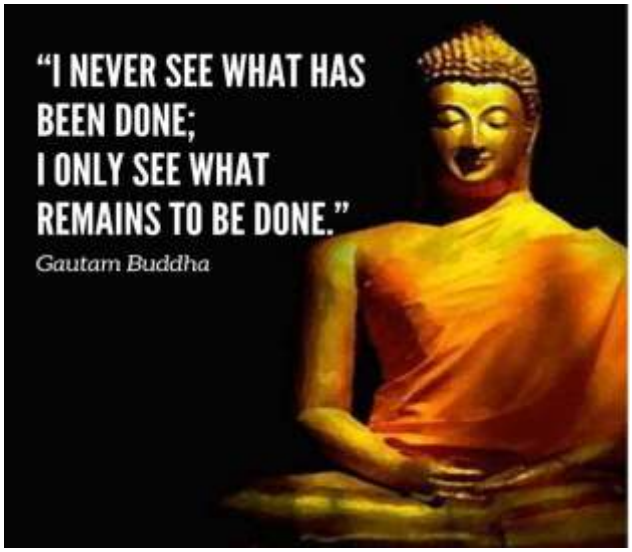
In front of us they were shifting the huge machines within the factory in the evening. We learned that they did this every week or so depending on the requirements. This as opposed to some factories where the machines never move for decades. The complexity of the shift was that it had an impact on the purchase, the tool placement, the product route, the finished goods storage and the movement of people. They had all this planned out and that too by class 10 pass workers, presented to the top management, benefits explained and executed as well without waiting for external assistance.

When we started to leave, the entire team came to us and requested information on lots of issues related to production, even though each was an expert in the field with tons and tons of experience. We saw the often stated punch line," Learning is a lifelong process"

Such excellence, such quality everywhere, such amazing attitude, and all 100% Indian, in an Indian environment, with local talent only. Yes this is a real place.

We now see what Total Quality management really means in action!!

Do you believe that this factory is in India? Yes it is in India.



TQM to Quick Response Quality Control methodology (QRQC)

Shri R. Kannan, TQM consultant

Every industry may be small. medium or large has its own products to manufacture and enhancing customer base in the present competitive land scape through their leadership/ management strategies.

However, their policies and approach differ but most important commonality among them is the problem-solving approach. we evidence their problem solving and quality improvements efforts through kaizen, QCC, six sigma. smed ,poka yoke and lean thinking approaches

As I have involved over 64 years in various production processes and continuous improvement programs, after covid pandemic, I found the focus on QRQC - (Quick Response Quality Control) is very much beneficial as it is an efficient field approach to reducing quality defects and boosting operational performance. QRQC emphasizes immediate action and swift problem resolution to enhance product quality and operational efficiency.

. Nissan developed this approach in the late 90s, taking inspiration from Toyota's TQM and Lean production systems, which are still very relevant today and my success story on its adoption and achieved significant results both in process and product manufacturing,,

QRQC - it's not Nothing newer approach and not difficult to adopt and not time involving and waiting to see the results? And at the same its 'not low hanging fruits or quick wins or AK '

This approach will be easily percolated to all employees from Grass root to high velocity XF teams and will be empowered to bring unique

improvements to customer experience

This method draws heavily on the principles and tools of TQM such as. PDCA

GEMBA walk, Kaizen, and Lean Manufacturing. Red bin analysis (RBA) ...

QRQC is on principles of 3 G

1,Gemba walk – Quick Quality issue identification-

Gemba Walks in first place to gain a better understanding of the process flow and start from there making our way down to the root cause of problems in the process. A Gemba walk is not a surprise inspection., Be clear and honest about the purpose Start with to three simple questions:

What should happen? What is happening? Explain why!

2. Genbutsu:

"Gemba" refers specifically to the actual location where work is done, like a shop floor, whereas "Genchi Genbutsu" means "go and see" and signifies the practice of actively observing and investigating a situation directly at the "Gemba" to understand and solve problems firsthand, often when a specific issue arises; essentially, "Gemba" is the place, and "Genchi Genbutsu" is the action of going there to gather information and solve problems.

Genjitsu

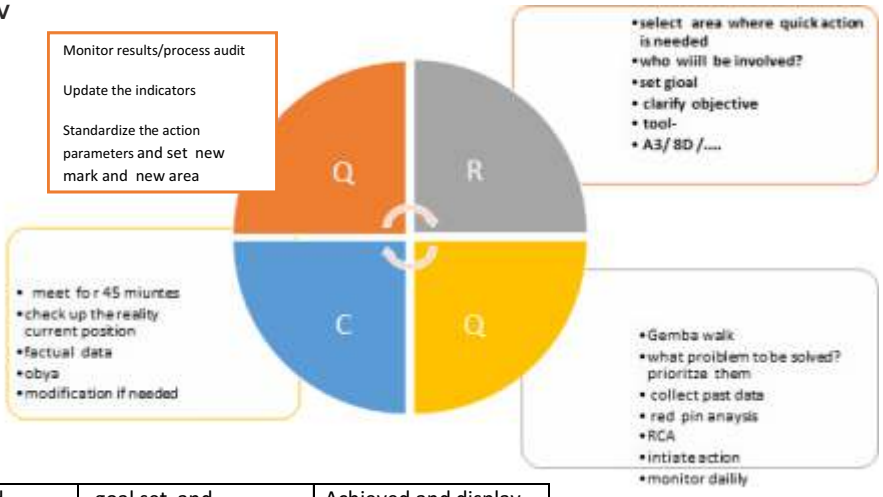
Genjitsu (現物) is a Japanese word that means "the real facts" or "the actual situation". It's part of a set of three words that are known as the 3G of Kaizen. The other two words are genba, which means "the actual place", and genbutsu, which means "the actual thing".

Go for root cause analysis and find out hidden factory elements Genjitsu translates to "the current reality" or "the truth." It requires acknowledging the reality of the situation without making assumptions or judgment

Mille stone activities in the QRQC System through 3G

- Identifying Quality Issues: select area
- Single manager for QRQC
- Organize Gemba meet and
- Proactive Approaches and Data Analysis
- Documenting and Tracking Non-Conformities
- Digging Deep: Root Cause Analysis Made Effective
- Proposing and Implementing Corrective Actions
- Escalation Process
- Holding QRQC Meetings and Daily Huddles - daily

Implementation: over all view



TRACKING QRQC

Are in right track?

ğH ttïũ M ẍüttj permanently	time to find and solving the problems	goal set and improving operational indicators- area,	Achieved and display Hoshin kanri matrix

To make QRQC useful to your industry

Make QRQC a Daily Priority:

Appoint a Single Problem Manager for accountability and monitoring and reporting

Prioritize Customer Protection:

Transparency build up

Rely on Facts and Statistics:

Results at glance

IPR – 15- 20% through QRQC achieving < 1200 ppm. production volume almost 80 to 90 % higher

TEI- increase of 350 numbers - 3G kaizens . safety – zero incidents. Go green – achieved

Centre of Excellence, QCFI

306, 3rd floor, Navketan Chambers, 62, SD Road, Secunderabad - 500003
Mail: tqmqcfi@gmail.com Call: 7894400702 ; 9391647969

Welcome to Unique Business-Enabler Training Programs

I - FLEXI SCHEDULE MODULES (TTT- Train-The-Trainer Modules for Managers/Internal Trainers)

Can be scheduled on any date(s) with three-weeks prior agreement). Limited Batch Size - 7-15 nos.

SL No	CoE Modules	Duration	Fee per day per participant Physical	Fee per day per participant Online
1	**Key QC Tools-Part1** - Brainstorming, six thinking Hats, PPI (project-Pareto-Index) - TTT for managers/internal Trainers	1 Day	1800	1500
2	**Key QC Tools-Part2** - CE diagrams - how to make 3 types of CE diagrams, Why-Why Technique, validation, data analysis and prioritization - TTT for managers/internal Trainers	1 Day	1800	1500
3	**Making Various Business graphs** - Line Graph, Bar Chart, Pie chart, pareto, Pictorial Graph, Z Graph, belt graph, Area Graph, Histogram- TTT for managers/internal Trainers	1 Day	1800	1500
4	**Key QC Tools-Part3** - Check list, Check sheet, Data Sheet, Data Types, Data Collection, Scatter Diagram, Histogram - TTT for managers/internal Trainers	1 Day	1800	1500
5	**Key QC Techniques** - PDCA, Gantt Chart, Milestone Chart, Flow Diagram, SMED Concept and Internal External Activities - TTT for managers/internal Trainers	1 Day	2000	1500
6	**Statistical Process Control** - Normal Curve, Standard deviation, Control Charts - TTT for managers/internal Trainers	1 Day	2000	1500
7	**QC Tools and Techniques** - Combo Program for SN1 to SN6 (batch Size 12-17 nos.)	6 Days	1700	NA
8	**Quality Circles system /QIT** 12 Step methodology, Tools and techniques - TTT for managers/internal Trainers	3 Days	1700	NA
9	**Lean Quality Circles system**- 5 Step methodology, Key Problem solving Tools and techniques - TTT for managers/internal Trainers	2 Days	1700	NA
10	**JURY DEVELOPMENT PROGRAM** modules - 20 Nos. Details at QCFI Portal. Offiline Program at QCFI HQ at Clock Tower, Secunderabad (or Inhouse at Company's Site with Faculty Logistics arrangements)	6 Days	2000	NA

II - Unique Business-Enabler Modules from Centre Of Excellence -

On Mutually convenient Dates with Organizations

SL No	CoE Modules	Duration	Fee per day per participant Physical	Fee per day per participant Online
11	**Business @ Turbo Roadmap for Champions** - A strategic breakthrough program for Business Owners, Leaders at all levels, decision makers	1 Day	4200	2700
12	**Business @ Turbo Roadmap for Trainers** - A train-The-Trainer program for Organization Business Excellence Leaders for Plants and Quality Departments for strategic breakthrough results	3 Days	4200	NA
13.A	**Turbo-DMAIC LSSGB Training Certification** (Lean Six Sigma - Green Belt) - An improvised Training with hands-on excercises	3 Days	2500	2500
13.B	**Turbo-DMAIC LSSGB Certification** ((Lean Six Sigma - Green Belt) - Training and projects facilitation - GB Certification (**project handholding** spread over 4 months (batch size 10-20)	9 Days	2500	NA
14.A	**Turbo-DMAIC LSSBB Training Certification** - LSSBB (Lean Six Sigma - Black Belt Training- An improvised Training with hands-on excercises. includes champions' training (batch size 10-20)	10 Days	3500	NA
15	**Turbo-DMAIC LSSBB Certification**- LSSBB (Lean Six Sigma - Black Belt) with project	2 Days	2500	2500

16	**Business Risk Reduction** through cross functional teamwork - using IMPROVISED FMEA and concepts of AIAG-VDA FMEA	1 Day	2500	1800
17	**Maximizing Operations targets** through Design of Experiments (batch size 10 - 20)	2 Days	3000	NA
18	**Data Analysis and Minitab software usages** for faster project execution	1 Day	2500	1800
19	**KAIZEN and SMED -** for senior Leaders, managers, frontline leaders **-** The winning approach is decoded with an actual case study and hands-on excercises.	1 Day	2500	1800
20	**Kaizen and basic Lean Tools** - Reducing Losses and improving PQCDSME for senior Leaders, managers, frontline leaders - The winning approach is decoded with an actual case study and hands-on excercises.	1 Day	2000	1800
21	**Utility Advance data Analysis Tools/ business graphs**- Correlation, Regression, Anova, various graphs using Minitab software	1 Day	2500	1800
22	**Process Capabilty for business Transformation** - Normal Curve, Standard deviation, Cpk, Cp, Pp, Ppk , Statistical Process Control - Control Charts, Minitab software usages	2 Days	2000	1600
23	**5S -JUSE Japan-Certification-System** - Productive and Safe Workplace Management system towards zero inventory and zero breakdown. For Internal Trainers and Management- Auditors	3 Days	2000	NA
24	**TPM 8 Pillars Introduction and Autonomous Maintenance** Overview, 7 steps towards zero breakdown, Managers Model - For Internal Trainers	2 Days	2000	NA
25	**Lean Management for business transformation** for senior Leaders, managers, frontline leaders(batch size 12-17)	3 Days	2000	NA
26	**Seamless Agile SGAs** (Small group Activities) - Leveraging strenths of QCs, LQCs, Six Sigma, Lean, TPM) for leaders/senior Managers/Quality Leaders/Business Analysts	3 Days	2000	NA
27	**ZERO MISTAKE Methods -** The approaches of Poka Yoke elaborated in simple manner with examples for senior Leaders, managers, frontline leaders **-** The winning approach is decoded with an actual	1 Day	2500	NA
28	**PROCESS BENCHMARKING -** The approaches elaborated in simple manner with examples for senior Leaders, managers, frontline leaders **-** The winning approach is decoded with an actual case study	1 Day	2500	NA
29	**Project team Dynamics** - A transforming experience for competence building. The program unleashes the team potential to deliver towards full potential reducing Losses and improving PQCDSME for senior Leaders, managers, frontline leaders - The winning approach is decoded with hands-on excercises.	1 Day	1500	NA
30.A	Industry Ready Professionals - For Fresh Engineers/Graduates. Comprehensive Orientation on project-based improvement roadmap to develop them as business professionals. Besides vital tools and techniques, the module enriches the participants with essential teaming and leadership attributes with experiencial learnings! . On-site program. Batch Size - 20	4 Days	1500	NA
30.B	Industry Ready Professionals - For Final Year Engg./MBA/Science Graduates. Comprehensive Orientation on project-based improvement roadmap to develop them as business professionals. Besides vital tools and techniques, the module enriches the participants with essential teaming and leadership attributes with experiencial learnings! On-site program. Batch Size - 20	4 Days	650	NA
31.A	**TQM System - Champions Program** - Training and handholding to challenge Deming	2 days	3000	NA
31.B	**TQM System - Champions and Internal Core Team** - Training and handholding to challenge Deming Award - for leaders / Trainers / Initiative Drivers of TQM Program	5 days	3000	NA
31.C	**TQM focused intervention - Seamless Agile SGAs** (Small Group Activities)- Training and handholding to challenge Deming Award - for Champions and Internal Core Team of Trainers / Initiative Drivers / All Shop Floor Trainers	3 days	2500	NA
31.D	**TQM Focused Intervention - Business@Turboroadmap -** Training and handholding to challenge Deming Award - Champions and Internal Core Team of Trainers / Initiative Drivers / All Shop Floor Trainers	3 days	4200	NA

CONTACT : Mail - tqmqcfi@gmail.com | Call : +91 7894400702 ; 9391647969 | Faculties : Sunil Shrivastava & Experienced QCFI Trainers

About the Lead Faculty - Mr Sunil Shrivastava - An established Trainer and facilitater, has innovated and practicing effective Business excellence tools and mechanisms for agile implementation of 14 TQM principles given by Dr Deming. He Brings in four decades of improvement experience using his innovative tools and techniques in all functional areas in over twnety Sectors. Was instrumental in training and facilitating over 100 lean Six Sigma Black Belts and over 500 Green Belts with projects worth over 2500 cr per annum. He has improvised designs for all the Training modules of TQM, TPM, WCM, Lean, Six Sigma, Leadership, Teaming, BBS, etc. and a USP of Centre of Excellence, QCFI. These modules are designed especially for Internal Trainers of the Organizations for makeing quantum value additions faster, better and cheaper. His designs of mechanisms help the CEOs to achieve quantum growth simultaneous to developing Total Quality People,

https://qcfi.in/tqmcoeregister

Role of SPC in the Pursuit of Business Excellence

Shri S C Prasad,
Hony. Secretary, QCFI Rourkela chapter

Introduction:

The open economy and globalization have intensified competition among companies. The concept of a localized and protected market economy has drastically evolved. To sustain and excel in business, companies must ensure continuous quality improvement. This is essential for:

- Remaining competitive in the market
- Retaining employees
- Achieving technological advancements
- Expanding into new markets
- Increasing profitability

Quality improvement directly correlates with cost reduction and enhances competitive advantage.

This necessitates a shift from a "Strategy of detection" to a "Strategy of prevention".

The Need for a Preventive Approach:

The traditional detection and correction strategy is ineffective, anti-quality, and wasteful, as it increases cycle time, rework, and overall costs. On the other hand, a prevention-based approach enhances process acceptance, reduces rework, and improves overall efficiency. However, implementation challenges, delayed results, and neglect of problem-solving tools often hinder its success.

To overcome these challenges, various quality improvement tools and methodologies, such as Zero Defects, Quality Control, SPC, Automation, Quality Circles, Kaizen, Six Sigma, Operation Research, Reliability Analysis, and the Taguchi Method, are available. Among these, SPC has proven to be one of the simplest and most effective tools for process control.

Basics of SPC:

SPC aligns with the fundamental quality mission of any organization: to produce products that meet customer needs. It is an integral part of the Quality Management System (QMS) and is incorporated into ISO-9000 standards for continual improvement. SPC operates on three fundamental principles:

- The manufacturing process determines whether a product meets quality standards.
- Processes exhibit variability over time due to changes in influencing factors.
- Processes naturally tend toward disorder and require continuous monitoring to maintain stability.

Dependency on Process:
Product quality depends on the process, including:
- The manner in which it is designed and manufactured
- The way it is installed and adjusted
- The way it is powered and operated

Why SPC?
All control mechanisms focus on process stability, ensuring quality and profitability for both producers and customers. SPC is vital because -
- Some level of variation is inevitable.
- No process remains inherently stable over an extended period.
- Continuous monitoring is required to maintain process consistency.
- It increases workforce awareness of process behaviour.
- It provides real-time checks and inspections for customer requirements.
- It helps achieve goals with minimal disruptions and effort.

By reducing variation, SPC enhances process capability, leading to greater customer assurance.

Benefits of SPC:
- Graphical representation of process behaviour for continuous monitoring
- Early detection of process variations
- Root cause diagnosis and compensatory adjustments
- Accurate guidelines for product development and specifications
- Improved product quality, productivity, efficiency, and employee morale
- Cost reduction

Use of Statistical Techniques:
Depending on the nature of the problem, different levels of statistical tools are applied in SPC -

✓ Elementary Statistical Tools	:	Basic Quality Control (QC) tools
✓ Intermediate Statistical Tools	:	Sampling methods, process capability analysis
✓ Advanced Statistical Tools	:	Taguchi Method, Regression Analysis

Management Support:
SPC is a continuous improvement process, not a one-time initiative. It requires strong commitment
from top management. Effective SPC implementation demands -
- ✓ Thorough understanding of the improvement process
- ✓ Development of long-term strategic plans
- ✓ Organizational structures and systems for result-oriented performance
- ✓ Leadership development for goal achievement
- ✓ Clear responsibility and accountability at all levels
- ✓ Focus on critical and important objectives
- ✓ Transparent communication of values and expectations
- ✓ Regular feedback and support for improvement initiatives
- ✓ Recognition and rewards for sustained progress

Application of SPC :
Over the years, numerous SPC studies have been conducted and successfully implemented across various plant areas, from mining to finishing lines in the industry I worked. Some key applications include:

✓ Optimization of input parameters for desired product quality
✓ Control of width allowance to achieve target plate length
✓ Reduction of wagon underloading / overloading to minimize demurrage costs
✓ Crew performance analysis for productivity improvement
✓ Breakdown analysis for improved maintenance strategies
✓ Optimization of alloying materials for specific steel grades
✓ Defect analysis for quality enhancement
✓ Yield improvement in various production processes
✓ Reduction of process variability
✓ Vendor performance assessment
✓ Evaluation of new methods versus existing processes
✓ Sampling plans for incoming spare parts and raw materials

Conclusion:
SPC is an essential tool in the pursuit of business excellence. By focusing on process control, variation reduction, and continuous improvement, organizations can achieve superior quality, enhanced productivity, and increased customer satisfaction. With strong management support and proper implementation, SPC can drive sustained success in a highly competitive market.

A Case study: Improving the quality of CRNO steel w.r.t. its Core Loss

Objective:
To reduce the diversion of CRNO coils from CONCAST Stream

Scope: Limited to M45 Grade CRNO Coils

Status:
✓ Check analysis for chemistry and thickness of coils
✓ Core loss for the same coil collected after testing
✓ Frequency distribution for these coils given below –

Sulphur %	%Freq		Aluminium %	% Freq
0.005–0.010	7.1		0.00–0.05	53.6
0.010–0.015	25.0		0.05–0.10	32.1
0.015–0.020	42.9		0.10–0.15	8.9
0.020–0.025	12.5		0.15–0.20	3.6
0.025–0.030	12.5		0.20–0.25	1.8
Average	0.018		Average	0.065
Std. Dev. (б)	0.006		Std. Dev. (б)	0.046

Silicon %	% Freq		Input Thickness %	% Freq		Core Loss	% Freq
1.20–1.30	1.8		2.00–2.10	3.6		3.37–4.02	1.8
1.30–1.40	8.9		2.10–2.20	7.1		4.02–4.67	19.6
1.40–1.50	17.9		2.20–2.30	19.7		4.67–5.32	25.0
1.50–1.60	32.1		2.30–2.40	32.1		5.32–5.97	25.0
1.60–1.70	23.2		2.40–2.50	19.7		5.97–6.62	23.2
1.70–1.80	16.1		2.50–2.60	10.7		6.62–7.27	3.6
			2.60–2.70	7.1		7.27–7.92	1.8
Average	1.58		Average	2.38		Average	5.40
Std.Dev. (б)	0.12		Std.Dev. (б)	0.14		Std.Dev. (б)	0.80

Relationship among variables:
Variables considered are –
1. Core Loss (Y) Dependent variable
2. Sulphur % (X1) Independent variable
3. Aluminium % (X2) - Do –
4. Silicon % (X3) - Do –
5. Input Thickness (X4) - Do –
6. Aneeal Temperature (X5) - Do –
7. Line speed (X6) - Do –
8. Cleanliness (X7) - Do –

➢ Multiple Linear Regression (MLR) carried out
➢ Anneal Temperature and Line speed almost found to be constant (980 0c & 18m/min)
➢ Data not available on cleanliness of steel. So excluded from analysis.
➢ Temp. & Speed did not show any significance so eluded from analysis & MLR re-run.

Final relationship is given below –
Constant 6.3839
Std. Error of Y estimate 0.2914
R squared 0.8634 (R = 0.93) ++
No. of Observation 39
Degrees of freedom 34
X coefficients 69.0212 -5.2684 -2.1282 0.6395
Std. Error of Estimate 9.0413 1.1574 0.4004 0.3184
t – value ++ 7.63 4.55 5.31 2.01
S% Al% Si% Thick
++ highly significant at 1% significance level

Thus, final equation is ------
Core loss (Y) = 6.384 + 69.021 * (S%) - 5.268 * (Al%) -2.128 * (Si%) + 0.640 * (Input Thickness)
Interpretation of the equation is —---
➢ Reducing S by 0.001%, Core loss decreases by 0.069
➢ Increasing Al by 0.010%, Core loss decreases by 0.053
➢ Increasing Si by 0.100%, Core loss decreases by 0.213
➢ Reducing Th by 0.100mm, Core loss decreases by 0.064

Suggestion :

Various alternatives have been made by keeping the value levels of factors within a particular range. One such alternative is hereunder –

Expected core loss value for a certain value range of enablers
(Desirable Core loss value = 4.02 – 5.31)

	S = 0.015%			
	Thickness= 2.30mm			
Si% ↓ **Al%→**	0.05	0.10	0.15	0.20
1.40	5.65	5.38	5.12	4.86
1.50	5.43	5.17	4.91	4.65
1.60	5.22	4.96	4.69	4.43
1.70	5.01	4.75	4.48	4.22
1.80	4.80	4.53	4.27	4.01

Thus Levels can be selected as ----

- **Sulphur (S%)**
- **Aluminium (Al %)**
- **Silicon (Si %)**

0.015 % Max.
0.10 – 0.15 %
1.60 – 1.80 %
4.27
4.01

- **Input thickness of coil (mm) up to 2.20 mm. This is the thickness to be kept in HSM during rolling**
- **SSM to maintain Line speed at 18m/minute and Annealing Temperature within 970 ± 10 0C**
- **Proper check to be made by respective i/c from SMS-I to SSM to avoid mix up of slabs / coils and improve its traceability.**
- **Expected Core loss then**

4.89 max.

World Class Manufacturing (WCM)

Shri D K Srivastava, Executive Director - QCFI

Recipient of Sudomo Quality Medal for Quality Leadership-Indonesia

Quality Circle Forum of India, is a Non-Profit organisation established in 1982 with the objective of propagating, training, implementation and handholding the Quality Circle Concepts in India. In 1991, workplace management(5S) has added the value to the Quality circle to have project on Home 5S and to make the Workplace more meaningful. QCFI has developed the concept suiting to Indian conditions and started implementing not only in the manufacturing sector but in Home, Colony, Worship Places, Village, Schools, Hospitals, Railways, Airport, port, etc.

We have tie up with JUSE for 5 S joint certification in the year 2016. So far, we jointly certified about 300 no's of Indian organizations. The feedback from the organizations is excellent and this certification is helping Indian organizations to have strong foundation for Quality, Cost and Delivery. Thanks a lot, to JUSE for supporting us in this area.

In 1995, QCFI started working on Total Productive Maintenance and developed a simplified system of TPM suiting to Indian Industries specially MSMEs and labour-intensive Industries. Today, DK's Model of simplified TPM is well accepted by the MSMEs.

QCFI HQ has conducted two advance management programs with the association with Ni-msme, one at coimbatore and second one at Ambattur Chennai in November 2024. A total of 60 participants attended and benefitted with Quality Concepts such as 5S,kaizen Lean QC. Lean manufacturing and DK model simplified TPM. We are happy that more and more MSMes are reaching us for implementation and I acknowledge the efforts of the chapters and in particular Coimbatore and Chennai. We have a close association with NiMsme Hyderabad in this endeavour.

In 2010, we have developed Lean Quality Circle which has become very popular.

In 2021, we have developed Lean Safety Circle which was also well accepted by the organisations. This was further modified in 2024 to cover all employees from contract labour to the senior management through small group activity.

We have developed World Class Manufacturing system (WCM) which is nothing but an Integrated approach of various Quality concepts to make the training and implementation simple and user friendly effective since 2022.

At QCFI, we have our own publication on Quality Circle, Lean Quality Circle, Problem Solving Tools and Techniques, 5-S, Kaizen, DK's Model of simplified TPM, Lean Safety Circle etc.

Presently, we are helping the organisations for the practical implementation of different Quality Concepts with the help of trained trainers from 34 chapters from different parts of India. The highest participation in ICQCC itself is a testimony and the interest taken by the organisations of India is an ample reflection.

World Class Manufacturing

To achieve GROWTH, HAPPINESS AND SUSTENANCE (GHS), most of the organisations are trying to implement different Quality Concepts. In the present scenario, organisations are flooded with different Quality Concepts. Each expert will explain the concept, form Steering Committee, teach applicable tools and techniques which are overlapping and people are amused as what to do? Appreciating this predicament, QCFI has developed an Integrated Approach to avoid the overlapping and go for systematic approach for the implementation of different Quality Concepts through Total Employee Involvement with the help of unit's own trainers developed by QCFI.

In the process of implementation, QCFI will develop the trainers in a phase manner so that they can learn, refresh through recorded modules of the learnt topics, can come for on line clarification session for one hour in case of facing any problem in implementation and further visit by QCFI faculty to see and guide them in the unit through practical demonstration for real time application. Our system of implementation of different Quality Concepts as follows:

1. 5-S and its implementation, visual management, Certification
2. Quality Circle, Individual Kaizen, Personal Kaizen
3. Problem Solving Tools and Techniques
4. Problem Solving steps-12 step method, DMAIC system
5. Implementation of Lean Quality Circle, Quality Improvement Team, Lean Safety Circle.
6. Implementation of Manager's Model. Tag System, Autonomous Maintenance, PM, One Point Lesson, OEE, SMED, Poka Yoke, GTT/Time Motion study,
7. Quality Maintenance
8. Lean Manufacturing and Value Stream mapping (VSM)
9. Material Handling, Material Flow
10. Inventory management.
11. HR initiatives
12. Office Management, Information flow.

Eight Pillars of WCM

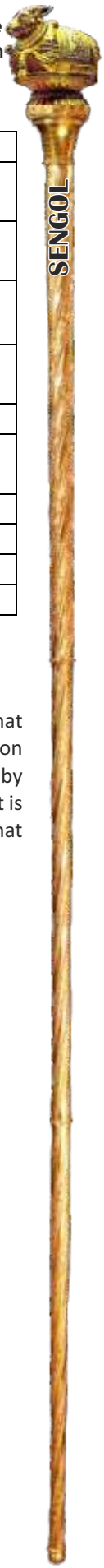
Following are the 8 pillars of WCM with Priorities

1) Layout and Material Handling
2) Orderliness, Visual management, Safety and Environment,
3) Quality Systems
4) Asset Care
5) Customer Focus
6) Training and development, HR Initiatives
7) Innovation Adaptation
8) Inventory Management

To implement all these pillars, QCFI has developed different modules and divided into 15 sets. Training is given to the identified trainers and core group members set wise. Recorded modules of the respective set are given to them through link. For each set, task is given. Once they complete the task of one set, then the link for the second set will be sent to the respective unit. Once task done is checked and found perfect, they can go for next set. QCFI faculty will make a visit after three sets or as per the need of the unit to observe the implementation physically and guide them accordingly. Content of the set is given below.

SET OF MODULES

Set No	Modules
1.	Concept of 5 -S, Creating Learning Environment, PDCA -Brain Storming, Flow Diagram, Activity Chart – Mile Stone / Gantt Chart, Ranking / Priority Method
2.	Role and responsibilities of the management for implementation of 5-S, Formation of Zone and Council Members, Awareness program to all, Individual responsibility, Micro Checklist by all, implementation of 1S to 3S
3.	Innovation & Kaizen, Individual Kaizen
4.	Self -Audit and 5S Register, 5-S Register, 5-S Home, Jagruti Group, 5-S in other places



5.	Data Collection and Stratification, Graph, Visual Management
6.	Audit and role of auditor, Management Audit, Pre-Certification and JUSE Certification audit system
7.	Genesis of TPM / simplified TPM, Tag System, Manager's Model, Autonomous Maintenance, Preventive Maintenance
8.	QC -Awareness, formation of group, Functioning of QC, Why-why analysis and Cause and Effect Diagram, Problem Solving Steps -12 step system
9.	LQC/LSC/QIT, DMAIC System of Problem Solving, Case Study preparation and presentation of QC/QIT/LQC/LSC/Individual Kaizen.
10.	Inventory Management, Material and Information flow
11.	Concept of Lean Manufacturing and its basic principles, Eight type of waste, Value Stream mapping
12.	One Point Lesson, OEE, SMED, Poka Yoke, GTT study / Time Motion Study
13.	Pareto Diagram, Scatter Diagram, Standard deviation, Histogram
14.	Certification of 5 -S, Control Charts, Run Chart, Cp and Cpk
15.	Application of enablers in 8 pilers, Self - Assessment of each pillar

Evaluation of Pillars of WCM

There are 5 levels in each pillar. Norms are given which used to decide with the help of the management to the level as what they want to become World Class. Based on that. One of the QCFI Lead Assessors used to visit and do the pre-certification audit for 5-S and Final certification audit. If the score is 75% or more then unit may apply for the Joint Certification of 5-S by QCFI with JUSE. Then Pre-certification audit will be done by the lead Assessors and then Certification audit. If the unit is getting average score of 3.5+, then it will be eligible for fourth level. They will be given the first certificate of fourth level that is "Achiever" level. If their score is 4.5 and above, they will be given the certificate of "World Class manufacturing".

The certificate awarded will be valid for three years subject to yearly satisfactory surveillance audit.

Reference book for implementation of 5-S are as follows:

1. Practical Guide Book on 5-S
2. Concept and Implementation of Quality Circle
3. KAIZEN booklet
4. Lean Quality Circle
5. Lean manufacturing
6. Lean Safety Circles
7. Problem Solving tools and techniques
8. DK's Model of simplified TPM
9. 5-S Record Book
10. QC-meeting Register.
11. Hand Bills and Pocket cards on 5-S

Evaluation criteria pillar wise is given ahead.

LAYOUT AND MATERAIL HANDLING							
S.N.	**Description/Level**	**Weightage**	**1**	**2**	**3**	**4**	**5**
1	% of Indirect employees to total employees	10	40%	30%	20%	15%	5%
2	% of Direct employees to total employees	10	60%	70%	80%	85%	95%
3	Scrap Handling Procedure / Wastage Disposal Procedure-- Data collection/analysis and improvement	15	No Procedure present	Procedure present but no frequency defined, no record ,no analysis	Procedure present with defined frequency and record but no analysis	Procedure present with defined frequency and record and analysis and improvement level is 30%+	Procedure present with defined frequency and record and analysis with improvement actions
4	Material flow - Distance	10	No study	Study done for major four ingredients are in use.	30% improvement of initial distances.	60% improvement of initial distances.	80%+ improvement of initial distances.
5	Material flow - Time	5	No study	Study done for major four ingredients are in use.	30% improvement of initial time.	60% improvement of initial time.	80%+ improvement of initial time.
	LEVELS	**50**	STRUGGLER	BEGINNER	ORGANIZED	ACHIEVER	WORLD CLASS

ORDERLINESS							
S.N.	**Description/Level**	**Weightage**	**1**	**2**	**3**	**4**	**5**
1	**Work Place management**	20	Awareness to all, Formation of zone, zone council, Micro checklist of each employee for own area given area. Initial photographs taken	Implementation of 1S to 3rd S across the unit.	Development of Standard practices @ 5 per month per zone/Sub zone	5-S Home @3 homes per month for Team mates and 2 homes per month for staff and above. Effectiveness of Agouti Group	5min 5S activity is routine for everyone. Help in implementation of 5-S in respective Depos, nearby village, schools, worship places etc.
2	**Safety Audit**	10	No Audit system	System in practice moderately	System followed properly and with necessary action. Minimum 2 actions/month	System followed properly and with necessary action. Minimum 4 actions/month	System followed properly and with necessary action. Minimum 5 actions/month
3	**Environment Audit**	10	No Audit system	System in practice moderately	System followed properly and with necessary action. Minimum 1 actions/month	System followed properly and with necessary action. Minimum 2 actions/month	System followed properly and with necessary action. Minimum 3 actions/month
4	**Workplace Management System**	10	No Audit system	System in practice moderately	System followed properly	5S QCFI Certified	5S QCFI-JUSE Certified
5	**Visual Management**	20	<20%	>40%	>60%	>80%	>90%
	LEVELS	**70**	**STRUGGLER**	**BEGINNER**	**ORGANIZED**	**ACHIEVER**	**WORLD CLASS**

QUALITY SYSTEM							
S.N.	Description/Level	Weightage	1	2	3	4	5
1	**Cost of Quality - % expenses on Quality functions. (cost of man power including PQS coordinator+ lab expenses + other testing expenses)**	**10**	5%	4%	3%	1%	0%
2	**Average Achieved Capability Index. (Cap to be checked for each quality of product for weight variation)**	**20**	No system	Cp < 1	Cp = 1 to 1.2	Cp =1.2 to 1.33	Cp 1.33 and above
3	**Average Achieved Capability Index/month . (Cap to be checked for each quality of product for stack Height variation in biscuits and cake. For other products, to be decided by the QC Incharge.Parle executive of respective unit)**	**20**	No system	Cpk < 1	Cpk = 1 to 1.2	Cpk =1.2 to 1.33	Cpk 1.33 and above
	LEVELS	**50**	**STRUGGLER**	**BEGINNER**	**ORGANIZED**	**ACHIEVER**	**WORLD CLASS**

ASSET CARE							
S.N.	Description/Level	Weightage	1	2	3	4	5
1	Average Improvement in routine maintenance. Before/After Cp value to be calculated. In case of Biscuit packing machine, Ucl of packing defects may be calculated.	10	Cp less than 1	CP=1 to 1,33	Cp-1.33 to 1.5	Cp=1.5 to 1.67	Cp=1.67+
2	Machine Breakdown and machine history data analysis	5	Absent	Being Planned	Up to 30% machines	Up to 80% machines	> 80% machines
3	OEE-Batch Preparation	5	Not known	<75%	75% to 85%	85% to 90%	> 90%
4	OEE-OVEN	5	Not known	< 80%	80% to 90%	90% to 95%	> 95%
5	OEE-Packing Machines	5	Not known	<75%	75% to 85%	85% to 90%	> 90%
6	Planned Maintenance and Preventive maintenance schedule	10	No system of planned maintenance. Equipment's are repaired as and when breakdown occurs.	Planned Maintenance system is in place	Planned maintenance system is in place. Adherence to schedule is 50%to 80%.Step 1,2,& 3 of autonomous maintenance are implemented and are taking place regularly in the organization	Planned maintenance system is in place. Adherence to schedule is 80% to 95%.Measures undertaken to eliminate repeat failures. Step 4&5 of autonomous maintenance are implemented and are taking place regularly in the organization	Planned maintenance system is in place. Adherence to schedule is more than 95%.Machine breakdowns have reduced by 5% in last one year. Step 6&7 of autonomous maintenance are implemented and are taking place regularly in the organization
7	Present status of Cp	10	Cp less than 1	CP=1 to 1.33	cp=1.33 to 1.5	Cp=1.5 to 1.67	cp=1.67+
8	Managers Model	10	<5 machines covered	10-15 machines covered	15-20 machines covered	20-40 machines covered	All Machines covered
9	Tagging system	10	10%implemented at machine on board display	20%implemented at machine on board display	40%implemented at machine on board display	>60%implemented at machine on board display	>80%implemented at machine on board display
	LEVELS	**70**	STRUGGLER	BEGINNER	ORGANIZED	ACHIEVER	WORLD CLASS

CUSTOMER FOCUS							
S.N.	**Description/Level**	**WTG**	**1**	**2**	**3**	**4**	**5**
1	Customer Lead Time Performance improvement --Production based on present production lead time/per unit, quality wise (Unit of production to be decided by the respective CM units.	10	<10%	10% to 20%	20% to 30%	30% to 40%	>40%
2	Customer Lead Time Performance improvement --on finished goods based on present dispatch lead time/per unit, quality wise (Unit of production to be decided by the respective CM units.	10	<10%	10% to 20%	20% to 30%	30% to 40%	>40%
3	**External Complaints /Month based on last six months data.**	**10**	>2	2	<1	0	0%
4	Internal customer failures no of incidents on average for 3 months	10	>10	between 6-8	between 4-5	<4	0
5	Depot level customer complaints (#)	10	>20	10 to 15	5 to 10	2 to 5	<2
	LEVELS	50	STRUGGLER	BEGINNER	ORGANIZED	ACHIEVER	WORLD CLASS

TRAINING AND DEVELOPMENT							
S. N.	**Description/Level**	**WTG**	**1**	**2**	**3**	**4**	**5**
1	One Point Lessons	10	not in practice	< 50% lessons taught and reviewed	50% to 70% lessons taught and reviewed	70% to 90% Lessons taught and reviewed.	90%+ lessons taught and reviewed
2	% of employees having training of SPC-Management Level	10	0 to 6	7 to 55	56 to 80	81 to 93	94 to 100
3	% of employees having need base basic training of SPC-Workforce Level	5	0 to 6	7 to 55	56 to 80	81 to 93	94 to 100
4	5 S Training -Teammates	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
5	5 S Training -staff	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
6	5 S Training -Senior level	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
7	TPM Training for Seniors	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
8	SGA for teammates	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
9	QC -Teammates	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
10	QIT-Senior level	5	covered <50%	covered 50%-60%	covered 60%-70%	covered 70%-80%	covered 100%
	TOTAL	60					

INNOVATION AND ADAPTATION							
S.N.	Description/Level	Weightage	1	2	3	4	5
1	Level of Automation based on the macro checklist of total production activities along with weightage based on importance, from receiving the raw material to finished goods dispatched.	10	No improvement	<20% improvement on overall weightage	20% to 50%improvement on overall weightage	50% to 70% improvement on overall weightage	> 70% improvement on overall weightage
4	Use of Information Technology in the plant for Production, maintenance, Quality, Cost, Delivery, Wastages, Manpower, etc. with respect to production. A list to be made with weightage based on the importance.	10	No improvement	<20% improvement on overall weightage	20% to 50%improvement on overall weightage	50% to 70% improvement on overall weightage	> 70% improvement on overall weightage
3	Number of kaizens/Innovation related to automation/IT (% of total Kaizens/Innovations received)	5	0	2% to 3%	3% to 5%	5% to 7%	7 % and above
	LEVELS	**25**	STRUGGLER	BEGINNER	ORGANIZED	ACHIEVER	WORLD CLASS

INVENTORY							
S.N.	Description/Level	Weightage	1	2	3	4	5
1	Present Inventory turnover of Engineering Stores =	15	No improvement	20% improvement	40% improvement	50% improvement	50%+ Improvement
2	Present Inventory turnover of Raw material =	10	No improvement	20% improvement	40% improvement	50% improvement	50%+ Improvement
3	Present Inventory turnover of finished goods =	5	No improvement	20% improvement	40% improvement	50% improvement	50%+ Improvement
	LEVELS	**30**	STRUGGLER	BEGINNER	ORGANIZED	ACHIEVER	WORLD CLASS

QCFI is pleased to report that 35 Units from Parle Group have been certified for WCM Level 4 in Phase 1 and another 38 Units training and work in progress

Titan Eye ware, Titan Watch and Thysson Group have shown interest to join in WCM journey.

With the emerging business challenges and competitive environment learning organisations have to step up and hasten their skill development initiative for continuos improvement as their goal. In this endeavor, QCFI is at your door step and be a partner in your success story. With the joint certification program with JUSE WCM journey to march ahead and to stay ahead.

Happy to inform that the concurrence has come for joint certification of WCM from QCFI-JUSE

Quality Governance
Key to transformation

TQM AWARD - SAMPOORN

by Centre of Excellence, QCFI

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

CENTRE OF EXCELLENCE, QCFI

601, 6th Floor, Navketan Chambers, 62, SD Road, Secunderabad - 500003,
Telangana. Phone: 7894400702
Sunil Shrivastava – Head - Centre of Excellence, QCFI,
Email sunil@qcfi.in, Mobile – 7894400702

TQM AWARD - SAMPOORN
By Centre of Excellence, QCFI
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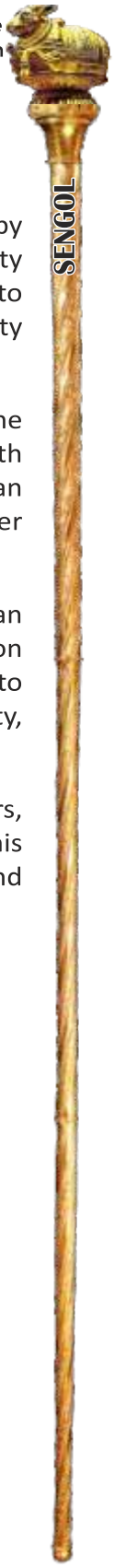

Foreword from President, QCFI

It gives me immense pleasure to introduce the TQM Award System, a pioneering initiative by the Quality Circle Forum of India (QCFI) aimed at fostering a culture of Total Quality Management across industries and organizations. This award system has been designed to recognize, encourage, and celebrate organizations that exemplify excellence in quality practices, innovation, and continuous improvement.

In today's rapidly evolving world, where adaptability and resilience determine success, the principles of Total Quality Management serve as the cornerstone for organizational growth and sustainability. By integrating quality into every facet of operations, organizations can drive productivity, optimize processes, and, most importantly, enhance customer satisfaction.

The TQM Award System by QCFI is not merely an accolade; it is a testament to an organization's commitment to embedding quality in its DNA. Through rigorous evaluation processes, this system ensures that the awarded organizations set benchmarks for others to emulate, thereby contributing to India's vision of becoming a global leader in quality, innovation, and productivity.

I take this opportunity to extend my gratitude to all stakeholders, including our members, Centre of Excellence, and partner organisations, for their relentless efforts in making this initiative a reality. Let this award system inspire every organization to strive for excellence and adopt Total Quality Management as a way of life.

With best wishes for continued success,

Avinash Mishra

President

Quality Circle Forum of India

Sengol - Tamil word 'Semmai' - Righteousness
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Foreword from Executive Director, QCFI

Dear participants and Quality fraternity, celebrations, awards and recognitions are the Hall mark of our Forum which we practice since long with the main objective of enhancing “performance excellence” in every sphere of human activity and across organizations.

Most of you have experienced in our National conventions and conclaves, where every participating team is recognized with an award which gives the team a sense of achievement and propel than to excel in their job assignments. In a similar manner organizations are recognized keeping their motivating spirit, as we believe in people building philosophy through self-development, mutual development and organization development as core value. Centre of Excellence-QCFI has come out with an innovative award system known as “Sampoorn TQM Award” for organizations.

I am sure that every organization will take up this opportunity and benefit through the award process for overall development. TQM award system assessment details are furnished in the inner pages of this Souvenir.

I would like to mention that as a winner getting award is no doubt a joyous event, but we would like that this should kindle other organizations, to practice or who are yet to start Quality concepts to follow suit as this will serve in the larger interest towards our goal to make our country 'Quality India Products'

Hope all Indian entities with an aspiration to excel and achieve customer delight as motto, will avail this opportunity.

With Best Regards

D.K. Srivastava

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Sanskrit word - ‘Sanku’ - Shakha - Auspiciousness

FOREWORD From Head- Centre of Excellence, QCFI

Dear All,

It gives me immense pleasure to share with you our 'Indian Quality Award System', which motivates, improves, recognizes and creates a roadmap for quantum performance jump year-over-year for the entire gamut of industries and organizations across the nation!

Designed as a breakthrough instrument, this Award system will prove to be one of the most significant turnaround strategies for the nation to achieve its vision of achieving 'developed nation status' because it can enable and transform even much-smaller organizations across the nation to raise their bar and redefine the benchmarks thereby raising per capita income to required levels!

The medium and large organizations will find this award system more fulfilling and challenging on their way to achieve highest level of awards. The organizations will need to make focused resilient efforts under their visionary leadership to achieve and sustain prime human values embedded in rich Indian culture of values and ethics. The jury members in the award-assessment panel will be having hands-on thorough experience on human values interventions to provide meaningful insights to the organizations in their feedback reports to the organizations!

The Site-assessment provides a unique learning and growing opportunity for the participating organization to relook and revitalize their approach, systems, processes,

performance trends for much greater achievements. The site-assessment enables them to improve upon in a wholistic and sustainable way!

A wonderful opportunity has been created for organizations of all sectors and sizes with launch of this award system to redefine the way of their delivery of products and services towards the true delight of all stakeholders – most importantly – upholding the prime human values.

There is a dire need for an extremely positive response from Indian Organizations to participate in this Indian Quality Award System and inspire all around to make it a National Movement!

I appeal all the organizations to participate in this process, take its full advantage and emerge as a contributing entity for collective-transformation-efforts to make our country as developed country by 20240 leveraging Total Quality People in a manner which is faster, cheaper and better than the best.

Please feel free to connect and clarify your doubts to remove any hurdle on way to transform India back into golden era of "Sone ki Chidia" (The Golden Bird). Let us work together.

Best Regards

Sunil Shrivastava

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INDIAN TQM AWARD
Award Cycle - 2025-26
By Centre of Excellence (CoE)
Quality Circle Forum of India

Quality Governance
Key to transformation

1.0 The Need: Awards are accelerators to create new benchmarks within and across the organizations thereby propelling the all-round growth motivating everyone around! The TQM Award System from Centre of Excellence (CoE), QCFI is made easy and affordable for all organizations to understand, appreciate and take an active part to get benefitted by the Award-process to improve across their entire business processes for quantum gains in shorter time to the delight of all stakeholders.

2.0 Expanding QCFI Horizons, QCFI decided to take quality concepts to each and every organization of the nation by providing them a structured platform to learn and use for their growth. As a result, this TQM Award system has been evolved which not only recognizes their significant achievements and best practices at National level; but also gives them a detailed feedback report on specific areas for improvements alongwith enablers for effective sustainable solutions.

3.0 The Quality Award Evaluation - Experts from Business Excellence and respective domains will be active part of this TQM award system which will help the organizations to grow in a wholistic way! There will be three levels of examination by CoE for an Award application as follows:

1. Initial examination of Unit Award application by CoE Examiners to determine eligibility for Site Assessment.
2. Review and Assessment of Unit-application alongwith Site-Assessment-Report (SAR) by Examiners and panel made by Head – CoE to bridge up the gaps in completeness of the SAR.
3. Final Examination/Approval by Apex TQM Award Steering Committee to decide the Award-Level for the Unit.

4.0 Applicant-Categories

There can be **4 applicant categories** for the QCFI TQM Award under Large , Medium and small organizations :

1. Business Excellence: It will have 3 categories of organizations :
   - A. Manufacturing organizations
     - a) MSMEs
     - b) Large Organisations
   - B. Service organizations
   - C. Overseas Organizations (Headquartered in India)
2. Education
3. Health Care
4. NGOs and Others
5. Rural

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5.0 The Levels of Awards will be for achieving different levels of scores out of maximum 1000 score -

1. Base Level – Aspirant <300 Basic housekeeping /5S practices , PDCA applications Required

I Level 1- Nascent 300-400 Basic housekeeping /5S practices, PDCA visible

ii. Level 2- Developing 401-500 Basic housekeeping /5S, PDCA practices visible as a system in few areas

iii. Level 3 – Foundation 501-600 Basic housekeeping /5S, PDCA practices visible as a system in all areas

iv. Level 4 -Progressive 601-700 Basic housekeeping /5S, PDCA practices visible as a system in all areas with CAGR growing in last 3 years in various functional indices in few areas

v. Level 5 - Advance 701-750 Basic housekeeping /5S, PDCA practices visible as a system in all areas with CAGR growing in last 3 years in various functional indices in all areas

Level 6 - Excellence 751-800 Basic housekeeping /5S, PDCA practices visible as a system in all areas with CAGR growing in last 3 years in all target matrices alongwith defined systems of organization values implementation measurements

vi. Level 7 - Apex Award 801-900 Basic housekeeping /5S, PDCA practices visible as a system in all areas with CAGR growing in last 3 years alongwith defined systems of organization values implementation measurements and Human Values scoring started for atleast 2 years

Level 8 - Supreme Award 901-1000 The award will be ensuring sustenance for 3 years in Level 6 and Level 7 criteria very objectively

An organisation can re-apply next year to raise their level of award

6.0 Award Criteria – Framework in Focus

1. Leadership
2. Strategic Planning
3. Customer Focus
4. Measurement, Analysis and Knowledge Management
5. Workforce
6. Operations
7. Results

There are key questions framed to address above criteria status in the organizations which need be answered and supported by evidences by the organizations in their Award-Applications.

The supporting data should include trends for recent past three years showing Year-Over-Year growth on organization-defined key Financial and departmental/functional indices.

The questions/Aspects for submitting Award Application are placed at Annexure-A.

7.0 Selection of Examiners for site assessment

Nominations of Examiners can be made preferably in January-April period sharing their details including hands-on work experiences. An Apex Panel constituted by Centre of Excellence, QCFI will shortlist the examiners for the Assessors' Alignment Workshop for the Site-Assessment. The examiners successful participation in this workshop will lead to final allocation of examiners for Site Assessment Work.

Nominations of Examiners can be made preferably in January-April period sharing their details including hands-on work experiences. An Apex Panel constituted by Centre of Excellence, QCFI will shortlist the examiners for the Assessors' Alignment Workshop for the Site-Assessment. The examiners successful participation in this workshop will lead to final allocation of examiners for Site Assessment Work.

8.0 Alignment of Selected Examiners

The examiners selected will be further aligned with Award System approach through a detailed interaction to create consistency of examination and feedback report to organizations on different aspects of Business Excellence.

9.0 Award Cycle Dates

SN	Milestones	Date(s)/ Duration Considering Mutual convenience
1	Award Cycle Announcement and invitation for Registration and Award-Applications	15-28 February, 2025
2	Award Application Submission by registered units	5 May, 2025
3	First Stage assessment of Award applications by SAGs (Site Assessment Groups) formed by COE, QCFI, Secunderabad formed for each of the Unit seeking Award	6 May –31 May , 2025
4	Consensus Review / assessment by SAGs with Site to seek clarifications, if any.	1 Jun – 20 JUN 2025
5	Intimation of Site-Assessment Schedules by COE and Site-assessment / application-details-validation by SAGs	21 Jun - 30 September'2025.
6	Site Assessment report preparation by SAGs after considering all new supporting-details provided by the Unit.	30 JUN – 10 October'2025
7	Assessment Reports Submission by SAGs to Head – COE, QCFI-HQ.	10 JULY – 20 October 2025
8	Final Review / Clarifications / Assessment by Apex Award Steering Committee, Chaired by President, QCFI including various functional Subject Matter Experts, formed by COE, QCFI – HQ (in monthly review meetings)	15 September- 15 Dec. 2025
9	Announcement of Awards	15 Dec – 25 Dec 2025
10	Sending Site Assessment Reports to respective Organizations	15 Dec – 25 Dec 2025
11	Felicitation of Awards at Annual National TQM Summit	By 10 February 2026

10.0 Registration and Eligibility Determination Form

(Available at www.qcfi.in)

Kindly enter below the details pertaining to your one Business Entity (one Plant of the Organization/Business)

1. Business Entity Name:

2. Site Address:

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Sanskrit word - 'Sanku' - Shakha - Auspiciousness

3. Overall Organization Name (if applicable):

4. Organization Headquarter Address (if applicable) :

5. Highest-Ranking Official at Site:

Name :

Address :

Telephone:

Mobile – Direct –

Mobile – Office -

E-mail:

6. Highest-Ranking Official at Headquarters:

Name :

Address :

Telephone:

Mobile – Direct –

Mobile – Office -

E-mail:

7. Applicant-Category for TQM Award – (pl tick as appropriate):

1. Business Excellence (Manufacturing (For Profit only) / Service (For-Profit only) / Indian Overseas Business (For-Profit Only)

2. Education

3. Health Care

4. NGOs / Others

8. Size and Location of Applicant

A. Total Number of Employees (Business): (this includes contract workforce)

B. Total Site area under administration (Sqft) -

9. Sales in the preceding fiscal year (in Crores) (pl tick as appropriate):

a. 0 - Rs.100 Cr

b. Rs.100 Cr - Rs 1000 Cr

c. 1000 Cr.- Rs.10000 Cr

d. More than Rs.10000 Cr

10. Number of Sites in overall organizations: Pl write - (1 2 3 4 5 or more) -

11. Please find attached is brief organization-introduction giving brief details of products, processes, Supply Chain, markets, Turnover, profits, management systems, people practices, improvement systems, certifications and awards, efforts on Safety, environment, digitalization etc. A brief insight into Growth journey of the organization need be attached (maximum 600 words / 2 pages).

12. The participating organisation should be a permanent member of QCFI. The enrollment form is at www.qcfi.in

13. Details of Registration fee: (as per organization size as in Point No. 11)

14. Undertaking:

I state and attest that I have reviewed the information provided by my organization in this page to the best of my knowledge. No untrue statement of a material fact is contained in this declaration, and no omission of a material fact has been made. I understand that at any time during the Award Process cycle, if the information is found not to support eligibility, my organization will no longer receive consideration for the Award. We will be driving all adeptable improvements emerging from the assessment report towards our journey to full potential.

1. Name of the Business Head at Site *

Signature with date

Mobile*

Email address*

2. Name of TQM/ BE / Innovation Dept Head*

Signature with date

Mobile*

Email address*

3. Name of TQM Coordinator*

Signature with date

Mobile*

Email address*

SN	Fee	SMALL Organizations Turnover < 500 Cr.	Medium Organizations Turnover < 1000 Cr., > 500 Cr	Large Organizations Turnover >1000 Cr.	Remarks
1	Registration Fee	Rs 15000 members Rs 18000 non members	Rs 20000 members Rs 25000 non members	Rs 25000 members Rs 35000 non members	Towards Establishment and organizing expenses
2.	site A. assessment and B. detailed C. Business-Gaps Report	Ć ÑMŘCE onsite by A. 2 Faculties Ī CE 110000 B. É ÑPPMÕ expenses C. on Travel and Stay for 2 faculties	Ć ÑMŘCE onsite by D. 2 Faculties Ī CE 150000 E. É ÑPPMÕÑŘÓÑÕCÕŠCE. on Travel and Stay for 2 faculties	Ç ÑMŘCE onsite by 2 Faculties Ī CE 200000 É ÑPPMÕ expenses on Travel and Stay for 2 faculties	Extensive detailing at Site assessment by the elite panellists from CoE and an insightful 'Gap -report' preparation for the organizations to make significant improvements.
		Rs 130000 non members	Rs 170000 non members	Rs 240000 non members	

10 % Discount can be availed from April - October by way of books, training for trainers and other online programs on registration fees

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12.0 Award Assessment Process

Centre of Excellence, QCFI invites organizations to submit their application for the Award. The applications need to provide organizational performance and growth report in form of answers to prescribed questions elaborating on related support systems, their performance Indices, growth trends and its widespread implementation across the organization!

Various steps of Awards process are evident from the Award-Cycle dates for the period February 2025 – February 2026.

13.0 Guidelines for preparing Award Application

1. The application report should include evidences, performance-trends including financial impact/Cost / intangible gains for recent 3 years in brief.
2. The report should include objective graphs for better communication, understanding and evaluation.
3. The report should highlight performance-impact on people, process and Waste-reduction in each key performance areas of each function of the site.
4. Pls share in brief TQM Quality journey, special achievements/ awards / certifications & systems in maximum 1000 words.
5. Please share the process of establishing, sharing, pursuing Values, Vision, Mission, Key Objectives, Goals (Long term, Short Term) and related evidences of last three years.
6. Please share in brief the organization Work-Management System practices to pursue Annual Business Plans using well defined policies through various Check points and measurements for various functions.
7. The flow of P-D-C-A (Plan-Do-Check-Act) should be brought out in writing about any best-practice / intervention / system.
8. The report should indicate the nos. of areas where any best practice was implemented alongwith area-wise performance nos.
9. Please share the various improvement systems/ practices /process (TQM/TPM/WCM/QC/5S etc.), engagements/ results of last 3 years
10. Please share efforts on Safety, Environment, Occupational Health and sustainability
11. Please share efforts on Quality 4.0/ QA4.0/Industry 4.0 or on AI / digitalization in respective functions.

Please elaborate as necessary on following points:

12. Is your product quality recognized as a benchmark by your industry and you consistently enjoy a sizeable market share?
13. Does everyone in the company know who the key customers are and what differentiates the company's products and services from the competition?
14. Do you ship to your customers on time in full (OTIF), more than 99% of the time, against their latest schedule or delivery agreement?
15. Do all staff who are in contact with customers have the authority and empowerment to resolve customer problems?

16. Have you eliminated the central storage of direct material and is purchased material supplied to the point of use without routine inspection?
17. Have you laid out the majority of your machines and equipment so as to minimize the distance between sequential operations?
18. Have you reduced or are you reducing the set-up time between products to the point when it is economical to make your product in the quantities required for customer shipments?
19. Have you an ongoing education and communication programme to inform existing employees and educate every new employee, whatever function he or she performs, in the value of world class manufacturing?
20. Do employees take the initiative to move to the point of need?
21. Is there is a programme in place to progressively reduce non-value-adding costs?
22. Is there a programme in place to reduce your supplier base to a small number of qualified suppliers integrated into your business?
23. Are there SGA small group activities in operation?
24. Do you audit the product and process quality inside the test limits?
25. Does everyone have authority to "stop the production / process line" in case of critical deviation?
26. Have you 'mistake-proofed' critical processes.?
27. Are the majority of people responsible for the maintenance of the equipment they use?
28. Do you have an active policy to help keep work areas clean, tidy and uncluttered?
29. Does the design of products include a consideration of the manufacturability of the product?
30. Is there a culture of continuous improvement in the organization.
31. Is there a mechanism to quickly and effectively receive and evaluate suggestions from customers and employees? Are people motivated in the organization?
32. Is there a defined document stating vision, mission, long term short -term goals:
33. Is the SWOT analysis done & reviewed periodically?
34. Is the organization policy for various functional areas defined?
35. Are the managing points & check points defined for all roles in the organization?
36. Is the Daily Work Management concept in practice at all levels
37. Are the interventions in place for encouraging Total Employee Involvement & for development of Total Quality People.
38. Is there a defined plan towards Zero Breakdown
39. Is there a safety System including "Behavioural Based Safety" in place?
40. Is the organization having any TQM performance review and awards system?
41. Do the processes in all functions have stable performances measurement systems and support.
42. Are the organisation values defined, measured, tracked and improved under a system- please support
43. Please share system to embrace emerging technological innovations in core and allied areas for greater stake holders satisfaction.
44. Please share on ESG / Sustainability aspects.

14.0 Application Writing guidelines:

1. The Award Application Should not exceed 60 Pages of A4 size.
2. The font can be used as Times New Roman/ Arial. The running font size should be 12, the headings should be 14 Font Size. The sub-script should be readable.
3. The Header, Footer can have 1 inch space, and Side margins as .8 inches. The running matter should have line spacing as 1.5.
4. The pictures, graphs can be fitted along the text in the report.
5. There will be additional opportunity to give supporting documents/Pics/Graphs during the site-assessment. As such, primary report should be as brief as possible.
6. Please try not to use abbreviations in the main report unless very repetitive in nature with proper referencing.
7. Broad Understanding of Key dimensions of Award system Criteria

a. Leadership

The leadership category examines how your organization's senior leaders personal action guide and sustain your organization. Also examined are your organization's governance system and how your organization fulfils its legal, ethical and societal responsibilities and support its key communities.

b. Strategic Planning

The strategic planning category examines how your organization develops strategic objectives and action plans. Also examined are how your chosen strategic objectives and action plans are implemented and changed if circumstances require and how progress is measured.

c. Customer Focus

The customer focus category examines how your organization engages its customers for long-term marketplace success. This engagement strategy includes how your organization listens to the voice of its customers, builds customer relationships, and uses customer information to improve and identify opportunities for innovation.

d. Measurement, Analysis and Knowledge Management

The measurement, analysis and knowledge management categories examine how your organization selects, gathers, analyses, manages and improves its data, information and knowledge assets and how it manages its information technology. The category also examines how your organization reviews and uses reviews to improve its performance.

e. Workforce Focus

The workforce focus category examines your ability to assess workforce capability and capacity needs and build a workforce environment conducive to high performance. The category also examines how your organization engages, manages, and develops your workforce to utilize its full potential in alignment with your organization's overall mission, strategy, and action plans.

f. Operations Focus

The operations focus category examines how your organization designs, manages, and improves its work systems and work processes to deliver customer value and achieve organizational success and sustainability. Also examined is your readiness for emergencies.

g. Results

The results category examines your organization's performance and improvement in all key areas—product and process outcomes, customer-focused outcomes, workforce-focused outcomes, leadership and governance outcomes, and financial and market outcomes. Performance levels are examined relative to those of competitors and other organizations with similar product offerings.

15.0 Registration Link and Award System Details at : www.qcfi.in

Contact: **Sunil Shrivastava** : Head-Centre of Excellence, QCFI, email sunil@qcfi.in, Mobile – 7894400702

Office: QCFI, 306, 3rd Floor, 62 SD Road, Secunderabad – 500003,
email- tqmqcfi@gmail.com, Mobile – 9391647969 9989697930;

CENTRE OF EXCELLENCE, QCFI

601, 6th Floor, Navketan Chambers, 62, SD Road, Secunderabad - 500003,
Telangana. Phone: 7894400702
Sunil Shrivastava – Head - Centre of Excellence, QCFI,
Email sunil@qcfi.in, Mobile – 7894400702

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THE WORLD'S 2nd LARGEST INTEGRATED ZINC PRODUCER

Hindustan Zinc, an energy transition metals company, offers a wide range of zinc products for steel, infrastructure, automotive and sunrise sectors such as renewable energy, electronics, hi-tech manufacturing, energy storage, defence and electric mobility.

Product Portfolio: CGG (Continuous Galvanising Grade) Jumbo | SHG (Special High Grade) | SHG Jumbo | PW (Prime Western) | HG (High Grade) | HZDA 3 (Hindustan Zinc Die-Casting Alloy 3 | HZDA 5 (Hindustan Zinc Die-Casting Alloy 5) | Jumbo HG

Scan to see how Zinc keeps cars rolling, bridges standing, and monuments shining through the ages!

Safe, Smart and Sustainable

Yashad Bhawan, Udaipur - 313 004, Rajasthan, INDIA. Contact No: +91 294-6604000-02 CIN L27204RJ1966PLC001208

infohzl@vedanta.co.in https://www.facebook.com/HindustanZinc/ https://twitter.com/Hindustan_Zinc
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