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JOINT POSSESSION OF INFORMATION

from "Total Quality Control", Vol. 43, No. 2 (1992 Feb.)

Tadahiro SEKIMOTO President NEC Corporation



NEC is operating at 100 locations in 45 countries throughout the world, and about 180,000 people are actively employed. What is important in this connection is that management is impossible without a sense of respect for the culture of each country.

However, it is my managerial philosophy that we should unite ourselves as one group, although different cultures are respected.

I term this concept "holonic management". What should be done if this is to be successfully attained? It is quite difficult to unify individuals who are different in sensitivity, recognition potential, and degree of actual perception. I believe that common possession of "information" is required to have a wide variety of people work willingly.

Based on this managerial philosophy, NEC is striving to create a global information network. As often as practical, I have been emphasizing the importance of owning common information in my "president's instruction", given both inside and outside Japan.

I think that "information" is the fourth managerial element following "personnel", "materials", and "money". As the fifth managerial element, I have been promoting "corporate culture." I have put together the outlook on social value, cultural value, economic value, and scientific value into a single package and included it in our corporate philosophy.

The 1980's was termed the "era of uncertainty". I call the 1990's the "era of dislocation". I believe that the challenge to the Deming Prize amid such an era will serve the purpose of reinforcing corporate strength. It is hoped that, through our

effort for reinforcement of our corporate structure, we will be evaluated from outside and guided to reach practical levels in all aspects of the unified organizational unit without clinging to self-conceited views.

Thankfully, six NEC Group companies have already received the Deming Prize. I hope that our group companies will vigorously promote TQC and bravely challenge the Deming Prize in the future.

My motto is to go out and take action. Amid such action, sensitivity should be fostered. In this connection, the atmosphere allowing discussion of necessary matters or frank expression of what is felt is considered necessary. Yet, what is needed is not only feeling something by oneself but expressing one's own views.

Accordingly, I often suggest that criticisms should be accompanied by compassion. Discussion simply for the purpose of "crushing others" can serve no purpose. I think the most important point is to express one's opinion, or say that I believe so-and-so, or suggest that, as the president, you should do this, while indicating that such remark or suggestion is intended to help the improvement of the other party.

I think that "compassion should be the basis for criticisms of comrades." In other words, I think that there must be compassion if criticisms are made of others in our own group.

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TQC ACTIVITIES IN KYOTO KINTETSU DEPARTMENT STORE

from Quality Month Text No. 214

The Kyoto Kintetsu Department Store is promoting Total Quality Control (TQC) based on principle control, daily management, and QC Circle activities. Specifically, it implements QC diagnosis for principle control, while various kinds of announcement meetings for self-improvement or mutual enlightenment are held regularly with regard to QC Circle activities.

Quality of Department Stores

Quality of department stores can be classified into product quality, service quality, and quality of work, as shown in Diagram 1. The important items for controlling such kinds of quality are as shown below:

- (1) Product Quality (System of characteristics)
 - To form a line-up of products that can meet customer needs.
 - To form a line-up of products that can satisfy the "wants" of customers (bringing mental satisfaction to customers).
- (2) Service Quality (System of characteristics)
 - To provide information based on professional knowledge or technology in an appropriate manner.

- To propose to customers ways of leading a rich life.
- · To deal kindly with customers.
- To arrange for the facility or environment that enables customers to enjoy shopping comfortable without anxiety; in particular, fire prevention and anti-disaster facilities must be in good order.
- (3) Quality of Work (System of elements)

The quality of work means the degree of the attainment of the work, which is evaluated based on the elements of Q, C, D, S, and M shown below.

- O: Ouality accurate contents
- C: Cost investment effect, cost consciousness, performance, and efficiency
- D: Delivery time of delivery, and volume
- S: Safety security and making customers feel at ease
- M: Morale willingness to work and purposefulness

With regard to quality of work, Q, C, D, S, and M must be properly observed or maintained. Quality of work is universal regardless of whether in secondary or tertiary industries. It is an important control item in conducting work. If the quality of work is controlled in a satisfactory manner, the quality of product and service can be maintained at a fixed level and thus can be controlled adequately.

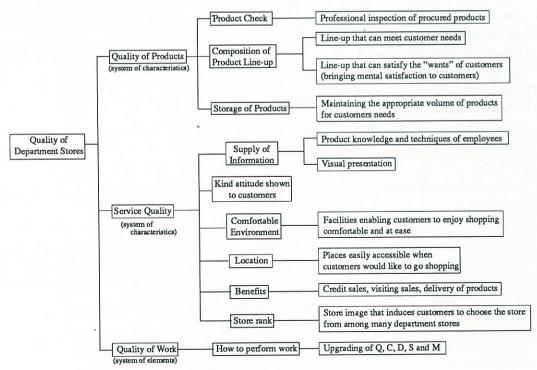


Diagram 1 Quality of Department Stores

TQC Promotion Organization

1. TQC Promotion Organization Equals Essential Business Organization

TQC represents the efforts to raise the level of business activities. Accordingly, the TQC promotion organization is directly placed in the business organization as shown in Diagram 2.

Of the TQC activities, principle control is enforced by the "top-down" method, while daily control is carried out by managers. QC activities, on the other hand, are performed through the "bottom-up" style. For the purpose of making these activities understood by all employees and getting them rooted in the company, we have selected five items, indicated in Diagram 2, for our company from among QC concepts and thoughts. We have turned them into slogans, displayed them in posters, and otherwise vigorously publicized them.

2. Sharing of Roles

- (1) The President is the manager of the TQC Promotion Headquarters.
 - The president's principles are decided at a directors meeting; he then evaluates the state of their implementation and control throughout the company from the viewpoint of QC, and ensures that necessary actions will be taken subsequently. This is an important role to be played by the president.
 - In promoting QC Circle activities, the president regularly (twice per year) evaluates the state of guidance and training by department and section managers, who are the "PTA" in the movement, so-to-speak; this contributes greatly to the activation of QC Circle activities.
 - At QC Circle announcement meetings of the company, the president adjusts his busy schedule to perform his tasks as the manager of the TQC Promotion Headquarters and chairman of the judging committee, evaluate the contents of QC Circle activities (which are developed in the "bottom-up" style and announced), and commends the winners. The president seems to look forward to this.
 - 1. Let's concentrate on priority points!
 - 2. Let's discuss based on data!
 - 3. Let's turn the cycle of PDCA!
 - 4. Let's repeat why, why, why!
 - 5. Let's do what pleases customers (or staff in the later process)!

Diagram 2 Poster of the TQC Promotion Slogans

(2) Officers are the chairmen of the TQC promotion committees of stores, divisions, and offices.

A senior managing director or managing director fills the post of a store manager, manager of a division, or head of an office. In promoting TQC, this officer's role as the top leader of each organization is great and important. A general director serves as an assistant to an officer.

- For principle control, an officer works out priority steps
 of his sector for the enforcement of the president's
 principles, explains them to the staff of the sector, and
 guides the staff regarding their implementation. The objective of such actions is to help the staff sufficiently
 understand his principles and engage in their development in an appropriate manner.
- With regard to promotion of daily control, the officer evaluates the methods of work of department managers, his direct subordinates, from the viewpoint of QC, and extends guidance and advice to them.
- In promoting QC Circle activities, he strives for their acceleration in the manner similar to that of the president. Thus, whenever there is a chance, he stresses to the dapartment and section managers, who can be considered as "PTA": "Based on their own initiative, QC Circles deal with and improve problems at the front-line of workshops that are unnoticed by the managers. Therefore, be thankful for QC Circles. If you have such feeling, the degree of your interest in QC Circle activities will be enhanced, bringing about their acceleration".
- (3) A department manager is a TQC promotion committee member.
 - Concerning principle control, he systematically develops priority implementation matters for his department at departmental meetings in line with the officer's principles. In accordance with the contents of various measures to be taken, he arranges for the performance of pertinent duties by the department manager, section managers, and assistant section managers.
 - With regard to daily control, the department manager assumes the position of the leader. He rectifies specific problems of the department under the QC method together with section managers and assistant section managers, standardizes the steps for their rectification, and adds them to the items of daily control for the purpose of fixing them to departmental activities.
 - In promoting QC Circle activities, he manages QC Circle announcement meetings of the department and provides intersectorial coordination in this regard.
- (4) A section manager is a chief adviser of QC Circles.
 - For principle control and daily control, he develops the principles of the department manager concerned and manages the priority implementation matters of his section.
 - In promoting QC Circle activities, he generates an atmosphere that allows QC Circle to conduct their activities on their own initiative. He extends guidance and

advice regarding selection of themes, activity planning, improvement measures, methods of activities, and all other matters relating to general aspects of the activities.

(5) An assistant section manager is an instructor and adviser for QC Circles.

His role as direct superior of QC Circle members is highly important.

- He extends guidance and advice concerning the formation of QC Circles and selection of their themes.
- He handles various problems in the relations between the section manager's principles and QC Circle activities.
- He extends specific advice (about utilization methods of QC Story and Seven QC Tools) and support (setting suitable times and finding an appropriate place for meetings).
- He grasps and evaluates the status of QC Circle activities.
- He makes sure that the leaders and members of QC Circles sufficiently understand that a QC Circle is unit in charge of everyday duties while conducting its activities based on its initiative.
- (6) Front-line employees are either leaders or members of QC Circles.
- (7) The TQC promotion committee members are designated by the president. This committee conducts the TQC-related mission for the entire company.

For the two initial years after its introduction in 1984, the TQC of our company evolved in the form of activities guided by the top management and the secretariat of the TQC Promotion Headquarters. In the third year, when all employees had become accustomed to the TQC system and actual methods of its activities, the TQC promotion committee was established within the company. Its members are 10 department manager specifically designated by the manager of the TQC Promotion Headquarters (president). This committee participates in the preparation of company-wide management principles for TQC activities and plays the role of the driving force for these activities. The term of office of the members is one year. Thus, its members have been replaced every year, accompanied by an increase in the number of TQC missions for the whole company. The main tasks of this committee are:

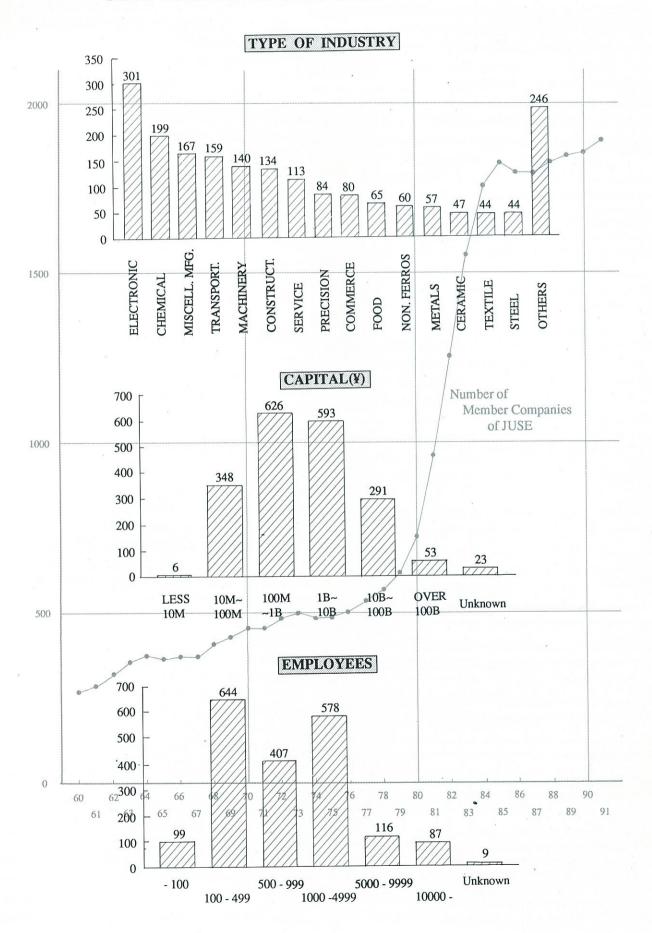
- With regard to principle control, it identifies problems for the entire company, analyzes them, and takes part in the preparation of the draft for the company's principles.
- It strives to step up QC activities as part of the company's TQC.
- It works out operational plans for QC Circle announcement meetings for the entire company.
- 3. Secretariat of the TQC Promotion Headquarters
 In order to seek the company-wide promotion of TQC, we

maintained the secretariat in the Planning Office from March 1984 to February 1990. The Planning Office attained considerable success by incorporating TQC promotion in its original work of preparing a long-range managerial program. On the occasion of an organizational change in March 1990, the secretariat was transferred to the newly-established Competence Development Department.

The tasks of the secretariat of the TQC Promotion Headquarters are as shown below:

- Preparation of annual promotion plans for TQC activities
- (2) Preparation of the draft for the president's principles
- (3) Company-wide promotion of principle control and daily control
 - Identification and analysis of problems for the entire company
 - Guidance, advice, assistance, and introduction of other companies' cases: Holding of internal study gatherings and lecture meetings, selection of external study courses and recommendation of the participants for such courses, and introduction of reference books
 - Preparation of implementation plans for QC diagnosis by the president
 - Formulation and revision of internal enforcement guidelines
- (4) Company-wide promotion of OC Circles
 - · Preparation and promotion of annual plans
 - Guidance, assistance, and advice by promotion committee members and advisers: Holding of internal study meetings, participation in outside study courses, arrangement for workshop visits, etc.
 - Guidance and advice by leaders: Holding of internal study meetings, regular holding of "QC Consultation Meetings" (once per month), participation in outside study courses, correction of activity outcome reports and subsequent guidance
 - · Holding of leader consultation meetings
 - Planning and operation of QC Circle announcement meetings for the entire company
 - Internal PR activities: TQC newsletter publication, planning for "QC Time" (in-house broadcast), spread of "QC Circle" magazine, and introduction of other companies' cases
 - Planning and management of external activities of the OC Circle movement
 - Compilation and revision of internal texts
- (5) Promotion of "horizontal development"
- (6) Research concerning TQC activities
- (7) Activities as the secretariat of the TQC promotion committee

COMPOSITION OF JUSE MEMBER COMPANIES



JUSE EDUCATION & TRAINING COURSES 1992

★ How to see this table:

name of course/seminar (total days of course/seminar) location : month to be held (number of classes)

QUALITY CONTROL (QC)	Ocales May (1) Son (1)		
QC Top Management Course (5 days)	Osaka: May (1), Sep. (1)		
Karuizawa: July (2), Sep. (2), Oct. (1)	Tokyo: Apr. (1), June (1), Aug. (1), Oct. (1), Dec. (1) Fukuoka: Dec. (1)		
QC Executive Course (5 days)	QC Circle Instructor Course (6 days)		
Hakone: Apr. (1), May (1), June (1), Oct. (1), Nov. (1), Mar. (1)	Tokyo: Apr. (1), May-June (1), June-July (1), AugSep. (2)		
QC Introductory Course for Executive & Management (3 days)	Oct. (1), OctNov. (1), DecJan. (1), FebMar. (1)		
	Osaka: AprMay (1), June-July (1), AugSep. (1)		
Osaka: June (1), Jan. (1) Tokyo: Sep. (1), Mar. (1)	OctDec. (1), JanFeb. (1)		
QC Middle Management Course (12 days)	Nagoya: May-June (1), OctNov. (1)		
Tokyo: AprJuly (2), AugNov. (1), DecMar. (2)	Sendai: AprMay (1)		
Osaka: AprJuly (1), AugNov. (2), DecMar. (1)	Fukuoka: AugSep. (1)		
Nagoya: AprJuly (1)	QC Circle Leader Course (3 days)		
QC Basic Course for Assistant to Section Chief (6 days)	Osaka: Apr. (1), May (1), June (1), July (1), Sep. (1), Oct. (1),		
Osaka: June-July (1)	Dec. (1), Jan. (1), Feb. (1), Mar. (1)		
Tokyo: SepOct. (1), JanMar. (1)	Tokyo: Apr. (3), May (2), June (3), July (3), Aug. (3), Sep. (1).		
QC Basic Course (30 days)	Oct. (3), Nov. (1), Dec. (2), Jan. (2), Feb. (2), Mar. (3)		
Tokyo: AprSep. (2), OctMar. (2)	Nagoya: Apr. (1), July (1), Sep. (1), Dec. (1), Mar. (1)		
Osaka: AprSep. (1), OctMar (2)	Sendai: May (1)		
QC Introductory Course (8 days)	Fukui: June (1)		
Toyko: May-June (1), July-Aug. (1), OctNov. (1), JanFeb. (1)	Sapporo: Oct. (1)		
Osaka: May-June (1), July-Aug. (1), OctNov. (1)	Hiroshima: Oct. (1)		
QC Basic Course for Foreman (6 days)	Kokura: Oct. (1)		
Tokyo: AprMay (1), May-June (1), June-July (1),	Fukuoka: May (1), Feb. (1)		
July-Aug. (1), SepOct. (1), OctNov. (1),	Okinawa: Jan. (1)		
DecJan. (1), Feb. (1), Mar. (1)	QC Circle Course for Clerical Work (6 days)		
Osaka: AprMay (1), June-July (1), SepOct. (1)	Tokyo: Apr-May (1), AugSep. (1)		
OctNov. (1), FebMar. (1)	Osaka: July-Aug. (1)		
Nagoya: June-July (1), OctNov. (1)	Nagoya: AugSep. (1)		
QC Basic Course for Group Leaders (4 days)	DELIABILITY (DE)		
Tokyo: Apr. (1), May-June (1), July-Aug. (1), AugSep. (1)	RELIABILITY (RE)		
Oct. (1), JanFeb. (1), FebMar. (1)	RE Management Course (4 days)		
Osaka: AprMay (1), AugSep. (1), Feb-Mar. (1)	Tokyo: Apr. (1), Aug. (1), Nov. (1)		
Nagoya: June (1), Nov. (1)	RE Course (15 days)		
Fukuoka: SeptOct. (1) TQC Instructor Course (6 days)	Tokyo: AprJune (1), SepNov. (1)		
Tokyo: Jun-July (1), AugOct.(1), OctNov. (1)	RE Basic Course (4 days)		
FebMar. (1)	Tokyo: Apr. (2), July (1), Sep. (1), Oct. (1), Nov. (1),		
QC Course for Purchasing Department (16 days)	Jan. (1), Feb. (1) RE Six Day Course (6 days)		
Tokyo: SepJan. (1)	Osaka: July-Aug. (1), OctNov. (1)		
QC Introductory Course for Purchasing Department (4 days)	RE Course on FMEA-FTA (2 or 3 days)		
Toyko: OctNov. (1)	Tokyo: Apr. (2), May (1), Nov. (1), Dec. (1), Jan. (1), Feb. (2)		
QC Course for Sales Department (13 days)	Mar. (1)		
Tokyo: AprOct. (1)	Osaka: Apr. (2), June (1), Nov. (1), Feb. (1)		
QC Introductory Course for Sales Department (4 days)	Hiroshima: Dec. (1)		
Tokyo: AugSep. (1), DecFeb. (1), FebMar. (1)	RE Course on Design Review (2 or 3 days)		
Osaka: June-July (1), SepOct. (1), FebMar. (1)	Tokyo: Apr. (1), Aug. (1), Sep. (1), Dec. (1), Feb. (1), Mar. (1		
Tokyo: Apr. (1), May (1), July (1), Sep. (1), Oct. (1)	Osaka: July (1), Oct. (1), Jan. (1)		
Nov. (1), Dec. (1), Jan. (1), Feb. (1), Mar. (1)	Fukuoka: June (1)		
Nagoya: May (1), July (1)	Hiroshima: Oct. (1)		
Introductory Course for Seven Management Tools for QC (3 days)	RE Course on Checklists (3 days)		
Osaka: Apr. (1), May (1), June (1), July (1), Oct. (1), Nov. (1)	Tokyo: Aug. (1), Nov. (1)		
Jan. (1)	Osaka: Jan. (1)		
QC Course for GMP (Pharmaceutical) (2 or 3 days)	RE Course on Test (3 days)		
Tokyo: Apr. (1) (Introductory), May (1) (Advanced)	Tokyo: June (1), Aug. (1), Oct. (1)		
00 OIDOLE (000)	RE Course on Failure Analysis (3 days)		
QC CIRCLE (QCC)	Tokyo: July (1), Aug. (1), Nov. (1)		
QC Circle Top Management Course (2 days) Nagoya: July (1), Feb. (1)			

DESIGN OF EXPERIMENT (DE)

DE Tokyo Course (30 days)

Tokyo: Oct.-Mar. (1)

DE Osaka Course (20 days) Osaka: May-Aug. (1)

DE Introductory Course (8 days)

Tokyo: Apr.-May (1), June-July (1), Sep.-Oct. (1),

Nov.-Dec. (1), Feb.-Mar. (1)

Osaka: Aug.-Sep. (1), Nov.-Jan. (1)

MULTIVARIATE ANALYSIS (MA)

MA Seminar (7 days)

Osaka: Oct.-Nov. (1)

MA Advanced Course (4 days)

Tokyo: Aug. (1)

MA Basic Course (4 days)

Tokyo: June (1), July (1), Mar. (1)

OPERATIONS RESEARCH (OR)

Corporate Strategy, Executive Course (4 days)

Tokyo: Oct.-Nov. (1)

Corporate Strategy, Managers Course (8 days)

Tokyo: May-June (1)

OR Introductory Course (5 days)

Tokyo: Apr. (1), Oct. (1)

INDUSTRIAL ENGINEERING (IE)

IE Seminar (16 days)

Tokyo: June-Sep. (1)

IE Basic Course for Foreman (6 days)

Tokyo: June-July (1), Nov. (1), Feb.-Mar. (1)

Osaka: July-Aug. (1)

MARKETING RESEARCH (MR)

MR Seminar (17 days)

Tokyo: Sep.-Dec. (1)

SOFTWARE PRODUCTION CONTROL (SPC)

Software Production Control Seminar for Manager (6 days)

Tokyo: Apr.-May (1), Nov.-Dec. (1)

Software Production Control Seminar (8 days)

Tokyo: May-June (1), Sep.-Oct. (1), Jan.-Feb. (1)

SENSORY INSPECTION (SI)

Sensory Inspection Seminar (11 days)

Tokyo: Jan.-Mar. (1)

PRODUCT LIABILITY (PL)

PL Prevention Introductory Course (3 days)

Tokyo: June (1), Oct. (1)

OTHER MANAGEMENT TECHNIQUES

Statistical Application Seminar for Clinical Test (CT) (7 days)

Tokyo: Sep.-Oct. (1)

New Finite Element Method Introductory Seminar (NFEM)(3 days)

Tokyo: Sep. (1)

Finite Element Method Seminar for Fluid Mechanics (FEM) (3 days)

Tokyo: Apr. (1)

Cost Reduction Seminar (CD) (6 days)

Tokyo: June-July (1), Feb.-Mar. (1)

VE Basic Course for Foreman (FVE) (4 days)

Tokyo: May (1), Nov. (1)

Osaka: Oct. (1)

1992 Annual Conferences & Symposia

May 20~22:

Quality Control Spring Conference in Sendai (for Managers and Staff)

June 8~10:

The 22nd Symposium on Reliability and Maintainability in

Tokyo

June 29~30:

The 3rd Symposium on Ergonomics in Tokyo

September 3 ~4:

The 12th Quality Control Symposium of Software Produc-

tion in Tokyo

September 10 ~11:

The 22nd Sensory Inspection Symposium in Tokyo

November 5~6:

The 6th Symposium on Computational Mathematics in Tokyo

November 5~6:

The 8th Quality Control Conference for Service Industry in

Tokyo

November 10:

The 22nd All Japan QC Circle Convention in Tokyo

November 10 ~11:

The 16th Symposium on Multivariate Analysis in Tokyo

November 11 ~13:

The 31th Foreman Quality Control Conference in Tokyo

November 16:

The 30th Top Management Quality Control Conference in

Tokyo

November 17~20:

The 42nd Manager & Staff Quality Control Conference in

1992 QC Circle Conference

Yamaguchi: Apr. 23~24

Sapporo: June 18~19

Fukui: Aug. 27~28

Gifu: Oct. 29~30

Okinawa: Dec. 10~11

Nagasaki: Feb. 18~19

1992 Study Missions to Overseas and QC Circle Cruising Seminar

- (not fixed) The 22nd Quality Control Study Team (22QCT)
- (not fixed) The 25th QC Circle Study Team (25FQCT)
- July 8 to 21

The 31st QC Circle Cruising Seminar (31QCS) visiting Hong Kong and Taiwan

• October 1 to 13

The 32nd QC Circle Cruising Seminar (32QCS) visiting Hong Kong and Taiwan

• October 12 to 24

The 11th QC Circle Team for South Asia (11SEAQCT)

visiting Korea, China and the Philippines

· October 24 to November 7

The 4th Software Production Quality Control Study Team (4SPCT) visiting U.S.A. and U.K.

ENGLISH PUBLICATIONS ON QUALITY CONTROL AVAILABLE FROM JUSE

(Books)

- WHAT IS TOTAL QUALITY CONTROL? The Japanese Way by Kaoru Ishikawa, 1985, 215 Pages Publisher: Original by JUSE, English Ed. by Prentic Hall Price with Mail Charge: 10,700 yen (Air), 9,800 yen(Sea)
- TOTAL QUALITY CONTROL FOR MANAGE-MENT by Masao Nemoto, 1987, 238 Pages Publisher: Original by JUSE, English Ed. by Prentic Hall price with Mail Charge: 10,900 yen (Air), 9,800 yen (Sea)
- COMPANY-WIDE TOTAL QUALITY CONTROL by Shigeru Mizuno, 1988, 313 Pages Publisher: Original by JUSE, English Ed. by APO Price with Mail Charge: 6,300 yen (Air), 5,600 yen (Sea)
- QC CIRCLE KORYO General Principles of the QC Circle
 by QC Circle Headquarters, JUSE, 1980, 86 Pages
 Publisher: Original and English Ed. by JUSE
 Price with Mail Charge: 5,000 yen (Air), 4,800 yen (Sea)
- HOW TO OPERATE QC CIRCLE ACTIVITIES by QC Circle Headquarters, JUSE, 1985, 254 Pages Publisher: Original and English Ed. by JUSE Price with Mail Charge: 6,400 yen (Air), 6,000 yen (Sea)
- 6. GUIDE TO QUALITY CONTROL by Kaoru Ishikawa, 1976, 226 Pages Publisher: Original by JUSE, English Ed. by APO Price with Mail Charge: 5,700 yen (Air), 5,100 yen (Sea)
- 7. QUALITY CONTROL CIRCLES AT WORK by Kaoru Ishikawa, 1984, 232 Pages Publisher: Original by JUSE, English Ed. by APO Price with Mail Charge: 5,700 yen (Air), 5,100 yen (Sea)
- 8. STATISTICAL METHODS FOR QUALITY IM-PROVEMENT by Hitoshi Kume, 1985, 245 Pages Publisher: Original and English Ed. by AOTS Price with Mail Charge: 6,300 yen (Air), 5,800 yen (Sea)
- TOTAL QUALITY CONTROL AND MANAGE-MENT
 by Masayoshi Ozawa, 1988, 150 Pages
 Publisher: Original and English Ed. by JUSE
 Price with Mail Charge: 6,710 yen (Air), 6,210 yen (Sea)

- MASTERING THE TOOLS OF QC by Hajime Karatsu, 1987, 243 Pages Publisher: Original and English Ed. by PHP Price with Mail Charge: 4,200 yen (Air), 3,300 yen (Sea)
- AN INVITATION TO QC
 by Hajime Karatsu, 1988, 104 Pages
 Publisher: Original and English Ed. by PHP
 Price with Mail Charge: 2,500 yen (Air), 2,100 yen (Sea)
- INTRODUCTION TO QUALITY CONTROL by Kaoru Ishikawa, 1989, 436 Pages Publisher: Original by JUSE, English Ed. by 3A Corporation Price with Mail Charge: 11,540 yen (Sea)

(Periodicals)

- "REPORTS OF STATISTICAL APPLICATION RE-SEARCH, JUSE"
 <u>English</u>, Quarterly, by JUSE Editing Committee
 Annual Rate with Mail Charge: 8,700 yen (Air), 7,300 yen (Sea)
 2,060 yen per copy excluding Mail charge
- "ENGINEERS" (JUSE Official Journal)
 <u>Japanese</u>, Monthly, by JUSE Headquarters
 Annual Rate with Mail Charge: 10,600 yen (Air), 8,100
 yen (Sea)
- 3. "HINSHITSU KANRI" (Statistical Quality Control)

 Japanese, Monthly, by SQC Editing Committee, JUSE

 Annual Rate with Mail Charge: 18,100 yen (Air), 13,200

 yen (Sea)
- "QC CIRCLE" (renamed FQC Quality Control for the Foreman)
 <u>Japanese</u>, Monthly, by QCC Editing Committee, JUSE Annual Rate with Mail Charge: 10,000 yen (Air), 7,500 yen (Sea)
- "SOCIETAS QUALITATIS"
 <u>English</u>, Bimonthly, Ed. by JUSE
 10,000 yen for three years subscription, 4,500 yen for one year's both including Air Mail Charge

^{*}The material shall be shipped on receiving payment.

^{*}The listed price is for one copy order basis only from overseas. When you order more than one copy, please inquire about the total costs prior to remittance.

^{*}The handling charge is requested to add to the above price as per purchashing order.