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"DERIVING JOY FROM CREATIVE WORK"

from "Total Quality Control", Vol. 43, No. 12 (Dec. 1992)

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Few are the customers who can't tell good service from bad, but only persons who have actually given services are in a position to accurately judge whether the services rendered have been good for the customers or not. In other words,

unless the persons who make this judgement have the proper amount of sensitivity, good services will never result. In this respect, QC circle activities can provide an educational forum for honing one's sensitivity, thus providing the best kind of employee training, especially in the retail industry. I often put it this way: "Good services can't be achieved where there is no improvement in basic intellectual strength."

QC circles should be allowed to spend whatever time is needed to solve various issues. QC circles let young employees get together and deepen their mutual communication. New groups will emerge based on their mutual reliability, thereby improving jobsite atmosphere. And from among these young employees, workers who can think, act and judge with a sense of responsibility eventually evolve. It's not merely a hope; I've seen it work.

One of our young female employees commented in her report that she could get good ideas by looking at new publications every day; from them she could tell what the contemporary world is trying to overcome the most and what people are most interested in. Without attitudes like hers, I think that gathering and offering just the right kind of merchandise and providing top-quality service would be extremely difficult if not impossible. This, I belive, should rank as a major objective in QC circles.

Working at the forefront of the publishing industry, in its retail aspect where books and consumers meet fact to face, we have long been of the opinion that, minus good bookstores, healthy development of our domestic publishing culture could not be expected.

As for our Yaesu main store, which is said to be Japan's biggest retail outlet for books and periodicals, we like to think of it as a place for disseminating intellectual information in Tokyo, and as a cultural center complete with top-flight services, a variety of functions and a comfortable atmosphere. In short, we take pride in keeping our store's shelves filled with a great assortment of quality merchandise offered to our clients with the best of service, and that includes a smile. It's like we were actually polishing our store every day to keep it shining, and in fact our maintenance workers do just that. Even though we tip the scale in the mammoth class, we try to maintain a cosy mood, like that found in the little bookstores of the "good old days."

As the number of our personnel having superior ability increases, our company needs to assure both the capacity and strength to sustain such power. At present we have five stores within Tokyo and three branches in other districts. We would like to develop into a nationwide network as a "bookstore where any book is available now." And the answer to it lies not only in investment and ambition, but also in quality control.*

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1992 WINNERS OF THE JAPAN QUALITY CONTROL MEDAL

AISIN CHEMICAL CO LTD

Established in 1952, Aisin Chemical Co., Ltd., manufactures chemical synthetic products, synthetic resinous goods and frictional materials used in making automobiles. Its present capital stands at 1.24 billion yen and it retains 825 employees.

In 1980 Aisin adopted the total quality control (TQC) system, and following two years of its rigorous promotion the firm won the Deming Application Prize for Small Enterprises. Five years later, in 1987, the company was awarded the Deming Application Prize.

Under the excellent guidance of top management, whose philosophy is to seek the highest in quality and work toward the future, Aisin has set a new goal every five years and made concerted efforts to achieve its target each time.

In particular owing to corporate emphasis on the development of new products and highly active marketing under the lead of the firm's sales department, Aisin was able to attain the following superb results.

The quality of its products, including new items, has remarkably improved. Moreover, the percentage of sales representing new products has notably increased and made a substantial contribution to overall corporate returns.

- 2) Through prior investment in development of new products as part of its long-term business plan, Aisin has steadily laid the groundwork for accomplishing its longrange goal, a move that is expected to augment company earnings.
- 3) Aisin has adopted a unique plan of technological innovation wherein production techniques are combined or devised anew. This effort has enabled the firm to develop new forms of technology as foreseen to meet future needs.
- 4) The company has won widespread acclaim for its skill in manufacturing chemical goods used in motor vehicle production. As a result there has been a marked increase in the number of Aisin technology transfers to foreign enterprise.
- 5) Aisin has been able to boost the profit ratio of its new merchandise appreciably above its set sales targets by designing and offering products highly attractive to the market and by making accurate and appealing estimates regarding production costs.
- 6) Aisin has established its AC Company, Ltd., to create more jobs for the elderly, thus contributing to the resolve of an important social issue.

TAKENAKA CORPORATION

Takenaka Corporation was established in 1899. Since then it has grown to become Japan's second-largest general constracting and engineering firm in terms of both the volume of orders received and those completed. At present the firm's capital is 50 billion yen and it has approximately 11,000 workers on its payroll.

Under a management philosophy of contributing to society by constructing architecturally superior buildings, Takenaka Corporation in 1976 introduced to its operation the TQC system, and in 1979 the firm became the first in Japan's construction industry to receive the Deming Application Prize.

In 1980 the company's current president took office, and under his superb guidance operations improved until in 1992 Takenaka Corporation became the first in Japan's construction trade to win the Japan Quality Control Medal in recognition of its unswerving efforts to improve quality and enhance business performance.

Major characteristics of Takenaka Corporation TQC activities are:

- The firm links TQC to its long-term strategic management. It sets goals based on its management philosophy, four corporate policies and friendly mottoes, and formulates long-range strategy almost certain to attain whatever the goals. The company announces three-year plans and annual policies, and faithfully implements control activities in line with plans devised by each department.
- Takenaka Corporation stresses quality assurance as a means to construct buildings and other works that will fully satisfy their owners, users and the local community.

In an effort to increase orders received for architectural design and construction, Takenaka Corporation has intensified its development of technology intended to satisfy the needs of future projects. It also welcomes proposals from employees regarding more active sales activities and extends aid to supporting firms.

These concerted efforts have resulted in the construction of unique, architecturally superior edifices of all kinds, including domes and "intelligent" high-rises.

3) In addition to QCDS (quality, cost, delivery and safety), Takenaka Corporation's TQC criteria call for a quartet of Es: Environment (environmental protection), Ethics (corporate ethics), Ecology (coexistence), and Employees (keeping the workforce satisfied).

By combining all its criteria Takenaka Corporation promotes TQC activities that emphasize harmony with the social environment as a leading contracting and engineering firm forever in search of higher forms of technology, of broadening its business scope and operating internationally.

4) From the long-range perspective Takenaka Corporation seeks to develop the talents of its employees by respecting their individual personalities.

This forms part of an overall effort to upgrade worker capability as a means to keep abreast of all the latest state-



of-the-art technology while carefully preserving traditionally superior Takenaka craftsmanship. Through all these efforts, the company is creating a free and lively place in which to work, where employees are able to give full play to their respective talents in designing and building examples of architecture that benefit society and culture. **

1992 WINNERS OF THE DEMING PRIZE (FOR INDIVIDUALS)

Masao NEMOTO COUNSELOR (FORMER PRESIDENT) TOYODA GOSEI CO LTD



Following graduation from the Tokyo Institute of Technology in 1943, Masao Nemoto joined Toyota Motor Company, Ltd., which later became Toyota Motor Corporation. For more than thirty years, since 1960 when Toyota introduced TQC to its operation, Mr. Nemoto has actively contributed to the promotion of, and to education in, total quality control among academic and industrial circles.

Specifically his achievements are:

- TQC education for managers and supervisors at Toyota Motor Corporation
 - (a) Training of Plant managers and supervisors (1960-82): He vigorously promoted TQC activities among the employees of each department and established an industrial model of TQC education for department managers and section chiefs.
 - (b) The promotion of TQC education among executives, department managers and section chiefs at Toyota's cooperating firms (1966-82): As Toyota's first parts-purchasing manager (1966), he promoted TQC among Toyota's suppliers, and produced a model of TQC guidance for the firm's cooperating companies. His untiring efforts helped lay the foundation for a comprehensive TQC system among Toyota group firms, with Toyota Motor Corporation as the central

figure, or what is known as the "All-Toyota TQC" system.

- (c) TQC guidance among sixty-five Toyota-affiliated car dealers (1981-82): As managing director of Toyota Motor Corporation, Mr. Nemoto visited all of sixtyfive model Toyota dealers to give TQC guidance. In 1982 he completed TQC education and promotion among 280 firms that wished to adopt Toyota's TQC system.
- 2) Quest for the Deming Prize

Soon after becoming president of Toyoda Gosei in 1982 Mr. Nemoto introduced TQC to the firm's overall operations. This resulted in his being a warded the Deming Application Prize in recognition of his great contribution to the improvement in quality of Toyoda Gosei Products.

 Contribution to industrial circles through writing books and giving lectures

Based on his experiences at Toyota Motor Corporation, Mr. Nemoto authored "Total Quality Control for Management," a book which earned for him the Nikkei Quality Control Literature Prize.

Mr. Nemoto received increasing numbers of requests to lecture corporate personnel. During the late

1980s he gave more than thirty lectures a year.

4) Contribution to the Japanese Society for Quality Control After serving as counselor and director of the Japanese Society for Quality Control, each for two terms, Mr. Nemoto became deputy chairman of the society in 1987 and chairman in 1989.

Altogether through his many years of positive activities in his chosen discipline, Masao Nemoto is well recognized as having rendered exceptional service in the promotion of total quality control.

1992 WINNERS OF THE DEMING APPLICATION PRIZE

AISAN INDUSTRY CO LTD

Aisan Industry Co., Ltd., was founded in 1938. In 1945 the firm began manufacturing carburetors for Toyota automotive products. In time Aisan improved its business performance by boosting sales of engine valves and other goods. To meet the changing market needs, Aisan attempted to shift its primary product from carburetors to electronically controlled fuel injectors (EFI) and succeeded. Altogether, Aisan enjoys widespread esteem as a manufacturer of automotive fuel supply components. Its current capital amounts to 5.2 billion yen and it retains some 3,276 employees.

In light of the rapid change in demand from carburetors to EFI products about five years ago, Aisan should have expanded its manufacture of FEI products and shifted its main line of business from making automotive parts to producing integrated systems. Unfortunately, though, operations grew stagnant owing to lack of managerial ability to cope with prevailing problems from a midand long-range perspective, a shortage of engineers versed in the technology required to design and produce new merchandise, and a general lack of capability in developing new products with which to satisfy the changing market needs.

In an effort to rally corporate power and resources to resolve these problems at the earliest, Aisan announced a plan to introduce TQC to its operation in October 1988. Under the strong leadership of its top executives, the company has been implementing brisk TQC activities, with special emphasis on promoting vision-oriented management, motivating employees, stepping up efforts to develop new products, and improving quality assurance practices.

As a result Aisan has succeeded in shifting its principal products from carburetors to EFI systems, and was able to minimize damages to its business performance as caused by Japan's collapsed bubble economy. In addition, the company is almost assured that it can achieve its far-reaching project goal "Vision V'94" according to schedule.

The major characteristics of Aisan Industry co., Ltd., TQC activities are:

- Vision-oriented management: Aisan set two clearly defined business targets, "V'94" and "V'97," to further expand as an engine control system manufacturer, and to improve the morale of its workforce and coordinate their efforts under its TQC program.
- 2) Efforts to meet customer demands: Aisan has upgraded its quality assurance system to meet the ever-higher standards imposed by automotive manufacturers and refined its quality assurance process, which ranges from establishing superior quality goals to perfectly satisfy client needs to the actual production of goods.
- 3) Comprehensive DR: Aisan introduced its DR (design review) system so as to more closely identify manufacturing process problems, and correct and generally improve the progress of work. As a result, the firm stabilized the process of manufacturing key products in a shorter time span than originally anticipated.
- 4) Emphasis on manufacturing: Aisan redoubled its effort to scientifically assess the reliability of its products and to combine their advanced functions in the most sophisticated way possible.

In addition the firm actively applied its quality assurance system to introduce the results of TQC into its manufacturing process, a program that helped to significantly reduce the market claim rate as well as the ratio of defective products.

Deserving special note among Aisan's promotion of its TQC system is the leadership of top executives. It was their strong leadership, combined with their thorough understanding of total quality control, that so greatly contributed to the effective introduction and subsequent practice of TQC plus the ultimate success of the corporation.



JATCO CORPORATION

JATCO Corporation was founded jointly in 1970 by Ford Motor Company, Nissan Motor Co., Ltd., and Mazda Motor Corporation, with capital investments of fifty, twenty-five and twenty-five percent, respectively. The firm manufactures and sells automatic transmissions (AT) for automobiles.

In 1981 Ford withdrew its capital from JATCO. At present the company has a capital of approximately 6.5 billion yen and retains about 3,000 employees.

During its early stage of operation JATCO served as a subsidiary plant for its trio of automotive shareholders. In 1984 the firm launched a TQC led project called its "HSQ Movement," the objective being to evolve into a specialized AT manufacturer. Under the superb leadership of its chairman (formerly president) and its president, JATCO has adopted TQC in all its departments, the overall corporate goal being to manufacture products having the "highest quality on earth." Never straying from its objective, JATCO is enjoying steady growth and enviable results with respect to high productivity of top quality merchandise.

Major characteristics of JATCO's TQC activities are:

- JATCO has devised and adopted a system wherein interrelated departments simultaneously develop new products. This enables employees to pool the results of their TQC activities concerning quality and production costs into the process of developing new merchandise.
- 2) In recent years the simultaneous development system, which is subject to each phase of PDCA (plan, do, check, action) with unswerving regularity, has demonstrated great improvement and highly commendable results. The system enables JATCO to flow the benefits of TQC activities

into its manufacturing process, thus improving the quality of its products.

- 3) The firm sets forth annual policies based on a mid-term business plan, and it efficiently puts the policies into action, making sure that all rank-and-file employees know their content and perform accordingly. Under this program top JATCO executives and jobsite workers have been able to cooperate well in carrying out TQC activities to the fullest extent possible.
- 4) By conducting policy management, QC diagnosis, crossfunctional management and QC circle activities, JATCO has been able to innovate and carry out various imaginative activities, such as its simultaneous development system, its QA award certification program, and its "two-day" improvement project.
- 5) JATCO has succeeded in rearing highly motivated, truly skilled employees who enjoy working in an excellent environment. This is made evident by the firm's acive TQC circle activities plus the large number of proposals and suggestions submitted by its workforce; in fact, the proposals received figure among the most numerous per employee in all of Japan.

JATCO, its management and workforce, take pride in their having so remarkably improved the quality of corporate products, rationalized manufacturing costs, and strengthened their ability to ship the amount of merchadise ordered on the dates agreed. Further, JATCO has admirably established itself as an independent AT manufacturer, and as such it has successfully gained a large number of new customers. And it's all thanks to TQC combined with good management.

1992 WINNERS OF THE QUALITY CONTROL AWARD FOR FACTORY BY DEMING PRIZE COMMITTEE

TOPPAN PRINTING CO LTD KUMAMOTO FACTORY, ELECTRONICS PRODUCTION HEADQUARTERS

Toppan Printing Co., Ltd., established its Kumamoto Plant in 1980 as part of the firm's Western Japan Division, with its operations to include the design of integrated circuits, and the mass production of photomasks and color filters for video cameras. The factory underwent an organizational change in 1987 when Toppan intergrated its electronics business. At present the factory retains 242 workers.

The Kumamoto works launched TQC activities in 1983, a time when Toppan adopted the TQC system as part of a company-wide effort to meet the higher standards of quality products demanded by its electronics business customers. Under its TQC program, the plant has been trying to upgrade its operation in every way possible in anticipation of the diversifying needs of customers, to seek and attain the highest degree of product perfection, and to benefit the local community.

As years passed, the factory's equipment approached obsolescence owing to technological innovation that brought about qualitative changes in its principal product lineup, especially in 1982, 1985 and 1986. In addition the plant underwent another operational reform in 1989 as the precipitate of a decline in demand among its main products.

In an effort to develop a number of new products and efficiently improve its mass-production capabilities within a short span of time, factory management vigorously promoted TQC activities, the goal being to:

- Improve and thoroughly implement policy management (Toppan adopted policy management in all its divisions during 1985);
- Rear talented, motivated employees with great ability to resolve problems;
- Closely cooperate with clients in the design and experimental manufacture of new items, and work in parallel with related departments to step up mass production capabilities with special emphasis on manufacturing techniques and process; and
- Innovate and enforce its quality assurance system, and improve day-to-day control.

In defiance of the sharp decline in sales of its principal merchandise, the Kumamoto Plant weathered the storm by successfully developing several new products. Its introduction of TQC gained remarkable results in lowering the number of customer complaints, and improving the rate at which it can contain claims.

NISSAN MOTOR CO LTD OPPAMA PLANT

In 1962 Nissan Motor Co., Ltd., launched operations of its Oppama Plant as one of seven of the firm's manufacturing bases in Japan. The factory produces the well-known compact car Bluebird plus assorted automotive parts. It retains a workforce of 4,287.

In a bid to establish a quality assurance system and increase its power under Nissan's corporate philosophy, the factory in April 1988 announced its "TT Declaration," a plan to revamp its own TQC program. Since then, enjoying the solid leadership of successive managers, the plant has been making concerted efforts to stress the following TQC activities.

 Improvement of policy management and production line/jobsite control (T-GK);

- Improvement of planned work progress and implementation of source control;
- Securing the latest market quality data and taking appropriate steps to satisfy the criteria;
- 4) Intensifying support to cut to the minimum the fraction defective among delivered products;
- Increasing efforts to reduce manufacturing costs and general overhead and reform cost control methods;
- Creation of a system in which products are delivered in the ordered quantity to clients and on the contracted dates; and
- Upgrading of the educational system for employees representing different levels and promotion of practical education.

In spite of the prevailing stringent market environment, Nissan's Oppama Plant has achived a great deal, such as:

- 1) The roles of employees occupying different levels, ranging from department managers to jobsite foremen, were clearly defined, and each worker at each level was assigned specific tasks in line with the plant manager's policy, thus enabling coordinated efforts throughout the entire operation to achieve the established goals.
- 2) The plant's off VES value, an indicator of work quality, has notably improved, with work hours per automotive unit being sharply reduced, thus boosting productivity.
- 3) The number of customer claims has been significantly reduced, and relations with sales companies have been greatly improved; also the input of quality information has markedly grown.
- 4) Increased support has been responsible for a substantial cut in the number of defects among delivered products.
- 5) The target set for cost reduction has been attained.
- 6) The plant has vastly improved the rate at which it delivers products to clients by the specified dates.
- 7) It has augmented TQC activities and employed the talents of elderly workers.

DEMING APPLICATION PRIZE SCHEDULE FOR APPLICATION AND EXAMINATION

FOR OVERSEAS COMPANIES

The steps involved in the Deming Prize application and examination process are shown below in chronological order. Further explanation is provided in subsequent sections.

September "The Deming Prize Guide (For Overseas Companies)" is distributed to the

relevant parties.

by October 31 The applicant needs to consult with the JUSE secretariat for the application

procedures.

January 15 The application deadline.

Early February JUSE notifies applicants whether their application has been accepted or

rejected.

March 31 The deadline for an applicant to submit its Description of QC Practices,

Terminology Glossary and Description of Business Activities to JUSE.

April-May Examiners examine documents, decide if the applicant is eligible to stand for

the on-site examination, notify the applicant of their decision and, if accepted, provide the on-side examination schedule and the names of the

examiners.

June The applicant's business orientation meeting and preparation meeting with

the examiners for the on-side examination.

July-September

The on-site examination.

Mid-October

Selection, notification and public announcement of successful applicants.

November Deming Prize award ceremony and celebration party.

November Report and lecture by prize winners.

There may be a slight change in the above schedule from year to year. When the due date for an application or submission falls on a Saturday or Sunday, it will be extended to the following Monday.

FOR DOMESTIC COMPANIES

May 31 The application deadline.

June 10 The deadline for submitting.

Descripyion of QC practice.

July 31. The application on (Recommendation) deadline for Deming Prize

for Individuals and Nikkei Quality Control Literature Prize.

Schedule after July - September; On - site Examination are the same as the above for Oversea Companies.

JUSE SEMINARIO INTERNACIONAL SOBRE TQC

PARA ADMINISTRACIÓN SUPERIOR -CURSOS EN ESPAÑOL/PORTUGUÉS-

♦ Fecha: 12 - 16 de Abril, 1993 (Seminario)

19 - 22 de Abril, 1993 (Visita de Plantas)

◆ Lugar: Tokyo Hilton Hotel (Seminario)

JUSE organizará un relevante seminario sobre TQC (CTC) con la traducción simultánea en español y portugués. Un hotel de primera clase ubicado en el centro de Tokio, Shinjuku, les ofrecerá un ambiente privilegiado como un lugar de seminario así como del alojamiento a los participantes. Los conferenciantes más prominentes en este campo les conducirán al nivel competitivo en sus respectivos negocios.

Por más informaciones, hagan el favor de tener contacto con la siguiente dirección:

JUSE INTERNATIONAL SEMINAR ON TQC FOR SENIOR MANAGEMENT

SPECIALLY FOR TQC COORDINATORS
— ENGLISH COUSE—

◆ Date: October 4 to 8, 1993

◆ Venue: JUSE HIGASHI-KOENJI BLDG. (New Training Facilities.)

JUSE is planning the above seminar in October. All the details as participation fee and Program etc. will be announced later on.

ORGANIZED BY UNION OF JAPANESE SCIENTISTS AND ENGINEERS

TQC International Seminar Section

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