

## Vol 8 No 5 Nov / Dec 1994

Union of Japanese Scientists and Engineers

5-10-11 Sendagaya, Shibuya-ku, Tokyo 151 JAPAN

### 1994 Recipients of The Deming Prize

#### The Japan Quality Control Medal

- Aisin Keikinzoku Co., Ltd.

(Main products: Automobile parts - aluminum diecast, aluminum extrusions)

Employees: 1,056

President: Mr. Takashi SHIMIZU

Aisin Keikinzoku Co., Ltd., manufactures mainly aluminum die-cast for automobile parts. The firm is capitalized at 1.5 billion yen and retains 1,056 employees. As a result of its excellent achievements under a corporate policy of "quality first," the company in 1983 won the Deming Application Prize for Small Companies, and in 1988 it was awarded the Deming Application Prize. Since then, adhering to its future plan "New Vision 95, " Aisin Keikinzoku has displayed a tremendous amount of worker efforts to make major strides toward becoming a world-class components manufacturer by reinforcing its corporate framework through innovative management based on Total Quality Control (TQC). In 1994 the firm received the Japan Quality Control Medal for its accomplishments in developing original new products and securing profits, even under sever circumstances in increasing sales.

#### The Deming Prize for Individuals

## Mr. Takanori Yoneyama President of Konica Corporation

Mr. Takanori Yoneyama, President of Konica Corporation, was awarded the Deming Prize for Individuals for his longtime efforts to implement, conduct education in, and disseminate quality control among industrial and academic sectors.

Mr. Yoneyama joined Konishiroku Photo Industries Co., Ltd. (Konica's predecessor), in 1953. While there, he continually worked to conduct and promote quality control activities from the standpoints of ordinary employee, manager and executive, advancing within the firm. He

held a succession of important positions in the realm of quality control, among them being vice president of the Japanese Society for Quality Control and a key figure in the organizing committee of JUSE Quality Control Symposium. He also served as a member of editorial committee of JUSE magazines "Total Quality Control" and "QC Circle." He has authored many books on quality control and has greatly contributed to the progress of quality control in Japan from the viewpoint of a corporate man.

#### The Deming Application Prize

- AT & T Power Systems

(Main products: Power source systems, devices and parts)

Employees: 2,400

Chief Operating Officer: Mr. Andrew M. GUARRIELLO

AT & T Power Systems is a strategic business unit of AT & T, one that manufactures and sells power source systems, devices and parts. In order to gain active inroads on the international market, the firm introduced total quality management (TQM) in 1990, and made all-out efforts to build and realize models of promoting TQM by merging the characteristics of American corporate management with the distinctive features of company-wide quality control (CWQC) as founded in Japan. Through its TQM activities, AT & T Power Systems enjoyed many favorable results, such as improved quality, enhanced customer satisfaction and increased market size and share. Other noteworthy effects include greater profits and return on investment. Moreover, its employees responded positively to the corporate measures implemented under TQM by taking the initiative in conducting various programs and tasks intended to improve quality, make workshops more orderly and efficient, etc.

#### - Maeda Seisakusho Co., Ltd.

(Main products: Construction machinery - hydraulic shovel, crane tunnel excavator)

Employees: 1,000

President: Mr. Shigeo WADA

In 1982 Maeda Seisakusho Co., Ltd., introduced TQC as a means to improve and strengthen its corporate structure. Later, in 1991, the firm's management announced their intention to reinforce TQC activities, by setting performance goals under the quality-first principle that attaches the greatest importance to customer satisfaction, and by establishing a corporate framework capable of responding to whatever the environmental change. Noteworthy among its activities were the "Maeda Future Campaign," which purposed to transform to company into one oriented to development; the "Maeda Mind Movement," based on the customer first principle; full utilization of MM information, and a well-planned personnel training program. These projects made an invaluable contribution to steadily improved company performance.

## The Deming Application Prize for Small Companies

#### - AW Industries Co., Ltd.

(Main products: Automatic transmission parts - torque converters)

Employees: 787

President: Mr. Haruki SUGIHARA -

Originally AW Industries Co., Ltd., manufactured and sold mostly automatic transmission parts. In 1989 the company emerged anew as a full-scale maker specializing in torque converters, and at the same time it introduced TQC. Under its management philosophy of "quality first," the firm strove to improve policy management by forming long-term administrative and annual plans. And it thoroughly promoted technological development and cost control. Consequently, AW Industries now enjoys handsome recurring profits in defiance of the prevailing sever economic environment and is achieving its goals with respect to long-term management. The results of AW Industries' administrative wisdom are rated highly.

#### - NT Techno Corp.

(Main products: Automobile parts)

Employees: 305

President: Mr. Takayoshi NAITO

NT Techno Corp. introduced TQC in 1989, a time when the firm had encountered a serious quality problem. Since then the company has vigorously promoted TQC

under its management philosophy which calls for "making progress toward the future through the customer-first principle." Accordingly, NT Techno succeeded in reinforcing corporate structure. Adhering to its basic principle of "high regard for humanity," the firm has established excellent welfare facilities and vastly improved its working environment. It has fostered and made efficient use of talented personnel by creating cheerful jobsites conducive to productivity. It has made it a point to develop technology precisely dovetailing with client requirements, to secure high quality at the stage of upgrading processes, and to thoroughly assess the levels of control activities and analyze problematic factors. These ongoing efforts have produced remarkable results in terms of customer satisfaction, costs, and delivery.

#### - Kouritsu Sangyosha Ltd. Partnership

(Main products : Automobile parts - transmission parts)

Employees: 302

President: Mr. Katsuhiro TSUNOOKA

Kouritsu Sangyosha Ltd. Partnership, ever since it establishment in 1946, has developed as cooperative firm in the Aisin Group. In 1989 the company introduced TQC in order to survive in an increasingly sever market environment. In subsequent years the firm's TQC activities have been conducted on the basis of policy management included in long-term annual administrative plans. These activities have produced remarkable results with respect to improved quality assurance, bolstering corporate structure, the accomplishment of managerial goals, and much more.

#### -Diamond Electric Mfg. Co., Ltd.

(Main products: Automotive ignition coils, electrical equipment)

Employees: 725

President: Mr. Shigeji IKENAGA

Ever since 1936 Diamond Electric Manufacturing Co., Ltd., has developed automotive ignition coils and has manufactured mainly automotive and electrical equipment. For several years the firm has actively promoted TQC with the aim of technological innovation, responding to changes in marketing environment, and effecting stable progress on a long-term basis. These activities, coupled with the company's "3.3 drive" designed to advance management policies, whereby each of the top executives solves three improvement problems every three months, have enabled Diamond Electric to march forward solidly toward its goal of becoming an enterprise fully capable of offering its own forms of technology.

## How to Promote Policy Management and 109 Check Items:



from "Total Quality Control," Vol. 45, No. 6 (June 1994) JUSE

Susumu KITAJIMA Advisor NEC IC Microcomputer Systems, Ltd.

#### 1 How to promote policy management

One of the most important total quality control (TQC) activities is policy management. Many books and commentaries have been published on how to promote it. But the following is a summary of what I make it a rule to express regarding the subject.

- (1) Policy management constitutes a series of companywide activities intended to accomplish the firm's managerial objectives. In particular they include a clearly defined announcement of top management's policies, and their systematic deployment and actualization.
- (2) Top management must have a strong will to attain the objects set forth, draft well-prescribed policies, and announce them to the entire workforce.
- (3) Top management policies mean strategic plans formed based on comprehensive consideration of
  - (a) Medium- and long-term management plans
  - (b) Annual budgets and management plans
  - (c) Analysis and review of problems encountered during the preceding term
  - (d) New questions arising from changes in the business environment
- (4) Policies comprise goals and measures.
- (5) Top management policies must be disseminated through all levels of an organization, starting with general managers, and continuing through chiefs and supervisors to rank-and-filers. Policies announced by one's superior should not be accepted at face value, but should be adjusted according to one's own job and translated into personal policies.
- (6) Important problems should be resolved under the leadership of general managers and section chiefs.
- (7) Important information both within and outside the company should be gathered using one's own eyes, ears, hands and feet.
- (8) A clear understanding of problems must be gained by visiting jobsites, observing such things as

- facilities, materials, work in progress and the like, and listening to the true intentions of persons actually doing the work.
- (9) When promoting policy management it is essential to be QC-minded.
  - ① Consider customer satisfaction (CS) as of the utmost importance.
  - ② Turn the PDCA (plan, do, check, action) cycle religiously.
  - ③ Grasp the meaning of facts through data (figures and words), analyze them thoroughly, and accurately identify problems.
  - ④ Play close attention to discrepancies found in quality, clarify their causes by stratifying them, and take countermeasures.
  - (5) Define objectives and goals, and formulate plans for accomplishing them. Deliberate on more important items when drafting plans for execution and check the progress of the plans diligently.
  - (6) Always be attentive to priority matters.
  - ⑦ Complete measures to the maximum by joining the intelligence and wisdom of the entire group and applying creative thoughts that can lead to breakthroughs.
  - Attach importance not merely to results but also to the processes that bring results.
  - Promote standardization and make systems as complete as possible.
  - Make the most of QC and statistical quality control (SQC) methods.
  - ① Promote activities aimed at improvement in line with QC experiences, or the QC-based problem-solving method, make case examples of them, and deploy the examples horizontally.
  - (12) Conduct regular inspections and take action.
- (10) Make adjustments firmly at all levels and departments concerned.
- (11) Try to predict problems which may occur in the

future.

- (12) The corporate president must carry out diagnoses.
- (13) Raise the levels of systems, control and education.
- (14) Promote the development of human resources.
- (15) The promotion secretariat must be responsible for
  - Assuring that systems, manuals and forms are complete to the maximum, and conducting educational programs;
  - ② Collecting and analyzing information, identifying problems, and reporting to top management so they can formulate policies;
  - ③ Drafting plans for formulating policies, effecting adjustments, announcing and implementing such policies, and making sure that plans are put into practice;
  - 4 Conducting diagnoses by the president;
  - (5) Checking progress and making reports;
  - 6 Taking action as required.

#### 2 The 109 check points for policy management

#### 2.1 Check points in general

- (1) Are the significance, objectives and importance of policy management recognized by top corporate leaders, the heads of departments and sections, and supervisors, and is policy management addressed in a positive way?
- (2) The first step of management is to turn the PDCA cycle, and the next is to eliminate discrepancies found in quality and the differences in individual performance. Is this principle understood and being implemented?
- (3) Is daily management diligently conducted?
- (4) Do subordinates comprehend your policies? Are they convinced regarding them?
- (5) Are section chiefs thinking and seeing (looking at, viewing, watching, observing, inspecting, examining, diagnosing) things from the standpoint of their department manager, and are the heads of departments doing so from the viewpoint of toplevel management?
- (6) Are you merely giving subordinates goals to accomplish and leaving it to them to attain the goals? If so...
- (7) Do you assume leadership in addressing important issues?
- (8) Do you attach importance to processes, instead of maintaining the attitude, "All is well that ends well"?
- (9) Is your workplace cheerful, enjoyable and brimming with employee determination to do the job well?

- (10) Do all hands in your department or section recognize problematic points and set goals when carrying out their duties? Are they applying ingenuity with respect to taking countermeasures and resolving problems? Are they taking up the challenge?
- (11) Are you promoting the establishment of systems and standardization?
- (12) Are systems being reviewed and reformed promptly according to shifts in social circumstances and the needs and views of customers?
- (13) Can your operation meet the standards and specifications presented in the ISO9000 series?
- (14) Do you recognize that developing new products which satisfy the needs of customers always stands as the most vital question for a company, and are you taking up the challenge to in fact develop new merchandise or services?
- (15) It is said that good quality represents the degree to which goods or services meet the needs of consumers. Do your firm's merchandise or services satisfy customers in terms of quality, price, dates of delivery and post-sales services?
- (16) Do you always have a willingness to improve and create things?
- (17) Do all the members of your organization believe that applying effort and diligence in their work will surely lead to improvement of their abilities?
- (18) Can you readily explain to others the most important problems facing your department or section, and the countermeasures being taken?
- 2.2 Collecting, analyzing, collating and using data
- (1) Do you gather facts as they are without interspersing them with personal opinions?
- (2) It is ineffective just to amass information; data can be useful only when analyzed, assembled and applied effectively. Are you practicing this rule?
- (3) In assembling data, it is important to represent it graphically; collate, systematize and arrange it in time series; interrelate and stratify it. Are you practicing this?
- (4) Are you making it a rule to collect and analyze information on the social and economic situation both at home and abroad, as well as data on your own and other industries, and from within and beyond your firm from a long-term viewpoint?
- (5) Do you form policies for the coming business term on the basis of the fully analyzed actual results of the preceding term?
- (6) Do you have a clear understanding of the latent

- needs and complaints of customers and reflect them when drafting policies?
- (7) Do you fully comprehend the current and future needs of society and consumers and take them into consideration?
- (8) Do you predict and foresee potentially problematic matters in the future even though currently they do not constitute issues?
- (9) It is necessary to have all the data sources possible. Are you applying ingenuity to secure them?
- (10) Are you gathering market data not only from TV, newspapers and magazines, but also by walking and making frequent visits and phone calls?
- (11) When a problem arises, do you go into action by immediately proceeding to where it occurred, collecting information from the persons involved, and taking prompt remedial measures?
- (12) Ideas for resolving issues can be gained from case examples of successful remedies effected by predecessors representing all ages and countries. Are you doing this rather than merely learning from the limited spheres of your own professional field?
- (13) Do you make it a point to take notes when coming across potentially useful information or when a good idea flashes as a means not to forget?
- 2.3 Establishing policies
- (1) Do you establish policies for the current term by linking them with medium- and long-range plans?
- (2) Do you tie annual budgets, plans and goals with the measures and targets in policy management?
- (3) Do you incorporate solutions to major problems related to management and operations into policies, clarify the organizations and roles needed to promote policies, and brief persons concerned on such policies, organizations and roles?
- (4) Do you make adjustments sufficiently among all levels, departments and sections as concerned?
- (5) Do you implement measures and set goals systematically at all levels from top management down? Are there any departments or sections which are omitted or bypassed?
- (6) Do you give full consideration to measures and express them in specific terms in the form of 5Ws and 1H as organizational levels descend?
- (7) Do you incorporate ideas, creativity and ingenuity in measures?
- (8) Do you consider measures not merely by adopting those taken in the past, but by conceiving how they might be improved to the extent of making

- breakthroughs?
- (9) Do you take into account young persons' ideas regarding measures? Or do you simply dismiss their notions as coming from amateurs?
- (10) Are implementation plans presented in concrete terms? Are they easily understood by the entire workforce? Are they fully persuasive?
- (11) Do the heads of departments and sections assume proper leadership in establishing the implementation items to be promoted?
- (12) Do you designate personnel as responsible for the various items of implementation and brief them well?
- (13) Are the goals, deadlines and scheduled regarding matters to be implemented well-defined and reasonable?
- (14) Are control points, the frequency of conducting checks, and the persons responsible for the checks correctly determined?
- (15) Are plans for improving and revising systems incorporated in the items to be implemented and control points?
- (16) Do you make it a habit to conceive new methods and tools to make design, development and management effective?
- (17) Are you making efficient use of methods and tools, such as Q7, N7, quality engineering and the like?
  - ① When applying Pareto analysis, do you look not merely at one pattern of distribution but also at many others so as to conduct analyses from a variety of angles and viewpoints?
  - ② Do you make effective use of systematic diagrams and matrix diagrams in deploying measures?
  - ③ Do you make effective use of quality tables and condition tables when meeting customers to discuss specifications?
  - ④ Do you identify bottleneck technology and make effective use of quality tables, systematic diagrams and the process decision program chart (PDPC) method in order to resolve problems related to the technology?
  - (5) Reportedly the Taguchi method of quality engineering is effective for design and development. Do you conduct studies and research on applying the method to best advantage? Are you trying and implementing the method?
- (18) Do you predict and foresee possible adverse effects or demerits that one item of implementation may impose on others and take countermeasures?

- (19) Do you practice systems through which you receive cooperation from your staff or other departments or sections?
- (20) Do your policies represent what you truly wish to accomplish, and are you assuming proper leadership to enable it?

#### 2.4 Implementation

- (1) Are the persons responsible for implementing the items set forth fully determined to do so, and is each of them conducting his or her duties positively, taxing individual ingenuity and drawing on whatever his or her mental or physical resources?
- (2) Are implementation plans broken down into more detailed plans, and are they being realized by turning the PDCA cycle?
- (3) Are you recording the progress of implementation, and do you report at the times you are required to report?
- (4) Do you report promptly regarding items or processes where implementation may be delayed, and take proper action?
- (5) Are you resolving important problems according to plan?
- (6) Have you established firm cooperative relations with other departments or sections?
- (7) Do you maintain good relationships with cooperative companies and suppliers?
- (8) Do you maintain facilities securely, check them on a regular basis and make effective use of them?
- (9) Do you keep a firm hold on the work performance of personnel?
- (10) Is teamwork in the operation well maintained? What about employee morale? Do you give such factors full consideration?
- (11) Are conferences and preparatory meetings held effectively?
- (12) Good ideas do not always develop during meetings. Do you deliberate on matters in other ways so that better ideas will emerge?
- (13) The old adage goes, "Two heads are better than one." But this theorem will prove itself feckless if a number of heads simply assemble without a definite purpose. It is of paramount importance that persons having diverse thoughts gather to produce new ideas and wisdom through discussion. Are you providing such opportunities positively?
- (14) Unexpected problems and errors may often occur when tackling a new challenge. Do you consider in advance what to do in the event such impediments

- present themselves?
- (15) Is whatever currently takes most of your time and ingenuity the most important matter to you? If not...
- (16) Can you honestly tell others that you are working every day cheerfully, happily and creatively?

#### 2.5 Checking

- (1) Are you checking problems with surety within your department or section, and do you have a clear understanding of the issues?
- (2) Are you conducting checks at predetermined times and frequencies?
- (3) Do you regularly check the progress of implementation measures?
- (4) Do you make it a point to record the results of checks and prepare reports on a daily, weekly, ten-day and monthly basis?
- (5) It is highly important to assemble, collate and analyze the results of the preceding term. Are you doing this?
- (6) In anatomizing deficiencies, do you work to grasp the true nature of the matter by repeatedly asking "Why? Why? Why?" Do you make efforts to prevent recurrences of the problem?
- (7) Do you try to find the real nature of deficiency causes by analyzing them via not just one pattern of stratification but also through many others in order to enable examination from a variety of viewpoints?
- (8) Do you conduct checks by gathering information on processes?
- (9) Do you try to analyze why it was successful to identify the points on which you lavished your ingenuity and creativity?
- (10) Do you analyze problems not just individually but also comprehensively and from a broader viewpoint as a means to take more effective countermeasures?
- (11) When problems or deficiencies occur, do you try to identify the causes rather than simply rebuking the persons responsible?
- (12) Do you review the matters that passed unimplemented instead of merely calling them off?
- (13) Are there any unresolved problems in management, systems and education?
- (14) Do any problems exist in the way design reviews are conducted? Is a check list maintained and referred to?
- (15) Are you checking cooperative companies properly?

  Do you have a clear understanding of any problems

- related thereto?
- (16) Do you consider the president's diagnosis a chance gain recognition for your accomplishments and a way to receive advice regarding whatever you may have failed to achieve?
- (17) Are diagnoses by the heads of sections and departments conducted prior to diagnosis by the president?
- 2.6 Action
- (1) Do you take action promptly to eliminate or correct deficiencies?
- (2) Do you apply measures to prevent the recurrence of deficiencies in addition to introducing temporary expedients?
- (3) Do you review at random the items that have deviated widely from what was planned?
- (4) Are the results of creativity and ingenuity well recognized and horizontally deployed?
- (5) Do you take quick action regarding what was pointed out during the president's diagnosis?
- (6) Do you announce the results of the preceding term to the entire workforce, thank them for their efforts, and share with them whatever the pleasure?
- 2.7 Fostering human resources
- (1) Do you acknowledge that the fostering of highquality human resources is one of the most vital tasks for managers?
- (2) Is the cultivation of human resources incorporated in company policies?
- (3) Do you recognize the need for fostering persons with broader viewpoints, generalists, etc?
- (4) Do you give full consideration to and elucidate policies concerning the rearing of human resources and what the method for accomplishing this should be?
- (5) Do you have a clear understanding of the character and abilities of your subordinates, and whatever the plans for instruction and training? Do you discuss your ambitions and goals, and what you wish to become three, five and ten years later?
- (6) Are instruction and training programs planned in specific terms? Does the curricula include instruction in intellectual property, languages, the development of creativity, how to write treatises and reports, the cultivation of humanity? — this in addition to tutelage in technology and management?
- (7) Do you encourage your subordinates to educate themselves and each other? Are you doing the same for yourself?
- (8) Do you recognize that, in addition to gaining and

- combining knowledge, proper relaxation enhances your power of concentration and helps produce new ideas and concepts? Do you make it a practice to get enough relaxation?
- (9) Are you promoting instruction and training programs as planned?
- (10) Do you give your subordinates chances to accumulate even small success experiences?
- (11) It is said that you can upgrade the abilities of subordinates to whatever the desired extent by preparing devices intentionally and skillfully. Do you acknowledge this and take appropriate action to achieve this?
- (12) When a subordinate proposes something, do you promptly evaluate it and decide whether or not to proceed with it? Or do you encourage him or her to make further efforts, saying the idea is good but certain points merit reconsideration?
- (13) Do you praise your subordinates for their efforts and accomplishments? Do you reprimand them appropriately when they deserve it?
- (14) Are QCG activities properly conducted?
- (15) Do you encourage subordinates to come up with good ideas, exert ingenuity and creativity, and assemble them as possible patents?
- (16) Do you send subordinates to academic and study meetings to upgrade their thinking and ability? Do you encourage them to present papers at such gatherings?
- (17) Do you encourage subordinates to sit for examinations, such as those to qualify data processing engineers, TOEIC, STEP, secretarial tests, etc?
- (18) Are you actively promoting the use of female workers and the improvement of their skills?
- (19) Do you truly feel you can afford to take up the challenge of a new job as your subordinates grow?

Policy management is a genuinely excellent administrative tool. In most cases, though, policy management fails to merit recognition by persons outside the organization since its contents represent only corporate administration. In that sense, policy management is said to be unapproachable. I sincerely hope you will understand the key points in promoting policy management through my list of check points and refer to them as a guide when actually attempting to promote this very worthwhile managerial entree to success.



# International Convention on QC Circles 1995 Yokohama October 18 - 20

"QC Circles toward the 21st Century"

#### **CALL FOR PAPERS**

Abstracts (250 words) are requested in English covering problem solving implementation report at work and QC Circle implementation report and so on to be submitted with the application form not later than January 31, 1995, to ICQCC '95 Yokohama Secretariat.

Further information:

ICQCC '95-Yokohama Secretariat

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## JUSE INTERNATIONAL SEMINAR ON TQC

#### FOR TOP MANAGEMENT

— ENGLISH COURSE —

Date:

June 12 to 22, 1995

Venue:

(Seminar) JUSE Higashi-Koengi Annex - 5 days

(Technical Visit) Osaka, Nagoya areas - 4 days

All the subjects of the seminar concerned TQC/TQM includes New Methods such as QFD, and N7, ISO 9000, Case Study on Deming Prize winning Companies are discussed, by prominent lectures and company directors in charge of TQC, with simultaneous English/Japanese interpretation.

Further information:

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