

28<sup>th</sup> CCQC

# CHAPTER CONVENTION ON QUALITY CONCEPTS

In September 2020

**Theme**

**SELF-RELIANT INDIA – THROUGH QUALITY CONCEPTS**



**Organized by**  
**QUALITY CIRCLE FORUM OF INDIA**  
**ROURKELA CHAPTER**





## I n v i t a t i o n

Dear All,

A warm welcome to all of you from Quality Circle Forum of India, Rourkela Chapter. It's that time of the year when we start our preparations for our annual event and we are back again this year to give you an insight on the Chapter Convention on Quality Concepts (CCQC) event for 2020.

There is a saying - "*When the going gets tough, the tough gets going*". Every adversity offers an opportunity which decides our resilience towards survival and growth. Rourkela chapter too considers this pandemic COVID-19 as an opportunity to thrive on to become "**ATMANIRBHAR**" aligning its soul in the spirit of new emerging India.

This COVID-19 has caused many casualties and the entire world has been virtually brought under lockdown across the world and in India too. All the activities (except some essential services) have come to a standstill. Industrial, Service sectors and teaching in Schools/colleges are badly affected. But most important thing, as of now, is to remain indoor and stay safe & healthy. Social distancing, wearing face mask and regular hand washing with soap or hand sanitizer have become order of the day now a days.

Keeping this in view, after discussion among chapters and QCFI H.Q. in May'2020, it was decided to have the CCQC-20 without physical assembly of participants. CCQC-20 needs to be finished in September'20 or latest by 10<sup>th</sup> October'20. *There shall not be any Case study presentation.* Details regarding participation are given in the Brochure including fee structure. Therefore, this year in CCQC-20, results shall be based on evaluation of Case Study Report received in **soft copy** i.e. through e-mail only. This will be based on 100 marks. No QC register is to be sent this year. Other activities like Essay / Slogan / Poem, SKIT or Knowledge Test have been included in CCQC-20 (Rourkela Chapter), as *optional*, for the benefit of our participating teams which will help in preparation for NCQC-20 in Coimbatore, Tamil Nadu in Dec.'20.

In spite of this pandemic, Rourkela chapter of QCFI which is one of the most vibrant chapters of the country, has made significant contribution in promoting and popularizing the concept of Quality Circle and allied concepts e.g. Lean QC, 5S, SPC, Kaizen, Six Sigma, TPM, Poka Yoke, QIT, SGA etc. in the region. Today Quality Circles and Allied Quality Concepts have emerged as a mechanism to develop and utilize the tremendous potential of people for improving Production, Productivity and Quality. The concept has gained immense popularity as it respects people working at every level, involves them in decision making and facilitates an environment where an individual's capabilities are looked upon as assets to solve work-area problems. Application of knowledge and skills by first line employees can produce and render quality goods and services.

We are thankful to all our participating organizations of the region with whose support 100 circles had participated in CCQC-2019.

I, on behalf of Executive council, Rourkela chapter have great pleasure in extending the cordial invitation to your esteemed organization and team members. We look forward to welcoming you to the (Virtual) 28<sup>th</sup> Chapter Convention on Quality Concepts (CCQC-20) in September, 2020 in Rourkela. Result shall be given by 30<sup>th</sup> September, 2020.

Sincerely

**(S. Arasu)**

Acting Chairman, QCFI-RC &  
Chief Manufacturing Officer (India head)  
Dalmia OCL, Rajgangpur



## OBJECTIVES:

1. To provide a forum for interaction and exchange of knowledge on Quality concepts
2. To provide an opportunity to the members of Quality circles & allied concepts to exchange their ideas, learn and explain their achievements
3. To give opportunity to display their creative talents through competitions in Essay, Slogan, Poem & SKIT
4. Encourage the spirit of competition, team work and continuous improvement to gain & sustain high team motivational standards and results
5. To select and recommend the case studies for the forthcoming 34<sup>th</sup> National convention on Quality Concepts (NCQC-2020) being held in Coimbatore, Tamil Nadu in December 2020

## WHO SHOULD PARTICIPATE?

1. Teams from QC & Allied concepts
2. Organisations who wish to introduce QC & other concepts
3. Potential Practitioners & Life members
4. Students & Staff from Educational Institutions

## A BRIEF OUTLINE OF PROGRAMME EVENTS:

### 1. CASE STUDY REPORT

Case studies nominated by various organizations will be considered in CCQC-2020. Only those case studies (Gold & Silver medal winners) will be eligible for consideration for presentation in NCQC-2020 to be held in Coimbatore, Tamil Nadu in December 2020.

### 2. KNOWLEDGE TEST:

Since this is mandatory in NCQC, it is advised that all registered teams participate in it for their knowledge in various Quality concepts and QC tools & techniques. Time duration will be of 20 minutes. Mark sheet will include these marks also. This is OPTIONAL in CCQC-20. This shall be conducted by respective coordinators of participating organizations as per Chapter guidelines and result to be sent back to the QCFI, Rourkela chapter.

### 3. ESSAY, SLOGAN, POEM & SKIT COMPETITION:

- There is immense quest for excellence in all fields of human endeavor. QCFI has been leading in this regard through employees' involvement. Hence the theme for Essay competition this year is **"Self-Reliant India – through Quality Concepts"** and is limited to 500 words only.
- Slogan/Poem can be related to various Quality concepts like QC, 5S, TQM, Kaizen, Safety etc. *For Slogan/Poem, a team/member can give maximum 2 entries only.*
- This year, there shall not be any Model competition.
- For SKIT contest, theme has to be related to any Quality concepts. Only interested participating teams can take part in it and send in **video format** before 30<sup>th</sup> August'20 through email only.
- Home Kaizen/Five S by Homemakers: In order to encourage Kaizen/Five S practices in home, Rourkela chapter wishes to recognize home makers, who have done improvements in their homes. Interested circles can send report in soft copy.

## GUIDELINES FOR COMPETITION:

1. *This year for CCQC-20, there shall not be any Case study presentation. Instead evaluation will be based on the Case Study Report sent in soft copy through e-mail for 100 marks.*
2. Case Study Report should be in English only.
3. Standard fonts e.g. Times New Roman, Arial etc. and standard animations are advised to be used for case study report/presentation to avoid any issues while opening the report.
4. Front page of Case study report shall have the details like name of organization & Team, Title of the case study and Category of the case study e.g. QC, 5S, SPC, Six Sigma etc. (summary Sheet).
5. Case study report to be e-mailed only, either in WORD or PDF format (*preferably as its size reduces significantly*), and must be limited to less than 15 MB.
6. One can send case study report in PPT format (in report form only) with explanation in footnote and must be less than 15 MB in size.
7. **Case study report must be strictly prepared as per the guidelines of QCFI only. It says that Modified 12 steps are for QC case studies whereas DMAIC for allied concepts but separate procedure is there for 5S case studies.**



8. All entries for Case study, Essay, Slogan, Poem, SKIT (Video format), Home Kaizen or Homemakers' 5S must reach on or before **30th August 2020**.
9. Copy of QCFI membership needs to be sent along with Registration form via e-mail too.
10. *QC register being maintained (in QCFI Register format permissible) must not be mailed or couriered for the convention. This is not required this year.*
11. All Case Studies shall be evaluated by two judges, trained by QCFI.
12. E-Certificates shall be issued as per names given in Registration form.
13. Case study presented previously in Chapter / State / Regional / National level are not eligible for CCQC-2020.
14. Question Sets for *Knowledge Test* shall be sent to the participating Organization's Coordinator for conducting the same and result has to be sent to QCFI, Rourkela chapter for declaration. *This is optional.* Only 2 members shall be permitted per circle.
15. Participation in Knowledge Test, Essay/Slogan/Poem or SKIT competition is optional. It is being conducted for the practice of the teams towards preparing them for NCQC-20.
16. Essay / Slogan / Poem / SKIT should be in Odia / Hindi / English language only.
17. *Result will be declared and sent through email to all the participating organizations along with e-certificates by 30<sup>th</sup> September 2020.*

#### AWARDS TO BE PRESENTED:

1. **E-Certificates** shall be given to all the participating teams in the convention.
2. Successful teams shall be adjudged as Bronze, Silver & Gold Medal award winners depending upon the marks achieved as given below
  - a. 50% - 59% : Bronze Medal
  - b. 60% - 69% : Silver Medal
  - c. 70% & above : Gold Medal
3. Overall BEST circle in both QC & Allied concepts categories, shall also be awarded Jayant Dash Memorial Trophy and given **E-Certificates**.
4. **E-Certificates** shall be given to the winners of Essay/Slogan/Poem/SKIT/Knowledge Test/Home makers' 5S or Kaizen (who achieve 70% or more marks).

#### PARTICIPATION FEE:

Team Area	Fee
Teams from Quality Circles or Allied Quality Concepts	Rs.4000/- per circle + 18% GST (Irrespective of members in the circle)
Engg. & Mgmt. Colleges / Schools / Home Kaizen / 5S by Homemakers	Rs.4000/- per circle + 18% GST
Teams participating from organizations (not renewed till 15 <sup>th</sup> Aug'20)	Rs.4200/- per circle +18% GST

#### Note:

1. Last date of registration is **30.08.2020**.
2. Payment through Demand Draft/at par Cheque / NEFT / RTGS should be made in favour of **Quality Circle Forum of India, Rourkela Chapter** payable at **Rourkela** and payment details E-mailed along with the dully filled in Registration form and detailed case study report in the WORD or PDF format.
3. Participation shall be allowed only after payment of registration fee.
4. For direct remittance to the bank, the details are given hereunder :
 

<b>Bank</b>	: <b>UCO Bank, Sector-5, Rourkela-769 002</b>
<b>Account No.</b>	: <b>07120100005676</b>
<b>Type of Account</b>	: <b>Savings Bank A/c</b>
<b>For RTGS/NEFT Payment</b>	: <b>IFS Code - UCBA0000712</b>
<b>MICR Code</b>	: <b>769028004</b>
<b>PAN</b>	: <b>AAAAQ0008P</b>
<b>GSTIN</b>	: <b>21AAAAQ0008P1ZV</b>
<b>HSN / SAC Code</b>	: <b>999293</b>



5. All correspondence should be addressed to:  
**S.C. PRASAD**  
**Hony. Secretary, QCFI-Rourkela Chapter**  
**B-56, Sector-20, Rourkela - 769 005 (Odisha)**  
**Mobile: +91 8895501691, 9437245547, 8594939563**  
**E-mail:sureshc.prasad55@gmail.com / qcfi.rklchapter@gmail.com**

**EVALUATION CRITERIA FOR QC CASE STUDIES**

Quality Circle Forum of India, Rourkela Chapter			
SL. No.	Quality Circles / Problem solving steps	Max. Marks	Total Marks
<b>1</b>	<b>Identification of Problems (Unsolved)</b>		<b>5</b>
	Up to 19	1	
	20 - 29	2	
	30 - 39	3	
	40 - 49	4	
	50 and more	5	
	By any appropriate method, given by management, instant problem		
<b>2</b>	<b>Selection of problem</b>		<b>5</b>
	A, B, C Categorization of problems	1	
	Priority / Ranking method	2	
	Base used for priority / ranking	2	
	By any appropriate method, given by management, instant problem		
<b>3</b>	<b>Define the problem</b>		<b>10</b>
	Milestone chart proposed	1	
	Flow diagram / Pictorial diagram of process	2	
	Description of problem with labelled diagram or Detailed diagram or any other creative way	5	
	Objectives	1	
	Goals / Target	1	
<b>4</b>	<b>Analysis of the Problem</b>		<b>10</b>
	*See that required data/verbal data for 4W+1H	10	
	as how much also impact on performance parameter like Quality, productivity, Cost etc. as required to be mentioned.		
<b>5</b>	<b>Find out probable causes and root causes</b>		<b>10</b>
	*Circles up to 2 years old, may use Dispersion analysis	5	
	*Others to use Cause enumeration type or Production process classification type with all possible sub causes		
	With proper headers	2	
	Marking/Listing the probable root causes	3	
<b>6</b>	<b>Root Cause Analysis (Validation of root causes)</b>		<b>5</b>



	*by using appropriate method for validation	5	
<b>7</b>	<b>Data analysis</b>		<b>10</b>
	Collection of appropriate data for validated root causes	5	
	Pareto diagram	5	
	*In case, Pareto diagram not required, marks to be given out of 10 for collection of appropriate data		
<b>8</b>	<b>Development of solution</b>		<b>10</b>
	*Min. No. of Alternate solutions developed = 5 & Validation	10	
<b>9</b>	<b>Foreseeing Probable resistance</b>		<b>5</b>
	*Min. No. of probable resistances with solutions = 5	5	
<b>10</b>	<b>Trial Implementation &amp; Check Performance</b>		<b>15</b>
	Use of PDCA	5	
	Trial implementation	5	
	Check Performance	5	
<b>11</b>	<b>Regular Implementation</b>		<b>10</b>
	Present status	5	
	Overall gains - Tangible & Intangible	5	
<b>12</b>	<b>Follow up &amp; Review</b>		<b>5</b>
	Follow up system developed	3	
	Review results	2	
	<b>Grand Total Marks</b>		<b>100</b>

**EVALUATION CRITERIA FOR ALLIED CONCEPTS CASE STUDIES**

**Quality Circle Forum of India, Rourkela Chapter**

SL. No.	Allied concepts / Problem solving steps (LQC, Kaizen, WCM, Poka yoke, SMED, QIT etc.)	Max. Marks	Total Marks
<b>1</b>	<b>Selection of problem</b>	<b>5</b>	<b>5</b>
	By any appropriate method, from problem bank or given by management or instant problem		
<b>2</b>	<b>Define the problem</b>		<b>15</b>
	Milestone chart proposed	1	
	Flow diagram / Pictorial diagram of process	3	
	Description of problem with labelled diagram or Detailed diagram or any other creative way	6	
	Objectives	2	
	Goals / Target	3	
<b>3</b>	<b>Analysis of the Problem</b>		<b>20</b>
	See that required data/verbal data for 4W+1H as how much also impact on performance parameter like Quality, productivity, Cost etc. as reqd. to be mentioned.	20	
<b>4</b>	<b>Find out probable causes and root causes</b>		<b>20</b>
	*Circles up to 2 years old, may use Dispersion analysis	10	
	*Others to use Cause enumeration type or Production process classification type with all possible sub sub causes		



	*With proper headers & probable root causes marking		
	<b>Root Cause Analysis (Validation of root causes)</b>	3	
	*by using appropriate method for validation		
	<b>Data analysis</b>	7	
	Collection of appropriate data for validated root causes		
	Pareto diagram		
	*In case, Pareto diagram not required, marks to be given out of 10 for collection of appropriate data		
<b>5</b>	<b>Solution search, Trial Implementation &amp; Check Performance</b>		<b>30</b>
	*Solution finding, PDCA	15	
	*Trial implementation & check performance		
	<b>Regular Implementation</b>		
	Present status	5	
	Overall gains - Tangible & Intangible	10	
<b>6</b>	<b>Follow up &amp; Review</b>		<b>10</b>
	Follow up system developed	5	
	Review results	5	
	<b>Grand Total Marks</b>		<b>100</b>

**EVALUATION CRITERIA FOR 5S CASE STUDIES**

**Quality Circle Forum of India, Rourkela Chapter**

**Please note:**

**\*\* In case a team has taken up any specific problem on 5S, they need to follow DMAIC methodology by DMAIC method and evaluation will be done accordingly.**

**\*\* But if a team is from already 5S implemented unit/zone/sub-zone, they need to follow the procedure as given below and evaluated accordingly.**

SL. No.	5S / Problem solving steps	Max. Marks	Total Marks
<b>1</b>	<b>Initial efforts</b>		<b>15</b>
	5S organization structure	3	
	Initial photographs	5	
	Steps taken in zone/sub-zone before going for 1S	7	
<b>2</b>	<b>Activities of house keeping</b>		<b>20</b>
	Implementation of 1st S	10	
	Implementation of 2nd S	5	
	Implementation of 3rd S	5	
<b>3</b>	<b>Implementation of 4th S</b>		<b>10</b>
	Development of standard practices	5	
	Follow up of standard practices	5	
<b>4</b>	<b>Audit system</b>		<b>10</b>
	Self Audit system	5	
	Management Audit system	5	
<b>5</b>	<b>Status of 5S Implementation</b>		<b>25</b>
	Before / After Photographs	5	



	Tangible / Intangible gains	10	
	Status of Jagruti groups	5	
	Status of 5S home	5	
<b>6</b>	<b>Follow up and Review system</b>		<b>15</b>
	Management actions for sustenance & growth of 5S	10	
	Special activities	5	
	<b>Total Marks</b>		<b>100</b>

**EVALUATION CRITERIA FOR SIX SIGMA CASE STUDIES**

**Quality Circle Forum of India, Rourkela Chapter**

SL. No.	Quality Circles / Problem solving steps	Max. Marks	Total Marks
<b>1</b>	<b>DEFINE</b>		<b>20</b>
	Business Case / Voice of customer	5	
	Project charter	10	
	SIPOC	5	
<b>2</b>	<b>MEASURE</b>		<b>15</b>
	Performance measure	7	
	Key Process parameters	4	
	Key Product parameters	4	
<b>3</b>	<b>ANALYZE</b>		<b>25</b>
	Identification of causes/C&E diagram	10	
	Validation of causes	5	
	Identification of root causes	5	
	Data collection / Validation of root causes	5	
<b>4</b>	<b>IMPROVE</b>		<b>25</b>
	Creative solutions	15	
	Design of Experiments / Hypothesis testing	10	
<b>5</b>	<b>CONTROL</b>		<b>15</b>
	New / Updation of standards	5	
	Results / Benefits	10	
	<b>Total Marks</b>		<b>100</b>

**Please Note :**

- i. If any QC Team has taken up Pure Safety problem, it shall be evaluated as per QC.*
- ii. But if it is a Pure Lean Safety Circle & taken up safety problem, it shall be evaluated like LQC or Kaizen.*