

## THE ROLE OF MIDDLE MANAGEMENT IN TQC

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### (1) Preface

The middle management are basically assigned each responsibility for specific jobs to accomplish the policy and objective disseminated by top-management with their subordinates cooperation and support infraoperationally and with the other organizational

coordinations interoperationally. Under such circumstances, the middle-management are sarcastically and pitifully teased as "Sandwiched" squeezed between top and bottoms pressures. However, the value of sandwich are solely depending not on the both upper and lower pleads, but on core of the inserted ham, cheese, egg, vegetables, etc. which are exactly similar to the middle-management situations, without these existences, sandwich nor enterprise could not be functioned well enough for customer satisfaction. The core functions of the both cases are accordingly, instead of teasing, appreciated for their performances and achievement to have full customers satisfactions. Especially, the middle management are expected to function tendous of ever management by joint together and tying each other infraoperationally and interoperationally in and out of working assignment responsibility, that the middle management should be named "star" function not by conventional ways.

### (2) TQC Diagnosis

Questions to middle management at the time of TQC diagnosis, the followings were going on;

- Q: What about your most prouder as strong points in your assigned organization?  
A: Many!! Everything is fine, and better than competitions.  
Q: Very good, What is meant "everything is fine"? How much better than competitions in which sections?  
A: Oh, just, I know it by any experiences, and they said so.  
Q: Which sector are how much stronger? Who told you how much better than?  
A: Well, er .....  
Q: Then, how about weakness or problem in your organization?  
A: As mentioned before, we are all right, but my upper and down stream sections have many problems, which annoyed us a lot.  
Q: That's meant, you don't have no problems!  
A: Yes, some weakness.

Q: How much are they worse?

A: Here is the data.

Q: Any corrective actions taken for it?

A: Certainly, I ordered for it to my subordinates.

Q: If found any root-cause for recurrent preventive action while identifying it is either assignable or operatic happening?

A: Well, I don't know, er .....

### (3) Weakness Observed Under TQC Concept

This case study which was a fact experienced at a company would reveal the following stated lessons that could be observed at various management diagnostic conversations:

Lessons:

- (A) Not identifying own's present status at both in strong and weak points.
- (B) Not identifying how to sustain own's strong points.
- (C) Not isolating critical problem of weak point.
- (D) Not appreciating fact/data for present status explaining.
- (E) Not establishing own's control and check items.
- (F) Not establishing own's work-quality level.
- (G) Not thinking-over oneself, but blaming others.
- (H) Not following-up or monitoring own's subordinate status.
- (I) Only managing by "Catch as catch-can"
- (J) Only managing by result, not by in-process control processes.

### (4) Conclusions:

The middle-management are fully expecting for their mental and physical hard-work in their own responsible worlds where are completely delegated to perform by own's vision and strategy for in and outside customers.

### CONTENTS

|  |   |
|--|---|
| The Role of Middle Management in TQC .....           | 1 |
| Mental Preparation of Middle Management in TQC ..... | 2 |
| JUSE Quality Control Middle Management Course .....  | 4 |
| JUSE Education & Training Courses 1989 .....         | 6 |
| International Quality Conferences .....              | 7 |
| JUSE International Seminar on TQC for                |   |
| Senior Management .....                              | 8 |
| International Convention on QC Circle '90 .....      | 8 |
| International Symposium on Reliability and           |   |
| Maintainability 1990 .....                           | 8 |



# MENTAL PREPARATION OF MIDDLE MANAGEMENT IN TQC



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## 1. Preface

Implementation and promotion of TQC will not be born substantial results unless middle managers actively promoting the TQC

activities. The middle managers serve the function of coordinating between the top and bottom. They are also in charge of deployment of management policies in the various divisions. Therefore, they are expected to serve as good TQC proponents and promoters in its implementation, to promote cooperation between divisions and to display good leadership within organization.

In some case, when firstly introducing TQC into a factory, its all managers have requested to read "*What is Total Quality Control? – The Japanese Way*" by Kaoru Ishikawa and to submit their impressions to the factory manager. The factory Manager and his TQC instructor returned them with their comments. While many impressions were revealed by each managers, they are equally impressed to be necessary to consider like "Reviewing (their) work from the viewpoint of TQC." One technical division manager received a comment which said "Good farmers make soil." Today this would be like saying "Good superiors foster men." Because people-building by TQC is the most important matters for the next ten or twenty years development.

## 2. Roles of Staff Functioned Personnel

### (1) Policy management and leadership

When executing work with subordinates in an organization, there are several types of middle managers. One might be called the despotic type who establishes of organizational goals, minutely determines each subordinate's roles and works and furnishes instructions and checks the results in detail. The noninterference type is that simply parrots the policies from his superiors to subordinates and tells them to do as they like as used to do. Another is the democratic type who thoroughly discuss with his subordinates firstly for identification of problems in own shops pertaining to the corporate policies, analysis of causes and establishment of countermeasures, and secondly determination of goals and its achieving procedures and establishment of lists of items. While the despotic type might be improvable by studying TQC particularly policy management, the noninterference type might be called as a defective manager (as mentioned in Masao Nemoto, *TQC and Roles of Top Managements and*

*Managers*, Part II, 1986). Like Ricoh Co.'s managerial items and required items, such management should establish implement their own improvement themes.

A company president introduced TQC into his company to improve his company's constitution and advancement of Co's records. When commenting in his QC diagnosis actions always emphasized the need for each department managers to promote improvements by having themes. This improve has triggered to the manager's morale which had been sagging for a long time and to break-through the company's atmosphere into one oriented toward renovating the existing conditions.

### (2) Fostering, training and evaluating subordinates

Some company president has always said that he would never recognize as valuable department managers unless releasing the top subordinate from their rosters. Transferring the top subordinates could lower the division's performance, that most of managers are declining to do such a thing. In TQC, when a staff who stayed in the TQC promotion office, until being awarded the Deming Prize, is sometimes transferred to a line organization such as manufacturing, which is described, as a sumo wrestling referee be turned into a sumo wrestler. To experiences the different jobs by filling both positions in this way is believed to benefit for fostering a staff-development. To transfer good subordinates it is necessary to foster another good subordinates to fill in the emptied slot. This must be a major duty of middle managers. Such education are consisted of chass-room type, on-the-job training by superior and delegation of responsibility and authority. The latter two are called as OJT and account for two thirds to three fourth of educational program.

### 3. Evaluating of QC Circles

Formally, evaluation takes tasks as evaluation of case-presentation reports in QC Circle conventions and evaluation of annual activities and their awarding related to them.

Several years ago, one company renamed its improvement-result-presentation-meeting which were organized for many years, into QC Circle convention. It, of course, had been promoting QC Circle activities since around 1965 but had not clearly distinguished between improvement groups and QC Circles. The annual QC Circle convention for the presidential prize had been a little off the principle QC Circle activities, as it allowed entries only for case-presentations shown improvements which saved great



amounts of money. Last year it has changed to emphasize as "Avoidance of placing the highest priority on result appreciation but emphasizing humanity and creating cheerful workshops." This year, it repeatedly emphasized "Re-examination of the Concept of promoting the improvement activities" which it had once promoted. "promotion of QC Circle activities which are faithful to the principle of QC Circles" and "importance of developing the human abilities and evaluating the process." It explained that these emphasis will lead to manpower development" which are linked with president's policy.

Another important thing about evaluation is the superior's daily interest and attitude. QC Circle leaders expect superiors to show interest in their activities on a daily basis and provide appropriate advice and encouragement at appropriate moments. Superiors should understand that QC Circle leaders consider such interest shown by should understand that QC Circle leaders consider such interest shown by them as their evaluation for their activities.

## Taboo Phrases

The following phrases are taboos for QC Circle leaders and members.

- (1) "If you have time to hold QC Circle meetings why don't you go sell something!"
- (2) What! We don't need such kind of improvement by now! (Masao Nemoto), *ibid*"
- (3) "So, what kinds of effects, now? "

## 4. Roles of Top Management

- (1) Don't always look up when you work; look at the customers.

One company president noticed that while his company's in-house documents addressed to himself and managing director were used a lot of polite phrases, but those addressed to customers were not used them much. He cautioned this fact through and in-house circulars for notification.

An important role of middle managers is to enrich the deployment of goals and procedures related to policy management. Since the QC concepts incorporated in such policy-management are based on market-in and quality-first, this president's concern was natural.

- (2) A qualified manager is when he learns how to use his superiors.

Mr. Katsuyoshi Ishihara lists the following "Ten Ways to Persuade Your Superior" (*FQC*, No. 14, p. 20–22, 1975)

- 1) Understand your superior (human love).
- 2) Appreciate the day-to-day communication (human relations).
- 3) Observe the etiquette and always respect your superior (human relations):
- 4) Have guts, enthusiasm and sincerity (opinions, proposals).

- 5) Watch the timing (reports, opinions, proposals).
- 6) Speak with superior's terms (reports, opinions, proposals).

This means to explain the subjects in such a way as to draw out the superior's interest such as economic effect and cooperation among organizations rather than by using difficult QC terminologies.

- 7) Speak with data. Concisely explain the main points (reports, opinions, proposals).
- 8) Frankly listen to the superior's evaluation and guidance, and then maintain what should be maintained (opinions, proposals).
- 9) Even if yours are turned down, resubmit them under reforming of our ideas by three times (opinions, proposals).
- 10) The most important thing is to win the superior's trustworthiness (relationship of trustworthiness).

## 5. Cooperation between Organizations

Along with policy management, cross-functional management is an important management technique in TQC in eliminating sectionalism and enriching and strengthening the cooperation between divisions. While implementing such management, what is necessary to consider is how to organize mutual inter-divisional overlapping cooperation – "reaching out" – to solve problems caused by vacuumed functions between organization. Also important is the spirit of "taking orders of going around the next-down stream processes" to listen their complaints and requests, based on the concept of "The next processes as our customers. "Important for the organizations belonging to the down-stream processes, is to feed the information back and forward. To assure the quality for the down-stream processes, such as quality assurance characteristics assurance work and personnel in charge for assurance are determined, by each processes designed for production processings. But even if the production mechanism is created in this way such will not be functioned sufficient enough unless the foregoing consideration are implementation in each processings. So far cross-functional procedures management are mainly explained in this paragraph, in any type of work, the responsibility of coordination between organizations is solely line indispensable role of middle managers.

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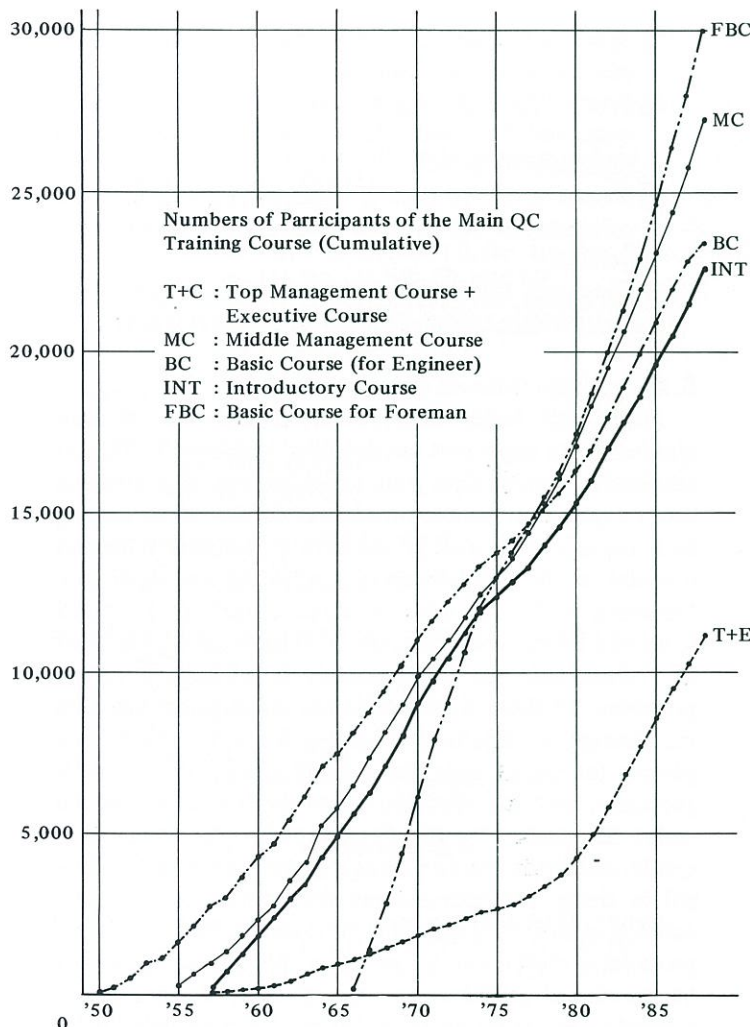
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# JUSE QUALITY CONTROL MIDDLE MANAGEMENT COURSE

12 DAYS (3days × 4months) 72 HRS (6hrs × 12days)



JUSE's Middle Management Course was established in 1955 as a result of Dr. J.M. Juran's first visit to Japan in the preceding year. His proposal of a curriculum was a great contribution to the organization of the course.

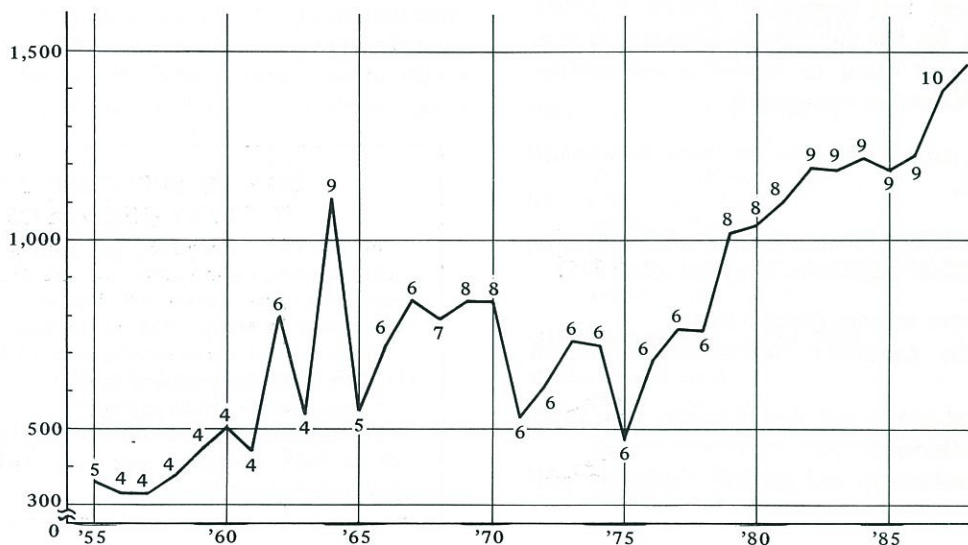
Since 1966, the course has been periodically held in Tokyo and Osaka separately beginning in every April, August and December, each with the duration of three days per month during four consecutive months. To meet the rapidly increasing demand, a new classroom was opened both in Tokyo and Osaka in 1979, and another classroom was added in Tokyo in 1982. Further in 1987, a class was newly opened in Nagoya so that total number of the classrooms reached ten. The following figure shows the number of classrooms of the course held each year.

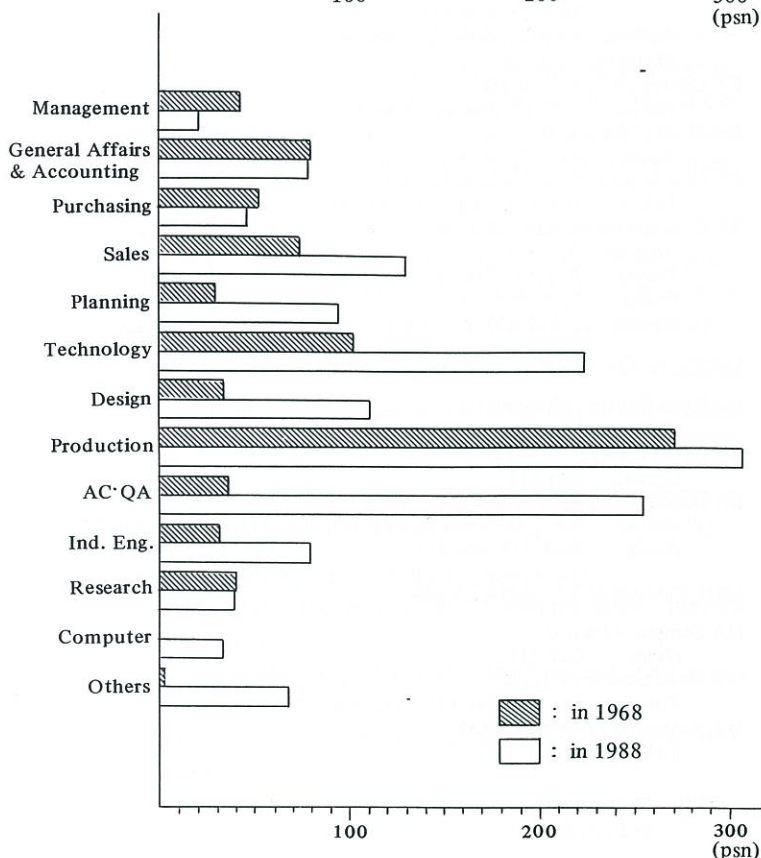
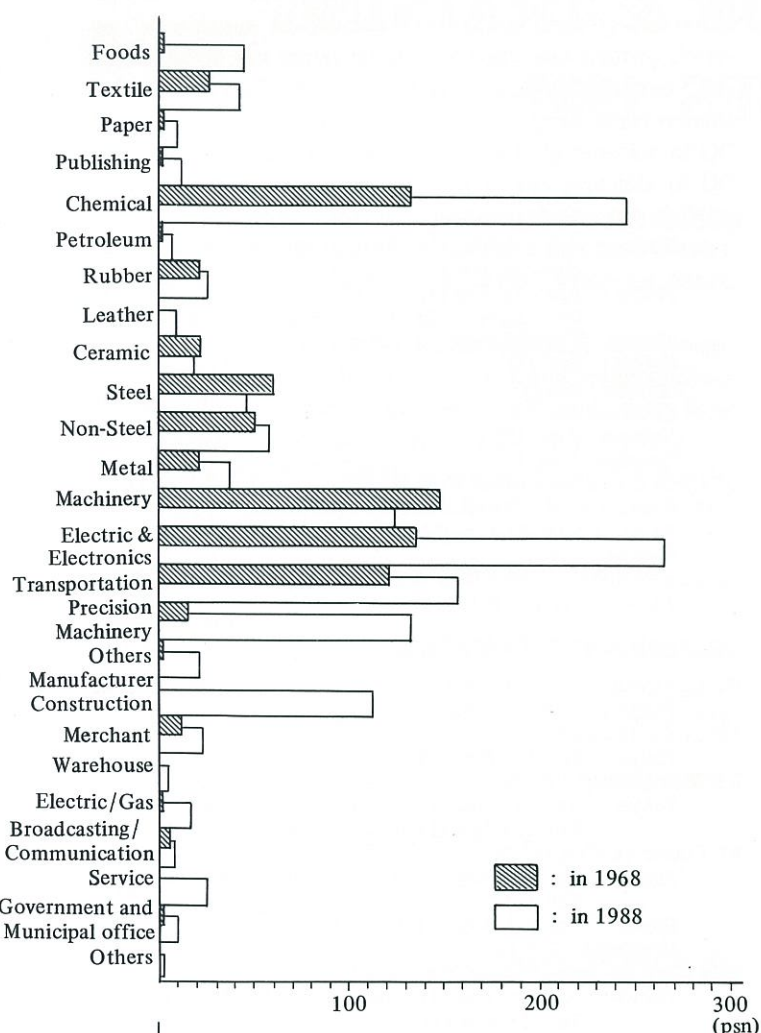
Although total number of the participants per year dropped below 500 in 1975, the lowest level during the preceding fourteen years due to the adverse influence of the oil crisis, it showed a sharp increase to the level of 1,000 to 1,300 participants during the period 1979–1986. Since 1987, the number is well over 1,400. Total number of the participants in the past 34 years from 1955 to 1988 is 27,192.

The figure at left indicates cumulative curves of the numbers of participants in the main six courses in JUSE QC seminars. These curves exhibit steady trends before the period of oil crisis, when the curves dip for a while, and then subsequent to the recovery from oil crisis, these curves soar up steeply reflecting the booming TQC drive in the Japanese industry.

The figure on the next page gives the participants' job functions as well as the industry classifications of their employers. In each case the histograms marked with hatched lines represent the number of participants in 1968 and unmarked ones those in 1988. The increase in the two groups of figures during the past twenty years characterizes the trend of the Japanese industry.

(continue to next page)





It is one of the features of the course from the beginning that the participants are not only managers in charge of quality control or quality assurance, but also those in every managerial positions including accounting and sales administration of enterprises.

In the figure showing the classification of industries, considerable increase in the number of participants is evident in electric machinery, electronics, chemical, precision machinery and construction, while that in steel and ceramic industries has decreased.

## CONTENTS OF JUSE MIDDLE MANAGEMENT COURSE

- I. INTRODUCTION [9 hrs]
  1. Introduction to Quality Control
  2. Role of Management
  3. Policy Management
- II. QUALITY ASSURANCE [15 hrs]
  1. Quality Assurance
  2. QA in Research and Development
  3. QA in Production
  4. QA in Sales and Service
  5. QA and Reliability
- III. FUNCTIONS AND THEIR MANAGEMENT OF QUALITY CONTROL [15 hrs]
  1. Organization, Training and Promotion
  2. QC Circles and Role of Managers for the Activities
  3. Involving Sub-contractors
  4. Integrating Management Techniques
  5. Quality Control and Standardization
- IV. METHODOLOGY [9 hrs]
  1. Statistical Methods [I]
  2. Statistical Methods [II]
  3. Seven Management Tools for QC
- V. SPECIAL LECTURE [12 hrs]
  1. Corporate Management and TQC
  2. New Product Development and Quality Function Deployment
  3. Distinction of Service Industry in TQC
  4. Topics on TQC
- VI. CASE STUDY OF TQC IN PRACTICE [3 hrs]
- VII. GROUP DISCUSSION [9 hrs]



# JUSE EDUCATION & TRAINING COURSES 1989

## QUALITY CONTROL

- QC Top Management Course (5 days)  
*Karuizawa* : July (2), Sept. (2), Oct. (1)
- QC Executive Course (5 days)  
*Hakone* : Apr. (1), May (1), June (1), Oct. (1), Nov. (1), Mar. (1)
- QC Introductory Course for Executive & Management (3 days)  
*Osaka* : Apr. (1), Dec. (1),  
*Tokyo* : Aug. (1), Feb. (1)
- QC Middle Management Course (12 days)  
*Tokyo* : Apr. (2), Aug. (1), Sept. (1), Oct. (1), Nov. (2), Dec. (1), Jan. (2), Feb. (2), Mar. (2)  
*Osaka* : Apr. (1), May (1), Jun. (1), Jul. (1), Aug. (2), Sept. (2), Oct. (2), Nov. (2), Dec. (2), Jan. (2), Feb. (2), Mar. (2)  
*Nagoya* : Apr. (1)
- QC Basic Course (30 days)  
*Tokyo* : Apr. (2), Oct. (2)  
*Osaka* : Apr. (1), Oct. (2)
- QC Introductory Course (8 days)  
*Tokyo* : Apr. (1), Aug. (1), Oct. (1)  
*Osaka* : Apr. (1), Aug. (1), Jan. (1)
- QC Course for Sales Department (13 days)  
*Tokyo* : Apr. (1)
- QC Course for Purchasing Department (16 days)  
*Tokyo* : Sep. (1)
- QC Introductory Course for Purchasing Department (4 days)  
*Tokyo* : Nov. (1)
- QC Introductory Course for Sales Department (4 days)  
*Tokyo* : Sept. (1), Nov. (1)  
*Osaka* : May (1), Sept. (1), Feb. (1)
- TQC Instructor Course (6 days)  
*Tokyo* : Jun. (1), Sept. (1), Dec. (1), Feb. (1)
- TQC Introductory Course for Service Industries (6 days)  
*Tokyo* : Oct. (1)
- QC Course for GMP (Pharmaceutical) (5 days)  
*Tokyo* : Apr. (1) (Introductory),  
May (1) (Advanced)
- Introductory Course for Seven Management Tools for QC (3 days)  
*Osaka* : Apr. (1), Jun. (1), Oct. (1), Dec. (1), Feb. (1)  
*Tokyo* : Apr. (1), May (1), Jul. (1), Aug. (1), Oct. (1), Nov. (1), Dec. (1)  
*Nagoya* : Jul. (1), Sept. (1)
- QC Basic Course for Foreman (6 days)  
*Tokyo* : Apr. (1), May (1), Jun. (1), Jul. (1), Aug. (1), Oct. (1), Nov. (1), Dec. (1), Jan. (1), Feb. (1)  
*Osaka* : Apr. (1), Jul. (1), Nov. (1), Feb. (1)  
*Nagoya* : May (1), Sept. (1)  
*Fukuoka* : Jun. (1)
- QC Basic Course for Group Leaders (4 days)  
*Tokyo* : Apr. (2), Jun. (2), Jul. (2), Aug. (1)  
*Osaka* : May (2), Jan. (1), Feb. (1)  
*Fukuoka* : Aug. (2)  
*Nagoya* : Aug. (1), Sept. (1)
- QC Circle Top Management Course (2 days)  
*Nagoya* : May (1)  
*Osaka* : Oct. (1)  
*Tokyo* : Feb. (1)
- QC Circle Instructor Course (2 days)  
*Tokyo* : Apr. (1), May (1), Jun. (1), Aug. (1), Sept. (1), Oct. (1), Nov. (1), Jan. (1), Feb. (1)  
*Osaka* : Apr. (1), Jun. (1), Sept. (1), Dec. (1), Feb. (1)  
*Sendai* : Apr. (1)  
*Nagoya* : Jun. (1), Oct. (1), Nov. (1)  
*Sapporo* : Jun. (1)  
*Fukuoka* : Sept. (1)

## QC Circle Leader Course (3 days)

- Osaka* : Apr. (1), May (1), Jun. (1), Jul. (1), Sept. (1), Nov. (1), Jan. (1), Mar. (1)  
*Tokyo* : Apr. (2), May (3), Jun. (2), Jul. (2), Sept. (2), Oct. (3), Nov. (3), Dec. (1), Feb. (1), Mar. (3)  
*Nagoya* : May (1), Sept. (1), Jan. (1)  
*Sendai* : Jun. (1)  
*Sapporo* : Jul. (1)  
*Kokura* : Jul. (1)  
*Fukuoka* : Sept. (1)  
*Okinawa* : Sept. (1)
- QC Circle Course for Clerical Work (6 days)  
*Tokyo* : Apr. (1), Oct. (1), Dec. (1), Feb. (1)  
*Osaka* : May (1), Oct. (1)  
*Nagoya* : Feb. (1)
- QC Correspondence Course (6 month)  
*Tokyo* : Jul. (1), Feb. (1)

## RELIABILITY ENGINEERING

- RE Management Course (4 days)  
*Tokyo* : April (1), Sept. (1), Feb. (1)
- RE Course (15 days)  
*Tokyo* : May (1), Nov. (1)
- RE Basic Course (4 days)  
*Tokyo* : Apr. (1), Jun. (1), Aug. (1), Sept. (1), Oct. (1), Nov. (1), Jan. (1), Feb. (1), Mar. (1)
- RE Course on FMEA-FTA  
*Tokyo* : Apr. (2), May (2), Jul. (1), Sept. (1), Nov. (1), Feb. (2)  
*Osaka* : Jun. (2), Aug. (1), Jan. (1)  
*Hiroshima* : Oct. (1)
- RE Course on Design Review (2 or 3 day)  
*Tokyo* : Apr. (1), Jun. (1), Aug. (1), Oct. (1), Nov. (1), Jan. (1), Feb. (1)  
*Osaka* : May (1), Sept. (1), Feb. (1)  
*Hiroshima* : Jul. (1)
- RE Course on Test (3 days)  
*Tokyo* : Jul. (1), Nov. (1), Mar. (1)
- RE Six Day Course (6 days)  
*Osaka* : Jun. (2), Nov. (2)
- RE Course on Failure Analysis (3 days)  
*Tokyo* : Jun. (1), Aug. (1), Feb. (1)
- RE Course on Checklists (3 days)  
*Nagoya* : Apr. (1)  
*Tokyo* : Aug. (1), Mar. (1)  
*Osaka* : Sept. (1)  
*Hiroshima* : Dec. (1)

## DESIGN OF EXPERIMENT

- DE Basic Course (30 days)  
*Tokyo* : Oct. (1)
- DE Osaka Course (20 days)  
*Osaka* : May (1)
- DE Introductory Course (8 days)  
*Tokyo* : Apr. (1), Jun. (1), Aug. (1), Nov. (1), Jan. (1)  
*Osaka* : Sept. (1), Jan. (1)

## MULTIVARIATE ANALYSIS

- MA Seminar (3 days)  
*Osaka* : Oct. (1)
- MA Basic Course (4 days)  
*Tokyo* : Jul. (1), Mar. (1)
- MA Advanced Course (3 days)  
*Tokyo* : Aug. (1)

(NOTE) The number with parenthesis represent the number to be held.



# INTERNATIONAL QUALITY CONFERENCES

– Fall, 1989 –

33rd EOQC (European Organization for Quality) Annual Conference  
September 18–21, Vienna, AUSTRIA

Congress Secretariat  
INTERCONVENTIONS  
Austria Center Vienna, A-1450 Vienna Austria  
Tel. (222) 2369-2641    Telefax. (222) 2369-648

Asian Congress on Quality and Reliability  
October 21–23, New Delhi, INDIA

Congress Secretariat  
S. Chakroborty, Executive Secretary  
Indian Statistical Institute, 7, S.U.S. Sansanwal Marg  
New Delhi 110 016 INDIA

International Conference on Quality Control (IQC '89)  
October 23, 24, Buenos Aires, ARGENTINA  
October 26, 27, Rio de Janeiro, BRAZIL

Secretariat  
Associacao Brasileira de Controle da Qualidade (ABCQ)  
Rua Ernesta Polosini, 22-sala 220  
09770 – Sao Bernardo de Campo – SP  
Tel. (011) 448-0041    Telefax. (001) 458-5955

International Exposition of QC Circles (IEQCC '89)  
November 28 – December 1, SINGAPORE

Secretariat  
National Productivity Board  
NPB Building, 2 Bunkit Merah Central, SINGAPORE 0315  
Tel. 2786666    Telefax. 2786667

International Convention on Quality Central Circles (ICQCC '89)  
December 6–9, New Delhi, INDIA

Secretariat  
No. 907, Hemkunt Tower, 98, Nehru Place,  
NEW DELHI – 110019, INDIA  
Tel. 6434544    EXT 243  
Telex. 031-62154, 031-61742 MOD1 IN

– Spring, 1990 –

The First International Middle East Quality Assurance Conference  
March 12–14, Bahrain, SAUDI ARABIA

Secretary General  
Dr. John Danies  
The Institute of Quality Assurance  
10 Grosvenor Gardens, London SW1W ODQ  
Tel. 01-730-7154    Telex. 8950952

ASQC 44th Annual Quality Congress (The 8th Triennial IAQ Conference)  
May 14–16, San Francisco, California, U.S.A.

Program Coordinator  
Mr. Shirley Furger  
American Society for Quality Control,  
310 W. Wisconsin Avenue/Suite 500, Milwaukee, WI. 53203 U.S.A.  
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To submit a paper, request a Speaker's Data Packet  
no later than May 26, 1989 from the above.



## ***JUSE INTERNATIONAL SEMINAR ON TQC***

### ***FOR SENIOR MANAGEMENT***

**October 16–21, 1989 Tokyo**

Lecture and guidance will be given by about 10 prominent and experienced leaders, specifically on the following subjects:

- Basic concept of TQC in Japan;
- Successful Management;
- Effective Statistical Methods;
- Practical Policy Management;
- Conforming Quality Assurance and Reliability for customers;
- Role of Management;
- How to implement QC Circle Activities;
- How to motivate, educate and train employees;
- Recent topics on TQC; Quality Deployment / Seven Management Tools, and others

The lecturers will deliver lectures on their specialities. Case studies by visiting plants of Deming Application Prize winner companies will enhance the effects of your learning at the seminar.

### ***CALL FOR PAPER***

#### **International Convention on QC Circle 1990 Tokyo**

**– October 24–26, 1990 –**

All papers offered for presentation would preferably be related to the following subjects.

1. Case reports implemented in the workshop by QC Circles.
2. Reports on the promotion of QC Circle Activities.
  - A) Characteristics and Problems of QC Circle promotion.
  - B) Education and Training of the QC Circle instructors, facilitators, leaders and members.
  - C) Nationwide Review on the QC Circle Activities.

About 500 words English abstract should be submitted to the ICQCC'90 Tokyo Organizing Committee in JUSE **not later than February 1, 1990.**

#### **International Symposium on Reliability & Maintainability Tokyo**

**– June 5–8, 1990 –**

Original papers in the field of reliability and maintainability covering the following topics will be welcome.

International Co-operation and National Activities, System and Equipment Reliability, Fault Tolerant System, Device and Component Reliability, Reliability and Maintainability Management, Life Cycle Costing, Quality and Reliability Assurance, Maintainability, Availability and Maintenance Support, Design Aspects, Software Reliability, Mathematical Modeling of Systems, Reliability Testing and Screening, Failure Analysis and Reliability Physics, Safety and Product Liability, Mechanical and Structural Reliability, Human Aspects of Reliability and Maintainability, Education and Training Data Collection.

Abstract at least 800 words in English with some keywords should be submitted to reach the Symposium Secretariat **not later than September 1, 1989.** A brief biographical sketch of the author(s) should be attached.

*For More details, please contact JUSE.*