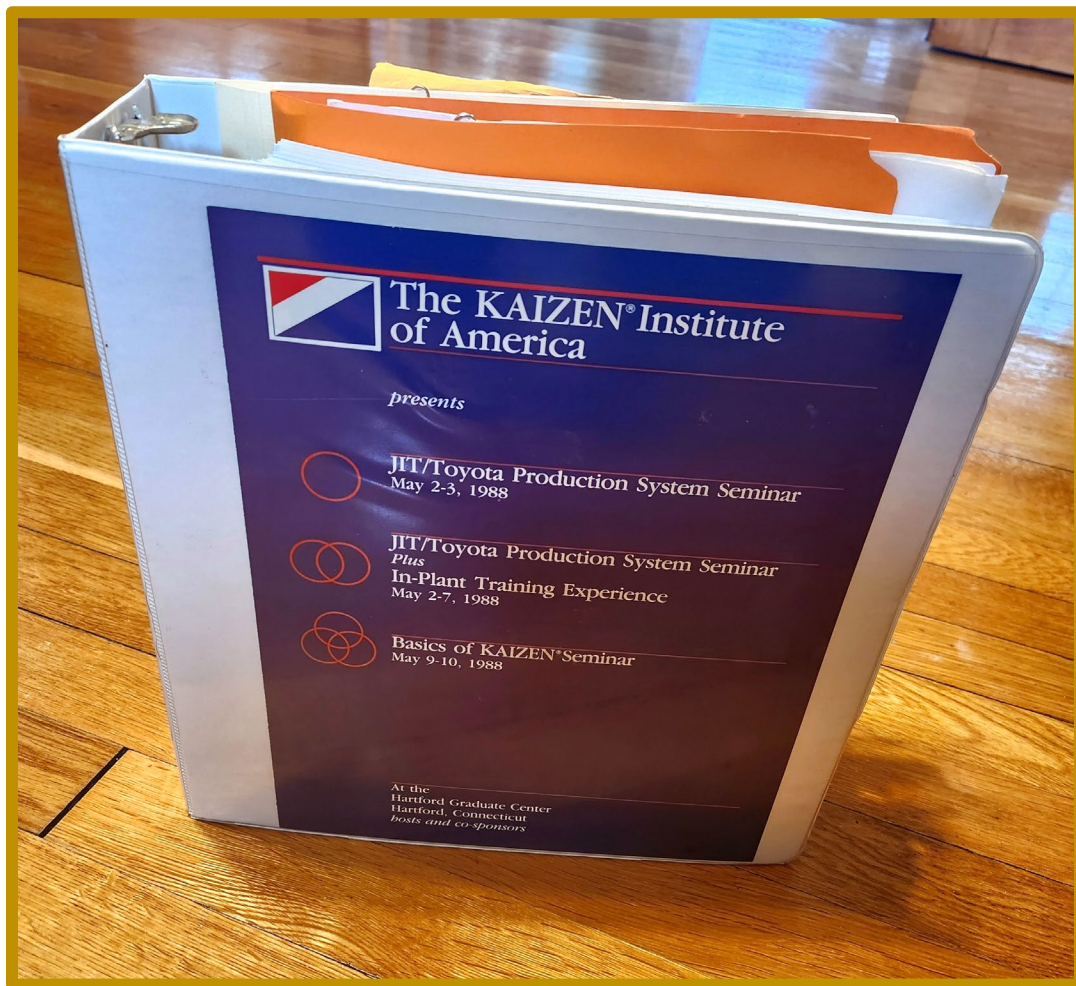


Insights into the History of Progressive Management

★ Part 1 of 4 ★



TPS and Kaizen Training by The Kaizen Institute and Shingijutsu

Hartford Graduate Center, May 1988
Hartford, Connecticut, USA

TPS and Kaizen Training by The Kaizen Institute and Shingijutsu

Hartford Graduate Center, May 1988

Hartford, Connecticut, USA

What was going on before “Lean” entered the scene in the Fall of 1988?

The Hartford Graduate Center (later known as Rensselaer at Hartford*) was a major site where the Toyota production system and Kaizen were introduced to business leaders from across North America.

It is the origin story of Danaher’s involvement with Toyota’s production system and kaizen, and that would later evolve into the Danaher Business System. In attendance were George Koenigsaecker, Art Byrne, John Cosentino, and Bob Pentland.

Art Byrne would later become the President and CEO of The Wiremold Company. Their transformation was described in my Shingo Prize-Winning book, *[Better Thinking, Better Results](#)*.

Several more of these Kaizen Institute seminars were held at the Hartford Graduate Center in 1989 and 1990, but without Shingijutsu (post-1989).

Special thanks to Alice Heist, Corporate Relations Manager at the Hartford Graduate Center, for preserving these important records!

The following pages are in chronological order. They tell the story of the first Kaizen Institute-Shingijutsu seminar held at the Hartford Graduate Center in May 1988.

Notice the focus on changing the production and management system through kaizen, and the emphasis on understanding and improving the work. This differs substantially from where Lean management is today. It has been reduced to a small suite of popular tools that have been absorbed into classical management and their use is typically circumscribed to lower-level workers.

Hopefully, this will inspire you to return to the roots of improvement: kaizen.

* I worked at Rensselaer at Hartford as a clinical professor in the Lally School of Management and Technology from 1999 to 2004. The name has since been changed to “Rensselaer at Work.” See https://en.wikipedia.org/wiki/Rensselaer_at_Work

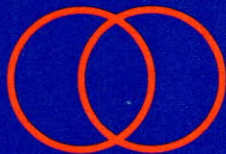


The KAIZEN[®] Institute of America

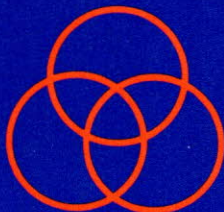
presents



JIT/Toyota Production System Seminar
May 2-3, 1988



JIT/Toyota Production System Seminar
Plus
In-Plant Training Experience
May 2-7, 1988



Basics of KAIZEN[®] Seminar
May 9-10, 1988

At the
Hartford Graduate Center
Hartford, Connecticut
hosts and co-sponsors



The KAIZEN® Institute of America

The KAIZEN Institute of America was created by Masaaki Imai, chairman of The Cambridge Corporation, one of Japan's most prominent international management consulting firms, to meet the increasing demand for learning and implementing the KAIZEN concepts, systems and management tools in American corporations and organizations. KAIZEN in Japanese means gradual, incremental and constant *improvement* that involves everyone in the organization - from top executives to line workers.

Through many programs and consulting services, the Institute offers specialized public or private, in-house opportunities for management to keep abreast of the latest developments in quality improvement, greater productivity techniques and increased competitiveness—from Japan, the United States and other major world centers.

Expert Seminar Leaders and Instructors

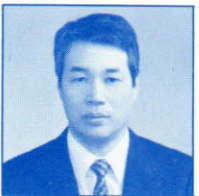
These practical, but intensive seminars are taught by a staff of specialists whose practical knowledge is supplemented by their continuous in-the-field assignments in Japan or other key industrial markets.

Featuring:



Masaaki Imai, chairman, Cambridge Corporation (Japan), president, KAIZEN Institute of America and author of the best-selling book, *KAIZEN: The Key to Japan's Competitive Success*.

Yoshiki Iwata, president, New Technology Institute, renowned leading consultant on Toyota's famous Kanban Production System (JIT) and former manager of Toyoda Gosei's JIT Implementation Office, where he became a disciple of Taiichi Ohno, former vice president of Toyota Motor Co. and founder of its revolutionary production system.



Chihiro Nakao, vice president, New Technology Institute and the manager responsible for introducing the Toyota production system to Taiho Kogyo Co., Ltd., a Toyota Group company. He is particularly recognized for outstanding work in the fields of *Jidohka* and *SMED*.

Akiro Takenaka, managing director, New Technology Institute and former production engineer who worked with Mr. Ohno in implementing the new Toyota Production System. He is an expert on building *standardized work systems*, and is in great demand in Japan as a top-notch trainer in this field.



Special assistance and group leadership will be provided by the U.S.-based KAIZEN consultants.



JIT/Toyota Production System Seminar

PROGRAM A: 2 Days, May 2-3, 1988

Seminar Description

This seminar provides the concepts of Just-in-Time production systems as they were originally developed by Toyota Motor Co. and implemented at the Toyota Group companies. For two days, the Toyota Production System will be introduced, examined and put into practical terms for application by participants in their companies. Using a course manual, complete with reference materials and schematic diagrams, this seminar will help you define and analyze your firm's production and productivity requirements.

May 2: Introduction of JIT

- TAKT time
- Man and machine - separation of work
- Even-flow production
- Standardized work

Jidohka

- Automation vs. Jidohka
- Jidohka and Andon
- Building quality into the production process

May 3: Standardized Work

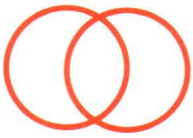
- Optimized combination of man and machine
- QCD as super-ordinate goals
- Standardized work vs. work standard
- TAKT time and cycle time
- Sequence of work
- Standard work in process

KAIZEN in Standardized Work

- Sequence of KAIZEN
- Work KAIZEN vs. Equipment KAIZEN
- Inventory reduction
- Defective reduction
- Production capability improvement

Who Should Attend?

Production managers, engineering supervisors, senior management, operations or anyone seeking an overview of the basics of JIT/Toyota Production Systems.



JIT/Toyota Production System Seminar Plus In-Plant Training Experience

PROGRAM B: 6 Days, May 2-7, 1988

Seminar Description

Following completion of the two-day seminar on JIT/Toyota Production Systems, participants will explore the practical applications of their new knowledge as we visit a local company for an in-plant training experience. The "hands-on" training and observation of an actual case-study-in-progress will enable participants to train others in their company in applying these tools and skills.

May 2-3: See Program A Agenda

May 4: How to Prepare Work Sheets

- Production capacity sheet
- Standard operation combination sheet
- Standard operations sheet
- Observation and measurement of work time
- Classroom exercises

May 5: Production Facility Workshop

- Observe processes and prepare process capability tables
- Prepare standard operations combination sheet
- Preparation of standard operation sheet
- Identify bottlenecks and establish aims for KAIZEN

May 6: Production Facility Workshop

- Study various KAIZEN alternatives
- Implement KAIZEN
- Time measurements after KAIZEN
- Preparation of various work sheets
- Comparison of results

May 7: Reporting KAIZEN

- What problems were encountered
- What countermeasures can be suggested
- Questions and answers

Who Should Attend? (Note: Limited to the first 40 registrants.)

Anyone interested in teaching or applying the tools of JIT/Toyota Production Systems within their own company. Program B includes the two-day basic introduction to JIT (Program A) necessary before this group goes on-site to a local plant for the training experience.



Basics of KAIZEN® Seminar

PROGRAM C: 2 days, May 9-10, 1988

Seminar Description

This seminar builds on a basic understanding of the concepts, systems and tools of KAIZEN—the exciting method for improving quality, increasing productivity and enhancing competitiveness and profitability. Each participant will receive a complimentary copy of *KAIZEN: The Key to Japan's Competitive Success* authored by Masaaki Imai, seminar leader.

Mr. Imai and several KAIZEN Institute's American consultants will present a clear understanding of how KAIZEN creates a synergism between a company's social and technical operations, as it integrates human resources, quality, delivery and cost improvements.

May 9: Introduction to KAIZEN

- The KAIZEN strategy
- The KAIZEN umbrella
- What is management?
- Standardization vs. KAIZEN vs. Innovation

KAIZEN Seven Concepts/Principles

May 10: KAIZEN Systems

- Hoshin Kanri (policy deployment)
- Standardization
- Small group activities
- Teian (suggestion) systems
- Quality Function Deployment (QFD)
- Cross-functional management (CFM)
 - Total Quality Control (TQC)
 - Just-In-Time (JIT)
 - Total Productive Maintenance (TPM)

KAIZEN Tools

- Basic seven tools
- New seven tools
- Team building
- Communications
- KAIZEN check lists

Who Should Attend?

Senior management, quality control, administration, human resources, personnel, sales/marketing, finance, information services and anyone in management seeking information on KAIZEN's concepts, methods, and tools for increasing competitiveness and profitability.



JIT/Toyota Production System Seminar; In-Plant Training Experience and Basics of KAIZEN® Seminar

PROGRAM D: 9 days, May 2-10, 1988

A special combination package at a substantial savings is available. Program includes all programs (B and C), from May 2-10. It includes a complimentary recreation/social program on May 8.

Fees

PROGRAM A: JIT/Toyota Production System Seminar
(2 days), May 2-3, 1988; \$1,100.00 per person

PROGRAM B: JIT/Toyota Production System Seminar Plus In-Plant Training Experience
(6 days), May 2-7, 1988; \$2,500.00 per person

PROGRAM C: Basics of KAIZEN Seminar
(2 days), May 9-10, 1988; \$1,100.00 per person

PROGRAM D: Combination Package (B + C)
(9 days), May 2-10, 1988 including a complimentary recreation program on May 8; \$3,000.00 per person

Make checks payable to The KAIZEN Institute of America.

Notes

1. Each additional person from same company will receive a 10% discount for Programs A, B or C.
2. PROGRAM D, the combination package, saves \$600 per person.
3. Program fees include all materials, continental breakfasts, luncheons, instructor fees and breaktime refreshments.
4. In the event of cancellation, registration fee will be refunded if written notice is received prior to April 15, 1988.

For further information contact: Alice Heist, Hartford Graduate Center, 275 Windsor Street, Hartford, CT 06120-2991, Phone: 203/548-2418, FAX: 203/649-6169.

Accommodations

A block of rooms has been reserved at the Holiday Inn Hartford, 50 Morgan Street, Hartford, CT 06120, at a special discount rate of \$48 per night, single or double (plus \$5 per night for parking), plus applicable state and local taxes. Reservations can be made by calling the hotel directly at (203) 549-2400 and

identifying yourself as a JIT/KAIZEN seminar registrant. The cut-off date for reservations is April 11, 1988. After that date, available rooms will be at regular rates. A major credit card or first night's deposit is necessary to guarantee arrival after 6:00 p.m.

Registration Form

(Photocopies of registration form are acceptable to preserve brochure.)

Registrant #1	Title
Registrant #2	Title
Registrant #3	Title
Company	
Street Address	
City/State/Zip	
()	()
Telephone	FAX

Programs (check correct boxes)

A	B	C	D
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please mail completed form along with your check made payable to The KAIZEN Institute of America to: Alice Heist, Hartford Graduate Center, 275 Windsor Street, Hartford, CT 06120-2991.

Total Registrants _____

Total Amount Paid \$ _____



**The KAIZEN[®]Institute
of America**

6065 Cielo Vista
Carmarillo, CA 93010

KAIZEN Institute of America
Schedule of Classes

PROGRAM A - JIT - May 02 and 03 at HGC

Lecture Format - JIT and Toyota Production System Seminar

PROGRAM B - JIT Seminar plus Case Study - May 02, 03, 04, 05, 06 and 07

May 02 and 03 at HGC - Program A

May 04 at HGC - Classroom Preparation for Company Visit

May 05 and 06 - In-Plant Assessment of Work Habits

May 07 at HGC - Case Study Wrap-Up

PROGRAM C - KAIZEN Workshop - May 09 and 10 at HGC

* * * * *

Each day begins at 8:00 a.m. with a continental breakfast.
Classes begin at 8:30 a.m. and conclude at 5:30 p.m.


The Schedule for the In-Plant Assessment will vary slightly due to transportation requirements. Registrants for this program will be transported to the plant via chartered bus. The bus is scheduled to leave HGC at 7:45 a.m. The return bus is scheduled to leave the plant at 5:15 p.m. Travel time is approximately one hour.

Also, participants in the In-Plant Assessment are advised to bring:

- Comfortable "work clothes" and Walking Shoes
- Pocket Calculator
- Red & Black Pens
- Stopwatch

KAIZEN Communique

Vol. 2, No. 1

 KAIZEN® Institute of America
6065 Cielo Vista, Camarillo, CA 93010 • (805) 388-1201; FAX: (805) 388-0960

WINTER 1987/88

CHAIRMAN'S CORNER



by Masaaki Imai
Chairman, Cambridge Corporation
President, KAIZEN Institute of America

CROSS-FUNCTIONAL MANAGEMENT

QCD, or "Quality, Cost and Delivery," is one of the most commonly used acronyms by Japanese executives these days. Practitioners of TQC (Total Quality Control) believe that QCD are the superordinate goals of management. If management fails to establish a system to realize QCD, several results are inevitable: The company will be left behind by the competition because of inferior quality; it will find profits eroded by higher costs; and it will be unable to deliver products on time to their customers.

Therefore, it is much smarter to approach management's mission as to improve QCD in order to satisfy customers, rather than to look upon management's role only in the context of making more profits to pay dividends to stockholders. Once QCD is achieved, it is automatic that greater profits will be realized.

Another important aspect of QCD is that it is mostly cross-functional. To put it another way, no single department can realize the goals of QCD on its own.

One example is the case for "Quality." Quality-related problems encountered in the workshop are often traced back to inadequate design functions. This often happens because there are no systematic efforts to facilitate communication between the design and production staffs. It is essential for the engineers to understand the requirements of the production floor before they begin designing new products. Although both the design and production staff may be trying to do their best, the results will be unsatisfactory, yielding poor quality of products, since the design requirements do not meet production capa-

continued on page 2

The KAIZEN Institute of America: What Makes Us Unique?

by Stuart Chalmers
General Manager
KAIZEN Institute of America

The KAIZEN Institute of America is a management resource center that provides education, training and consulting services to companies and organizations seeking improved quality and greater productivity, leading to increased competitiveness and higher profitability. A subsidiary of The Cambridge Corporation, one of Japan's most prominent management consulting firms, the Institute's goals are achieved through implementation of proven KAIZEN concepts, systems and management tools. KAIZEN in Japanese means gradual, incremental and constant *improvement* that involves everyone in the organization—from top executives to line workers.

Although many variations of Japanese management style have been introduced recently to corporate America, KAIZEN is unique for the following reasons:

First, all KAIZEN Institute operations are directed by Masaaki Imai, who is recognized as the first person to describe the Japanese-style of management as KAIZEN. Not content with just "coining the phrase," he recently authored the popular book, "KAIZEN: The Key to Japan's Competitive Success," published in English by Random House. In Japan, as well as in every major industrial market worldwide, Mr. Imai has worked with world-renowned experts on management techniques or strategies that are included under the KAIZEN umbrella. (Please see graphic on page 4.)

Second, Mr. Imai and his corp of Japanese consultants utilize the same KAIZEN management techniques that help leading Japanese firms gain international recognition for quality and productivity improvements. These companies have the determination—as well as the management commitment—to be the very best. Their efforts often are recognized by winning various industry awards, such as the coveted Deming Prize.

At the KAIZEN Institute, we apply these techniques at Western companies seeking the same successes. We can help clients to not only *understand* the KAIZEN concepts, but also to *implement* them at their organizations with our "hands-on" programs.

Third, to compliment our corp of Japanese consultants, the Institute employs a team of selected U.S. consultants who have a history of experience in implementing KAIZEN

concepts, systems and tools. The KAIZEN Institute trains our consultants in these principles and methods, both in Japan and at our facilities in the United States. We apply the same proven KAIZEN concepts in use at successful Japanese companies, to the solving of quality and productivity issues at Western companies.

Fourth, the Institute offers the additional resource of distinguished Japanese consultants who regularly assess the Deming Prize applicants. These veteran consultants have been intimately involved in the qualification, evaluation and implementation of KAIZEN concepts and tools. We can accompany them on periodic visits to U.S. clients where they can show how KAIZEN will help them establish and maintain standards similar to those employed by their Japanese counterparts.

Finally, KAIZEN creates a synergism between a company's social and technical operation, as it integrates human resources, quality, delivery and cost improvements, ultimately discovering, "the keys to Japan's competitive success!"

The KAIZEN Institute of America offers many programs and services, including:

1. General Interest Seminars, one-half to two days, on, "An Introduction to KAIZEN," held in key North American cities throughout the year;

2. Annual Quality and Productivity Seminars and In-Plant Tours, in Japan, featuring exclusive visits to leading Japanese companies utilizing KAIZEN;

3. Company (or industry) Specific Seminars and In-Plant Tours in Japan;

4. "KAIZEN Diagnosis," to determine the awareness level and implementation feasibility for KAIZEN concepts, systems and tools within a specific company. These evaluations can be performed either by U.S.-based KAIZEN consultants or Japanese experts;

5. In-house Seminars on the, "Basic Concepts of KAIZEN," tailored to an organization's needs;

6. In-house Comprehensive Consultation Services, including KAIZEN awareness and concept training; implementation of KAIZEN tools and systems; and the realization of a firm's increased competitiveness and improved profitability.

Under the leadership of Masaaki Imai, the KAIZEN Institute of America provides clients the unique opportunity to blend proven Japanese management concepts with a rekindled American vision of global competitiveness.

East Coast Seminars to Focus on JIT/Toyota Production Systems and Basics of KAIZEN

Over the past 10 years, Masaaki Imai, as chairman of Cambridge Corporation (Japan) and more recently president of the KAIZEN Institute of America, has been besieged with requests from clients, associates, students and friends for an in-depth, practical seminar that would train production managers in the Toyota Production System and other corporate staff in the "Basics of KAIZEN."

The KAIZEN Institute of America has responded to these requests by offering, to a limited audience, two seminars and one in-plant, hands-on training and certification experience, this May in Hartford, Connecticut. The **JIT/Toyota Production System Seminar** will be held for two full days, May 2 and 3, at the Hartford Graduate Center, our cosponsors for these programs. A three-man team of Japanese JIT experts, all disciples of Taiichi Ohno, former chairman of Toyoda Gosei and founder of the Toyota Production System, will provide an introduction, case studies and practical applications of the world's most successful mass production concept. Seminar Leader will be Yoshiki Iwata, president, New Technology Institute, perhaps the world's most renowned consultant on the Toyota Production System.

The JIT system has been acclaimed worldwide for much of Toyota's dynamic success. "The combination of JIT and KAIZEN can produce the most efficient production system, since it is based upon an optimum combination of man and machine," according to Mr. Iwata. "We regularly experience produc-

tivity improvements of 100-200% when JIT/KAIZEN is implemented," Iwata states.

Immediately following the two-day seminar, Mr. Iwata's team will present a supplemental program for three days, featuring hands-on, in-plant training and observation, leading to JIT course certification. A final (fourth) day will be devoted to evaluations of all concepts, methods and skills learned earlier.

On May 9 and 10, Masaaki Imai will lead a team of KAIZEN Institute of America consultants in a seminar on the **Basic Concepts of KAIZEN**, the most talked-about method for improving quality, increasing productivity and enhancing competitiveness. Participants will learn how the KAIZEN strategy captures the essence of what makes Japanese management successful. The KAIZEN track-record includes such companies as: Toyota, Komatsu, Ricoh, Fuji-Xerox, Nissan and many others. "KAIZEN in Japanese means *improvement*. It is gradual, incremental and constant improvement," according to Mr. Imai. "It is the 'key to competitive success,' since it leads to improved quality and productivity." He emphasizes that KAIZEN can be successful in the American corporate culture because it is a "process-oriented" approach. However, everyone in the company should be genuinely interested in improvement and their efforts should be directed at the *processes*, rather than focusing on the results. These processes will be taught at the Hartford seminars.

Participation fees are as follows:

PROGRAM A – JIT/TOYOTA PRODUCTION SYSTEM SEMINAR, (2 days), May 2, 3: \$1,100.00 per person

PROGRAM B – JIT/TOYOTA PRODUCTION SYSTEM SEMINAR plus IN-PLANT TRAINING (6 days), May 2-7: \$2,500.00 per person

PROGRAM C – BASICS OF KAIZEN SEMINAR, (2 days) May 9, 10: \$1,100.00 per person

PROGRAM D – COMBINATION PACKAGE (B+C) (9 days) May 2-10, including a complimentary recreation program on May 8: \$3,000.00 per person

NOTES:

1. Each additional person from same company will receive a 10% discount for Programs A, B & C.

2. PROGRAM D, the combination package, saves \$600 per person.

3. Program fees include all materials, continental breakfasts, luncheons, instructor fees and breaktime refreshments. Not included are hotel expenses. However, a block of rooms at a special rate has been reserved at the Holiday Inn Hartford: (203) 549-2400. See enclosed registration form or contact the KAIZEN Institute for details.

Chairman's Corner...continued from page 1

bilities.

Another example is a new product which incorporates some "unique" features. What if such features are not what the *customer* is looking for? In this case, the customer is obliged to pay higher prices for a product that offers features exceeding their requirements. This happens due to inadequate communication between sales and marketing departments that are closest to the customers; and the engineering/design units that must incorporate customer requirements within the design parameters.

In recent years, Japanese management has recognized the indispensable value of cross-functional management.

A popular catch phrase used by Japanese executives competing for the Deming Prize is: "Let's break down departmental barriers!" These executives have learned that many serious management problems have occurred because of departmental barriers. Cross-functional management offers a solution, but can be achieved only by establishing a better *system* to govern the activities of participating departments. Whenever interdepartmen-

tal conflicts arise in a company where there is no system for cross-functional management, the department that has the bigger voice usually wins the argument. Often this happens regardless of the impact such a decision may have on company-wide performance. Shoji Nogawa, former president of Komatsu, says that building a system for cross-functional management is the responsibility of top management.

If each department acts independently, then there is no need for the company to have a president. Since no one department manager has authority over the next department manager, conflicts can only be resolved by their superiors. If this process is repeated upward, it ultimately reaches top management as the entity responsible for building a cross-functional system of QCD.

Japanese companies active in TQC have well-documented systems diagrams for such items as quality assurance and cost. They also have systems diagrams for new product development and claims handling. In all these activities, interdepartmental coordination and cooperation are the key.

In the case of a systems diagram for quality assurance, for instance, the sequence of product development, production, sales and after-service is listed on the vertical side and various departments involved are listed on the horizontal side. By following the diagram, it becomes clear that certain kinds of activities and communications efforts must take place between various departments concerned at any particular stage.

A starting point for improvement in a company is to recognize that there are cross-functional problems.

In too many companies, management is unaware of such problems and therefore they deal with them through conflict-resolution or adjustments of self interest.

Recognition should lead to actions. Although top management should take such initiatives, many now turn to KAIZEN's methods to show them the way.

KAIZEN Case Study #2 — Canon

Canon manufactures cameras, copying machines and office computers. Its KAIZEN activities are centered in its CPS (Canon Production System). Their objectives are to manufacture better quality products at lower cost and deliver them faster. In order to achieve these objectives, Canon has developed three systems: QA (Quality Assurance), PA (Production Assurance), and PT (Personnel Training).

Through the first system, QA, Canon tries to ensure the best quality in all stages of development, production and sales. The Production Assurance system has been divided into two systems to attain the goals of fast delivery and low cost: Canon's HIT System (equivalent to Just-In-Time) and Signal System. The HIT System means only making the parts and products when needed and only in the quantity needed. The Signal System uses HIT cards or signals for this purpose. These sub-systems are designed to achieve Just-In-Time manufacturing while adopting the "visual control" philosophy.

The Personnel Training System is a structure under which Canon's employees are continually educated through a life-long educational program.

There are two more crucial elements of the Canon Production System. They are the "Four Investments" which are directed at

Waste Category	Nature of Waste	Type of Economization
Work-in-process	Stocking items not immediately needed	Inventory improvement
Rejection	Producing defective products	Fewer rejects
Facilities	Having idle machinery and breakdowns, taking too long for setup	Increase in capacity utilization ratio
Expenses	Overinvesting for required output	Curtailment of expenses
Indirect labor	Excess personnel due to bad indirect labor system	Efficient job assignment
Design	Producing products with more functions than necessary	Cost reduction
Talent	Employing people for jobs that can be mechanized or assigned to less skilled people	Labor saving or labor maximization
Motion	Not working according to work standard	Improvement of work standard
New-product run-up	Making a slow start in stabilizing the production of a new product	Faster shift to full line production

Canon's Nine Waste Categories

technologies, human resources, facilities and welfare. Canon believes that neglect of any of these investments will eventually lead to corporate failure.

The other unique element in the Canon case study is their program for the elimination of "nine wastes." Waste is not always obvious and is often camouflaged within the daily routine. Without a clear-cut framework, it is difficult to tell whether one should take the trouble to eliminate a particular kind of waste or not. CPS therefore categorizes waste into nine types, shown above.

Canon management believes that using this

nine-part classification for dealing with waste: 1. helps employees become problem-conscious, 2. helps them move from operational improvement to systems improvement, and 3. helps employees recognize the need for self-development.

The ultimate goal of reducing waste is deployed from top management down to the workshops and targets are established each year at each level. In one of Canon's plants, a program called "Improvement Project 100" is used.

In this program, the managers are told to think of more than 200 tasks for improvement while the target for first-line supervisors is more than 100. Each manager/supervisor is given a KAIZEN Project 100 sheet to post on the wall in their workshop. Every time a new improvement is thought of a record is made of this idea on the sheet. This list serves as a useful guide in planning the workshop's monthly activities.

In some locations, each supervisor/manager is told to set aside 30 minutes per day as "KAIZEN-time" — time to do nothing but think about improvement in their workshop.

Canon management estimates that the company-wide efforts for reducing wastes through the CPS saved \$100 million in a single year recently. The success of Canon's CPS system has given their people great confidence and pride in contributing to the corporation's earnings.



Weyerhaeuser Executive "Lives" KAIZEN

Not content with just implementing KAIZEN techniques on-the-job at Weyerhaeuser Corporation, Ken Karch has special license plates to tout the management concept he uses in many facets of his life. He joins with Mr. Imai to frame the special plates on his Toyota Cressida.

INTRODUCING THE "QUALITY STORE"

KAIZEN Consultants, John Lowman and John Dean announce the opening of THE QUALITY STORE, a mail-order service that features the latest publications and software for managers or technicians interested in quality, productivity and other means for increasing competitiveness. Of course, their featured product is Mr. Imai's best-selling book, *KAIZEN: The Key to Japan's Competitive Success*. To order a copy, or to get on their mailing list, please fill out the form.

Book Order Form

Please send me _____ copies of, "KAIZEN: The Key to Japan's Competitive Success," by Masaaki Imai @ \$24.95 each, plus \$2.50 each for postage and handling.

Name _____
 Address _____
 City _____
 State _____ Zip Code _____

Make check payable. and mail with form to:

The Quality Store, P.O. Box 2465, Decatur, AL 35602

Please add my name to your mailing list.

KAIZEN... In Print

The American Society for Quality Control (Aerospace and Defense Div.) *Newsletter Notes* for September, 1987 featured a review of Mr. Imai's book, *KAIZEN: The Key to Japan's Competitive Success*. The reviewer encourages American management to read it and apply its concepts. He says, "It could be the key to America's competitive success, both domestically and internationally."

The *Hartford Courant*, on November 13, featured a story on the KAIZEN Introductory Session held in cooperation with the Hartford Graduate Center, as part of their Corporate Affiliates Program. Over 100 corporate managers and executives of service organizations attended. The newspaper interviewed Mr. Imai on the meaning of KAIZEN and how it could assist New England-based companies.

Portland Business Today, interviewed Mr. Imai during a visit there in 1987, as he conducted an in-house seminar for 100 employees of a local real estate development and management firm, on "the secrets of the Japanese management style."

The August, 1987 issue of the American Marketing Association's, *Marketing News*, President's Column, predicted 1987-88 "will be the year of KAIZEN." William Jamieson, AMA's president, says KAIZEN is appropriate for 87-88, "because it is ongoing, based on a longer-term perspective and is focused on cumulative efforts — building on the past, improving and moving smoothly into the future."

The *New Zealand Listener*, September 19, 1987, the largest circulation journal in the country, published a major feature article on, "Japanese Workstyles: The Secret of Their Industrial Success." Mr. Imai was extensively quoted in the article, as they interviewed him during a month-long visit that included in-house seminars, lectures and demonstrations for New Zealand companies.

Seminars/Announcements

- **SEMINARS ON JIT** (Just-In-Time), or the Toyota Production Systems and The Basic Concepts of KAIZEN, will be featured during the KAIZEN Institute of America's East Coast Seminars, May 2-3 and 9-10, in Hartford, Connecticut. The Hartford Graduate Center will host and cosponsor these timely and valuable seminars. Both are limited to the first 100 registrants. A special, JIT In-Plant Training Seminar will be offered May 4-7, as a supplement to the introductory seminar, for the first 40 individuals to register. Yoshiki Iwata, the world's foremost expert on JIT and the primary disciple of JIT's founder, Taiichi Ohno, will personally conduct the Seminar and In-Plant Training Sessions. Please see story on Page 2 of this Communique and the enclosed Registration Form, or write to the KAIZEN Institute for further information.

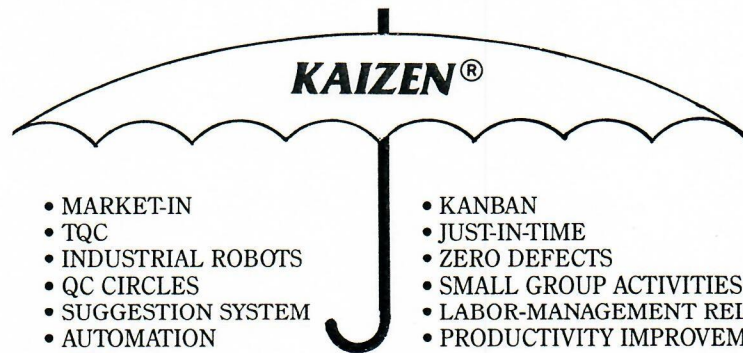
- **THE KAIZEN INSTITUTE'S** Midwestern U.S. Seminar on the Basic Concepts of KAIZEN, along with a special one-day focus on "Hoshin Kanri," or Policy Deployment, will take place in July. A Deming Prize Professor will join Shoji Nogawa, recently retired president of Komatsu, Japan's leading heavy machinery manufacturer, in the expla-

nation of Japan's implementation of Hoshin Kanri, Cross-functional Deployment and The Presidential Audit, in the institutionalization of KAIZEN. Details will be forthcoming or contact the Institute.

- **MR. IMAI WILL SPEAK** before the Human Resource Planning Society's National Conference, March 22, 1988, in Washington, D.C. His three-hour seminar will focus on, "The KAIZEN Strategy for Continuous Improvement."

- **ABOUT 130** French corporate executives heard Mr. Imai present the Keynote Address at a seminar in Paris, January 27-28, on KAIZEN: The Key to Japan's Competitive Success. The program was sponsored by RITME, a leading French consulting firm. Mr. Imai was accompanied by Joop Bokern, a European KAIZEN consultant.

- **ARE YOU ON OUR MAILING LIST** for complimentary future issues of the KAIZEN Communique and important seminar announcements? If not, send your request to: KAIZEN Institute of America, 6065 Cielo Vista, Camarillo, CA 93010. Phone: (805) 388-1201; FAX: (805) 388-0960.



KAIZEN® Institute of America

6065 Cielo Vista
Camarillo, CA 93010

the
Hartford
Graduate
Center

February 1, 1988

Mr. Richard H. Ayers
President
The Stanley Works
Post Office Box 7000
New Britain, CT 06050

Dear Mr. Ayers:

Thank you for your willingness to consider Stanley's participation as an on-site case study for the "kaizen implementation certification" workshop scheduled for the first two weeks in May. The classes in JIT and kaizen will be held here at HGC; the case study will be held on-site.

I have just talked with Stu Chalmers at the Kaizen Institute about the program. Stu stresses that the company must have good labor-management relations and that the employees "under the gun" must be assured that their jobs are not in jeopardy - kaizen teaches how to improve, not destroy. Please see the list of criteria for company participation for further clarification. For the sake of expediency I am sending along the very informal program outline at this time together with other pertinent information from Imai's seminar held here last November to give you a feel of what is planned. I realize that this is still sketchy information but I hope it helps you with the go/no go decision.

Benefits to the participating company: professional evaluation of the operation, recommendations for improvement and implementation of kaizen, and gratis registrations for the entire seminar for two of your employees.

Matt and I would like you to have the enclosed copy of **Kaizen: The Key to Japan's Competitive Success** with our compliments.

I look forward to hearing from you.

Sincerely yours,



Alice E. Heist
Corporate Relations Manager

AEH:st
Enclosures

The following is a major criteria for selecting the company for doing on-the-spot **kaizen** work during the six-day seminar:

1. The cycle time should be somewhere between thirty seconds and one minute.
2. It should be a repetitive job.
3. It should be an assembly-type job, or a processing job.
4. The operator should be using a machine. Namely, the job should be a combination of manual and machine work.
5. The labor-management relations should be fairly good, so that the workers on the floor are cooperative in introducing the many changes which the participants (and the consultants) propose.

Often, the machine layouts are changed, and the job contents of the workers are changed and the number of workers is reduced.

6. There should be a least three and hopefully six different processes where the participants can introduce **kaizen**.

One of the marks of **kaizen** is to reduce the number of people involved. If six people are working in a given process, the participants are given such assignment as reducing the number to four. From such a standpoint they have to think of ways and means of doing more efficient work.

Needless to say, these changes should not be threatening to the job security of the workers involved.



MAR 21 1988

The International Marketing Center, Ltd.

601 Skokie Boulevard
Northbrook, Illinois 60062
Phone: (312) 480-0775
FAX (312) 480-0772

March 16, 1988

Ms. Alice E. Heist
Corporate Relations Manager
Hartford Graduate Center
275 Windsor Street
Hartford, CT 06120-2991

Dear Alice:

Enclosed are press releases to be sent to newspapers in your area announcing the seminars. Perhaps your contact at the Current can get this some coverage.

Cordially,

Harvey R. Shoemack
President

HRS:mn

Enclosures

FOR FURTHER INFORMATION:

Harvey R. Shoemack/Marjorie Neufeld
The International Marketing Center, Ltd.
(312) 480-0775

FOR IMMEDIATE RELEASE

**PRACTICAL SEMINARS TO FOCUS ON
"JIT/TOYOTA PRODUCTION SYSTEMS" AND "BASICS OF KAIZEN"**

CHICAGO, IL - March 7, 1988 - Two practical, in-depth seminars on the famous, "Just-In-Time/Toyota Production System" and, "The Basics of KAIZEN," will reveal the "secrets" of Japanese management and productivity systems, this May, in Hartford, Connecticut.

Sponsored by the KAIZEN Institute of America, along with hosts and co-sponsors, The Hartford Graduate Center, the JIT/Toyota Production System is scheduled for May 2-3, while the KAIZEN Seminar will be held May 9-10. A special, 6-day supplemental JIT program, that features an in-plant, hands-on training experience at a Hartford-area facility, as well as the 2-day JIT seminar, also is available, from May 2-7.

A three-man team of Japanese JIT experts, disciples of Taiichi Ohno, former vice president of Toyota Motor Co. and founder of the "Toyota Production System", will provide an introduction, case studies and practical applications of JIT -- the world's most successful mass-production concept. Seminar leader is Yoshiki Iwata, perhaps Japan's most renowned consultant and expert on the Toyota Production System.

- more -

Masaaki Imai, president of the KAIZEN Institute of America and chairman of The Cambridge Corporation (Tokyo), and noted author of, "KAIZEN: The Key to Japan's Competitive Success," will lead the seminar on "Basics of KAIZEN," May 9-10. The seminar builds on a basic understanding of the concepts, systems and tools of KAIZEN -- the Japanese method for improving quality, increasing productivity and enhancing competitiveness and profitability. Mr. Imai will be assisted by several U.S.-based KAIZEN consultants, who will discuss practical applications of this successful strategy for American industry.

Program fees are \$1,100 per person for either the 2-day "JIT/Toyota Production System Seminar," or the 2-day, "Basics of KAIZEN Seminar." The 4-day supplemental "In-Plant Training Experience," plus the 2-day JIT Seminar, is \$2,500 per person for the six days. It is limited to the first 40 registrants. A special combination package includes the JIT Seminar and In-Plant Training Experience plus the Basics of KAIZEN Seminar, from May 2-10 (with a complimentary recreation program on Sunday, May 8), at \$3,000 per person, for a savings of \$600. Additional registrants from the same company are eligible for a 10% discount for each seminar, except the combination package.

The JIT/Toyota Production Systems Seminars are targeted for operating management, project team management, top management and key team members from manufacturing, materials, engineering, marketing, finance, personnel, or anyone else seeking to understand JIT and how it may help improve their productivity.

The Basics of KAIZEN Seminar is directed toward key management and team members seeking a clear understanding of how KAIZEN creates a synergism between a company's technical and social operations, as it integrates human resources, quality, delivery and cost improvements.

The KAIZEN Institute of America was created by Masaaki Imai, chairman of The Cambridge Corporation, one of Japan's most prominent international management consulting firms, to meet the increasing demand for learning and implementing the KAIZEN concepts, systems and management tools in American corporations and organizations. KAIZEN in Japanese means gradual, incremental and constant improvement that involves everyone in the organization - from top executives to line workers.

Through many programs and consulting services, the Institute offers specialized public or in-house opportunities for management to learn and implement the latest developments in quality improvement, greater productivity techniques and increased competitiveness.

To register by telephone, or for further information, call Alice Heist, The Hartford Graduate Center, at (203) 548-2418, or The International Marketing Center, Ltd., (312) 480-0775. Attendance to all seminars is limited.

**KAIZEN Institute of America***Management Consultants Since 1962***(805) 388-1201****6065 Cielo Vista • Camarillo, CA 93010**

April 4, 1988

Alice Heist
Hartford Graduate Center

Alice,

This is the first of five (5) pages.

I have drafted up a checklist of things that I would like to review with the people at Torrington when we visit them. This includes a roughed out agenda of how we will spend our time the two days we are there and specific items that we feel need to be addressed prior to the program. I appreciate the opportunity to see their manufacturing line as well. Thank you for the good work that you are doing. I sure hope that you get well soon.

Sincerely yours

Stu Chalmers
General Manager
Cambridge Corp. USA dba
KAIZEN Institute of America.

Impact dates

AGENDA FOR TWO DAYS ON-SITE AT TORRINGTON

DAY 1

1. Orientation by Torrington
2. Issuance of safety devices
3. Go to work areas (teams of about 15 people), up to 6 areas maybe required if we have 45 people sign up and we sub-divide the teams into two.
4. Meet the workers and supervisors if this has not occurred already.
5. Participants to watch the line using the skills that they have received during the previous three days.
6. They will take measurements with stop watches and be writing these measurements and other observations down on work sheets that will be provided.
7. After observing for some period of time, perhaps an hour or two, the group will go into a meeting area and discuss what they have observed, making plans for changes. At this point it would be very helpful if the supervisor and the maintenance we with the group so that they can see and hear what is being discussed. Decisions on timing of change and decision making relative to the change could be taken care of on the spot.
8. Once permission is given to make the changes, they are then implemented.
9. Changes are checked and evaluated by the team to see if they had the effect that was desired.
10. Start all over with observations (step 5)

DAY 2

This should be a repeat of the previous day.

TORRINGTON WILL FIND THAT THIS WILL BE AN EXTREMELY REWARDING SESSION FOR THEM. AT ONE PLANT THAT INVITED MR. IWATA (IN NORTH CAROLINA) THEY GOT SO EXITED THAT THEY INVITED HIM TO RETURN AGAIN. AT ANOTHER PLANT IN TAIWAN THE PLANT MANAGER LOST SLEEP FOR TWO NIGHTS JUST DREAMING OF ALL OF THE CHANGES AND THE POSITIVE IMPACT THEY WOULD HAVE FOR HIM. AT ISUZU MOTORS THEY

HAVE DECIDED NOT TO PLAY ANY GAMES AND THEY ARE CALLING THEIR PROCESS THE ISUZU PRODUCTION SYSTEM. THEY SAID THAT WHAT THEY HAVE OBSERVED SO FAR HAS BEEN SUCH A RESOUNDING SUCCESS BY JUST PUTTING IN PLACE WHAT WORKED WITH TOYOTA, THEY ARE GOING TO GO AHEAD AND DO IT.

MR. IWATA AND HIS CONSULTING GROUP ARE NOW TEACHING ISUZU AND MAZDA MOTORS WHAT MADE TOYOTA SO QUALITY AND COST EFFECTIVE, THEY ARE IMPLEMENTING THESE THINGS LOCK STOCK AND BARREL. I SAY THIS BECAUSE I KNOW THAT THIS IS A DIFFICULT TIME FOR TORRINGTON DUE TO BACKORDERS AND EXTREME PRESSURE FROM CUSTOMERS TO MEET DELIVERY SCHEDULES. I CAN NOT THINK OF SOMETHING THAT WOULD HAVE A GREATER POSITIVE IMPACT FOR TORRINGTON THAN THIS PROGRAM AT THIS TIME.

CHECK LIST TO PREPARE FOR THE JUST IN TIME SEMINAR
AT TORRINGTON/MORRIS

- _____ Safety requirements
 - _____ hats
 - _____ glasses
- _____ Video tape before and after
- _____ Schedule for our being there, is 9:00 - 5:00 Okay?
- _____ Logistics for:
 - _____ Lunch breaks
 - _____ bathrooms
 - _____ break-out meeting areas
 - _____ Specific areas where improvements can be made
- _____ Torrington Orientation to group
- _____ Ground rules
 - _____ groups have to stay together
 - _____ All changes have to be reviewed and okayed by supervisor
- _____ Availability of Maintenance and engineering people while we are on-site
 - _____ We stress engineers being available so that we can discuss cause and effect of making changes, plus the engineers can continue the leadership of this process once we are gone.
 - _____ Two Torrington people should take the whole course since we are offering two slots in the course to Torrington for free.
 - _____ Maintenance people should be available so that layout changes can be made on the spot during breaks, or off hours.

_____ All supervisors and workers need to be coached ahead of the time that we are there so that they are fully aware of what we are going to do. There should be no surprises.

_____ All people on the line where we are working should have name tags so that we can address them by name.

_____ In order to balance a line people may have to be moved around from one station to another.

_____ People should be told that their jobs are intact and that changes being made only make them and Torrington more effective at staying competition.



KAIZEN Institute of America

Management Consultants Since 1962

(805) 388-1201

6065 Cielo Vista • Camarillo, CA 93010

April 16, 1988

Alice Heist
Corporate Affiliate Program
Hartford Graduate Center

Dear Alice,

Attached are the materials to be used and copied for the A and B portion of the seminar. The first portion labeled "text for JIT/Toyota Production System Seminar should be at the beginning of the note book, and the reading material at the end.

Also there are four blank worksheets attached. They are in the A-4 size, please get them reduced to 8 1/2 X 11 format (around 92%) and then make ten (10) copies of each form for each participant that is to take part in session B.

I will send you the masters for the session C in about a week.

I trust that everything is going well. Please call if there are any questions.

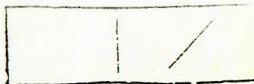
Regards,

Stuart Chalmers
General Manager
Cambridge Corporation USA
dba KAIZEN Institute of America

Sincerely yours,


Stuart Chalmers

Section Super- chief visor		Process Production Capacity Table	Model No.	Model type	Group	Name			
			Model name	No. of pieces					
Step	Process description		Machine tool number	Base time		Cutter	Process capacity	Remark	Time indicated
			Manual work	Machining	Time to complete	No. of works	Replace ment		
			Min. Sec.	Min. Sec.	Min. Sec.				
合 計									



Model No. and name	Standard Work Combination Sheet	Date prepared	Quota per Shift	Manual work
work sequence		Group	Takt time	--- Machine work ~ Walk

Step	Work content	Time		Working time (Unit: One second per scale)																			
		Manual	Auto/Walk	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	60'	65'	70'	75'	80'	85'	90'		

Total	Waiting
-------	---------

Courant 5/8/88

Japanese tutor on shop floor

By LAWRENCE B. RASIE
Courant Staff Writer

Specialists in Japanese manufacturing and management went onto factory floors in Connecticut last week and found American managers and workers willing to mix it up a bit.

The visits were part of a week-long workshop focusing on Japanese manufacturing systems called Kaizen and the Toyota production system — hailed as models of industrial efficiency.

And after 25 top and mid-level managers from Connecticut manufacturers followed their Japanese tutors to shop floors at Jacobs Manufacturing Co. in Bloomfield and the Torrington Co. in Torrington, they said they were set to adapt the new strategies to their work places.

"This material absolutely can be adapted [to other companies]," said manufacturing consultant Robert Warner of Manchester, who participated in the seminar. "It can be involved at the lowest and highest levels in a company."

George Koenigsaecker, president of Jacobs, said his company was trying to emulate many elements of what is called the Toyota production system. "For us, it will become the Jacobs Production System."

The Toyota production system was developed by the Toyota Motor Corp. in Japan and includes specific manufacturing efficiencies such as just-in-time inventory, a way to reduce inventory costs by having on hand just the material needed for the next step in manufacturing.

At Torrington Co., plant manager Robert J. Geiger said many of the improvements suggested by the visiting tutors had previously been installed at the plant, but he said some of the suggestions were new. "They had a couple of clever new wrinkles," Geiger said.

Masaaki Imai, one of the visiting experts and president of the Kaizen Institute of America, a consulting



Tony Dugal / Special to The Courant

Team leader Noe Silva, left, and Guiseppe Abbatemarco, a grinder operator, discuss a brake component at Jacobs Manufacturing Co.,

Bloomfield. Jacobs is interested in adapting Japanese manufacturing efficiencies to reduce costs in inventory and quality control.

firm based in Carmarillo, Calif., said Kaizen is the Japanese umbrella philosophy for efficient manufacturing. "Kaizen means constant improvement," he said. "That's all."

Applying Kaizen on the factory floor typically involves a series of very specific, if small, improvements. Each is minute, but together they create a groundswell, Imai says.

Kaizen also can touch upon cultural ways of doing business.

For example, Imai said, American workers and managers often are caught in adversarial relationships, such as wage negotiations, which are inefficient.

But in Japan, while managers and workers often argue over wages — like their counterparts in

the United States — they agree first to work together to make the company more profitable.

"It should benefit everyone in the company to make the total pie [profits] bigger," Imai said.

By contrast, he says, many U. S. companies "don't work to make the pie bigger."

Imai, enthusiastic and thoughtful, said he spends more than half his time traveling around the world talking about Kaizen.

He said he has conducted workshops in most countries in Europe, and in many countries in the Pacific area, including rising industrial powers like Taiwan, Singapore and New Zealand. "In New Zealand they are very much interested in Kaizen to increase manufacturing output," Imai said.

During last week's workshop in Connecticut, hope was an underlying message. The managers participating in the seminar learned there is no mystery about Japanese efficiency — it can be achieved, even surpassed.

The field trips to Jacobs Manufacturing and Torrington Co. followed two days of schoolwork in the seminar-workshop, which was sponsored jointly by the Hartford Graduate Center and the Kaizen Institute.

Alice Heist, director of the graduate center program that cosponsored the workshop, said the seminar was scheduled in response to the increasing demand by local companies for exposure to new manufacturing techniques.

Koenigsaecker, the president of

Jacobs, believes Kaizen can improve profit margins and, more specifically, improve his company's margins. Jacobs, which makes truck brakes and engines and chucks, has 600 employees. Its sales are estimated at between \$20 million to \$50 million a year.

Koenigsaecker said that just-in-time inventory and techniques for quality control have "interesting elements" which Jacobs could adapt to its own operations.

For example, he says, machine operators could be taught to ensure the parts they make are top quality, which would eliminate the need for quality-control inspections.

Koenigsaecker would like to infuse Kaizen throughout his compa-

See Local, Page D3

Local manufacturers follow Japanese tutors onto shop floor

Continued from Page D1

ny. "To make it work, all elements have to work together, which is one of the more difficult pieces to get in place," he says.

He says the change to Kaizen techniques might be toughest for middle managers because change involves attitudes and even symbols.

"Sometimes managers start thinking the shop floor is there to support them, when it's actually the reverse," he said.

Jacobs sent several of its employees from various departments to the Kaizen workshop. "We have people that represent the UAW in our plant and people who represent shop-floor supervision, and people who represent shop-floor production engineering and people like myself who represent management," he said.

The Torrington Co., with about 5,000 employees, makes automotive steering components. Geiger, the plant manager, said many Kaizen techniques were adopted by the company through a program initiated in the past 10 years.

To Geiger, the visit of Imai's team was a confirmation. "We were pleasantly surprised to find we were al-

In Japan, while managers and workers often argue over wages — like their counterparts in the United States — they agree first to work together to make the company more profitable.

ready doing many of the things the Kaizen people suggested," he said.

Geiger said the company had incorporated specific techniques, such as just-in-time inventory, in applying the Kaizen philosophy of steady improvement through small steps.

Still, about 25 percent of the suggestions from Imai's team were new.

And the ideas were typical Kaizen philosophy, small improvements in a key area of the company's daily operations — in this case, inventory-in-process. Inventory-in-process, or partially completed parts temporarily stored in the plant, ties up a lot of money. "We have 30 to 40 different operations [to make parts].

"And in the old days, say 10 years ago, we'd prepare materials ahead of time for each operation or the first in a sequence of operations," he said.

"That means you could have 99 parts lying around waiting for one operation to be performed. Those parts tied up a lot of money.

"But under just-in-time you need only one part for each operation. Cutting out 99 parts in progress frees up cash that used to be tied up in inventory-in-process."

It also frees valuable floor space formerly covered with inventory-in-process.

Imai suggested new ways that machines can be grouped closer together when there are no piles of half-finished parts laying between them.

"We had put in three smaller machines. They suggested two larger machines," says Geiger. "It's the same end [saving floor space] but with a slightly different twist."

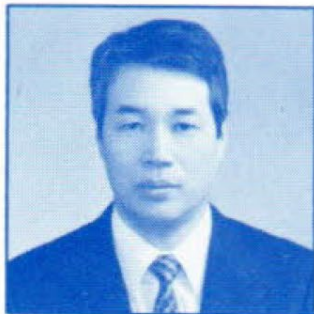
Says Imai: "Kaizen makes the company much more profitable. . . . Not just 10 [percent] or 20 percent but 100, 200 percent or more."

I hope you appreciate the pioneering work of Masaaki Imai and the Kaizen Institute, and Yoshiki Iwata, Chihiro Nakao, Akiro Takenaka and Shingijutsu for bringing kaizen to the world!



Masaaki Imai, chairman, Cambridge Corporation (Japan), president, KAIZEN Institute of America and author of the best-selling book, *KAIZEN: The Key to Japan's Competitive Success*.

Yoshiki Iwata, president, New Technology Institute, renowned leading consultant on Toyota's famous Kanban Production System (JIT) and former manager of Toyoda Gosei's JIT Implementation Office, where he became a disciple of Taiichi Ohno, former vice president of Toyota Motor Co. and founder of its revolutionary production system.



Chihiro Nakao, vice president, New Technology Institute and the manager responsible for introducing the Toyota production system to Taiho Kogyo Co., Ltd., a Toyota Group company. He is particularly recognized for outstanding work in the fields of *Jidohka* and *SMED*.

Akiro Takenaka, managing director, New Technology Institute and former production engineer who worked with Mr. Ohno in implementing the new Toyota Production System. He is an expert on building *standardized work systems*, and is in great demand in Japan as a top-notch trainer in this field.



Special assistance and group leadership will be provided by the U.S.-based KAIZEN consultants.

Learn More About Kaizen, and Then Put What You Have Learned Into Practice Every Day.



Learn more about Kaizen Institute

👉 <https://kaizen.com/>



Learn more about Shingijutsu Global

👉 <http://www.shingijutsu-global.com/en/index.html>



Learn more about Shingijutsu USA

👉 <http://www.shingijutsuusa.com/>

NOTE: In 2003, Shingijutsu Co., Ltd. was split into two companies two years after Yoshiki Iwata's death.

Learn More About Kaizen, and Then Put What You Have Learned Into Practice Every Day.

