### World Class Manufacturing THE NEXT DECADE

### TWO DAY INSTITUTE

Volume 13 1998 Number 4

Presenting, in person, the author of the "best-selling manufacturing book of all time".
RICHARD J. SCHONBERGER, reports from his latest book at this powerful Two-Day Institute

Chicago, IL

March 24 - 25

Atlanta, GA

April 23 - 24

Cincinnati, OH

May 12 - 13

Costa Mesa, CA

(LA area)

June 4 - 5

Presented by

MANAGEMENT RESEARCH CORPORATION

### LEARN FROM THE "BEST-OF-THE-BEST"...

### How Top Scoring Award Winners Boost Performance to Unprecedented Levels of Excellence

Many Baldrige, Shingo, Deming and America's Best Plants winners score a miserable 60% average on Dr. R. J. Schonberger's new 16 critical standards for achieving world class manufacturing excellence.

However, a precious few score a hardly-ever-achieved 80% to 100% on selected principles. By attending this two-day Institute your team will have access to inside information from the cream of the crop – taken from Dick Schonberger's pathbreaking, global benchmark research. (see pages 2, 3 and 4)

### PRAISE FROM THE PRESS...

### "Schonberger's...16 Point Strategy Pulls Together Much of What Leading Manufacturers Have Done to Turn Their Companies Around".

The Fort Worth Star Telegram went on to say, "Although many of the (16) points resemble some of the popular management programs in place today Schonberger often takes the ideas one step further into implementation and accountability".

In fact, Dr. Schonberger's 16 principles compliment rather than compete with popular systems such as agile or lean manufacturing, constraints and supply chain management, ERP and customized mass production...this protects your investment in current methodology and training while enhancing your results.

Perhaps *Industry Week* summed it up best when they reported, "...(Schonberger's) research reveals the true predictors of future success in 16 customer focused principles...". (see pages 2 - 3)

### MORE RAVE REVIEWS FROM SENIOR EXECS & MANAGERS...

### at the World Class Leaders and Award Winners

"Once again, Richard Schonberger has defined the new standard for excellence".

Soma Coulibaly, Manager, Graphic Arts Engineering Hallmark Cards

"Dick Schonberger's...(system of 16 principles) plays well in Hewlett Packard's environment...".

> Eric Olsen, Worldwide Mfg. Education Manager Components Group Hewlett Packard

"Dr. Schonberger created a new paradigm for how a factory should operate...Now he helps us see the world of manufacturing differently once again".

Kelly Hoffmann, Formerly Vice President, Measurement Division, Rosemount, Inc. Why do so many Baldrige, Shingo, Deming, and America's **Best Plants** winners score a miserable 60% average on Dr. Richard J. Schonberger's new 16 critical standards for achieving **World-Class** Manufacturing excellence?

1 have found your books (and) seminars The most sensible, comprehensive and well supported of any of the myriads of WCM leaders. Thanks. 99

Steve Wilkinson, Director of Manufacturing Boston Scientific Corp.

any Baldrige, Deming, Shingo, and America's Best Plants and other award winners are receiving a wake-up call after self-scoring their business processes using this new World Class by Principles (WCP) Matrix from Dr. Richard Schonberger.

In fact, the best scores turned in by over 300

Team-up with customers;

organize by customer/

presenta-ves for each

mengineered by customer product families

vorkflow

warns (cells) for key product/

Customer/ client

on project teams

an oject teams

product family

Capture/use customer, competitive,

practice information

Broad implemen-tation of better-than-

best practices for customer

All associates involved in customer/ competitive/ best-practice assessment

Systematic

surveys; fullscale

Gather

& best-practice data, and non-competitive samples and metrics

satisfaction data and

service

best-

Continual, rapid

improve-

want

ment in what

Sustained yearly QSPV

rates of 50% or more in all

a key process

key processes

manufacturers around the globe barely topped 60% ... for an overall score of D- ... with failing scores in many of the individual 16 benchmark principles that Industry Week says are "the true predictors of future success.'

The good news is: Now you can take your operations to the next level of performance ... and outscore even the Baldrige and Deming

winners ... by mastering the 16 customer-focused manufacturing principles presented in Schonberger's newly updated institute, "World Class Manufacturing: The Next Decade."

"This seminar packages together everything that is critical to attaining world class status," says J.P. Stautberg, Plant Manager, Aurora Casket Co. Steve Wilkinson, Director of Manufacturing, Boston Scientific Corp. adds, "I have found your...seminar the most sensible, comprehensive, and well-supported of any of the myriads of world-class manufacturing leaders."

### 16 steps to improved quality, performance, and customer service

Revitalize your operations with the best World Class principles Dr. Richard J. Schonberger's global research has uncovered since the publication of his landmark 1986 best-seller, World Class Manufacturing: The Lessons of Simplicity Applied.

In his previous book and seminars, Dr. Schonberger laid the groundwork for improved delivery, quality, and flexibility at hundreds of manufacturing facilities worldwide.

Now, in his latest book, World Class Manufacturing: The Next Decade - and his NEW seminar of the same title -

Cut flow time and distance,

start-up/

teams achieve 90%

Experts help achieve 80% average reductions

Associa

Principles of Customer-Focused, Employee-Driven, Data-Bas

Frontliners involved in change and

teams help develop strategies and set numeric goals, self-

teams plan/ implement cross-functionally with other teams

Frontline

teams assist in

planning and implementing changes in

Frontline

associates assist in

planning changes in own jobs

strategic planning

Design

Cut to the few best

components,

operations, and

suppliers

Average reductions 90% for all

services

Average reductions of 50% for all

50% fewer

parts/service operations of

Dr. Schonberger reveals the new principles, rules, and methods he has discovered for taking your existing worldclass achievements to the next level of performance, productivity, and customer satisfaction through:

· simplifying product designs and streamlining manufacturing operations

· maximizing innovation and productivity from teams and individuals

 implementing continuous quality and process improvement methods that work!

- · revolutionizing data gathering and reporting for better operations and control
- · boosting plant capacity and throughput
- · creating greater synergy between manufacturing and marketing to achieve mutual corporate goals.

Armed with new world-class benchmark data. Dr. Schonberger introduces a wealth of new material not covered in past seminars ... including a new integrated, business-wide management system based on 16 benchmark principles with a built-in self-scoring matrix.

### Compliments, rather than competes with, your current manufacturing system

The new "World-Class Manufacturing: The Next Decade" institutes build on and enhance - rather than replace - the systems and ideas you've implemented ... including lean manufacturing, constraints management, agile manufacturing,

customized mass production, supply chain management, enterprise resource planning, and Dr. Schonberger's earlier breakthrough research.

Many of these key concepts have already been integrated into the 16 World Class Manufacturing principles to amplify their effectiveness and focus them on common

rations and Control

13

Align performance measures

Second-order metrics (e.g., labor productivity, variances) no longer managed

**QSFV** are dominant

processes

QSFV are dominant metrics in key support departments

QSFV are

metrics in key operations

Training in universal customer wants: speed, flexibility,

quality, value (QSFV)

transactions out 50%; 50% of external

transactions by fax/EDI

work-flow, quality, internal scheduling &

labor transactions cut 25% with custom wants

goals. (In fact, Dr.
Schonberger wrote
one of the first
articles on lean
manufacturing for the
Harvard Business
Review in 1987, almost a
decade before the concept
came into vogue.) This
protects your investment
in current methodology
and training, while
enhancing results within
your existing framework.

"Once again, Richard Schonberger has defined the new standard for excellence," raves Soma Coulibaly, Manager of Graphic Arts Engineering, Hallmark Cards.
These 16 principles establish new standards for

manufacturing

excellence – whether you're a Baldrige, Shingo, Deming, or America's Best Plants award winner ... or want to be one some day.

"Dr. Schonberger created a new paradigm for how a factory should operate," praises Kelly Hoffmann, former Vice President, Measurement Division, Rosemount, Inc. "Now he helps us see the world of manufacturing differently once again."

Fully tested in more than 300 leading-edge manufacturing operations in 13 countries, these are proven breakthroughs that can dramatically boost your ability to compete – and win – into the year 2000 and beyond. And Richard Schonberger's "World Class Manufacturing: The Next Decade" seminar is the only place you can get them in-depth ... straight from the source.

Why there has never been a better time than NOW to get a new "shot in the arm from Schonberger"

"This program was a shot in the arm," said Don Cartlidge, General Manager, Petro Vend, Inc. "We're not as good as we thought but now we know how to get there."

Even if you have already sent some of your people to a Richard Schonberger "World Class Manufacturing" seminar, "World Class Manufacturing: The Next Decade" – building on the foundation established in Dr. Schonberger's previous lectures and

Promotion/ Marketing

16

Promote/

market/sell

every improvement

Reverse marketing: Out of strength, you choose whom you sell to

Global/national awards (e.g., Baldrige); over 90%

local awards (ISO-9000, Ford Q1,

state award)

Prograve DSPV

trends featured in selling, bids, proposals, ads

advertising slogans ("Quality is Job One";

Capacity

Seek simple.

flexible.

movable, low-cost equipment

movable

60% of equip

30% of equipment owned by focused beams/cells or

is highly flexible/ movable

10% of equi ment "owne by focused teams/cells

or is highly flexible/

avable

14

present capacity before new equipment & automation

Operators become

Experts teach operators to do repairs; downtime cut

Experts help operators take over their own PM

housekeeping

Preautomation (short flow paths, exact placement,

rousekeeping.

Training in total preventive

maintenanc (TPM) and process simplification

etc.)

Improve

books – will reveal systematic, step-by-step strategies and methods never before presented.

New attendees will learn how to use this revolutionary new – total business – approach to improve worldclass manufacturing results.

Prior attendees, in addition to getting a much-welcomed refresher in the fundamentals, will learn how to use the 16 customer-driven principles and

other NEW concepts that can boost manufacturing company performance to unprecedented levels of excellence.

John Stack Jr., Manufacturing Manager, Van Dorn Demag, states enthusiastically, "This is my third time at a Dr. Schonberger seminar and, as in the past, I leave with new tools and ideas on how to use them." And Bill MacMahon, Director of Technical Services, P&H Mining Equipment, adds: "This seminar lays out an excellent blueprint to manufacturing excellence that can be followed in a systematic way."

Well over 75,000 manufacturing professionals have taken a Richard Schonberger seminar or attended one of his speeches. Now it's your opportunity to get his latest systematic methods and actionable ideas for improvement ... proven principles you can immediately use to begin upgrading your World Class Manufacturing strategies and practices for the competitive challenges you'll face in the new millennium.

Dr.
Schonberger's
Five-Step
Assessment
Tool...Your
Roadmap for
Achieving the
Next Level of
World Class
Manufacturing
Excellence

Be forewarned:
If you self-score
your own
operations
against these
benchmark
principles, you
may be in for
the surprise of
your life

We re not as good as we thought but (now) we know how to get there.

Don Cartlidge, General Manager Petro Vend, Inc...

## Boost performance to unprecendented levels of excellence with World Class by Principles (WCP)

New ideas from the "Bestof-the-Award Winners"

66 opened my Thinking on how to be more competitive. 99

Bill Rose, Manufacturing Manager Mettler Toledo, Inc. ou'll not only explore new ideas from a wide range of top-scoring winners in Schonberger's global benchmark research, but you'll learn from the "best-of-thebest" in each of his 16 world-class principles.

The 5-step WCP scale is so tough that even major quality award winners average only 3.0 (or 60%) over all 16 principles. However, a select few score a hardly-ever-achieved 4.0 to 5.0 on some principles. At this two-day Institute, you'll explore inside information from the cream of the crop taken from Dick Schonberger's research and award winners.

These are the same 16 principles Industry Week called "the true predictors of future success". The Fort Worth Star Telegram said "Schonberger's...16 point strategy pulls together much of what leading manufacturers have done to turn the company around."

CEO's of leading world class companies, including those that have won Baldrige, Deming, Shingo and America's Best Plants awards drive the success engine by including World Class principles as the centerpiece of employee training for continuous improvement. IBM chairman Lou Gerstner announced that IBM will be managed by "principle rather than procedure". Gerstner went on to say "when a situation arises, you don't go to a (procedures) manual, you know in your heart and head what to do."

To boost performance, principles must be customer-focused and action-oriented.

Schonberger's 16 principles are just that.

They are the focus of employee training at companies such as Dow Corning and Hewlett-Packard Components. At Hallmark they were printed on pocket-sized laminated cards and passed out to hundreds of employees.

Bring your Management/Professional Team to this institute to learn how top scoring award winners use Schonberger's proven principles to take World Class to the next level:

- O Best manufacturers: How they rate.
- Diverse pathways to improvement: 18 highscoring companies share their implementation secrets
- Strategic re-direction: From cost management to value management
- Synchronizing the supply chain: Getting organized and setting targets
- Making agility affordable through customized mass production (not mass customization), employing "commonized modularity" at component levels – where 90% of the costs are
- Building power, strength & value through customer-focused, guiding principles
- Manage the processes (quick results), but not the "bottom line" (delayed reaction) mixing the two (common practice) produces an un-balanced scorecard and mixed signals under open-book management
- Guiding principles versus the command and control model
- Motivation and reward in an age of continuous improvement

- Roadblocks: Bad plant design, mismanagement of capacity
- Putting out the "drag-net" for customer information (feeding internal processes with external data)
- Life-cycle product management (combining "marginitis")
- Broad-based recognition and reward (a "basket of values" designed not to break the bank) is key to keeping the work force motivated and involved
- Following the "Golden Rule" of customer focus - and the "Golden Goals"
- O Collaborate to cope with global glut
- Building a ten year plan with the 16 principles
- Logical cell when physical cell is impractical
- Managing chaos via economy-of-control management: tight control that's not too heavy-handed

### YOUR INSTITUTE LEADER DR.RICHARD J. SCHONBERGER HONORED WITH QUALITY GREATS

DEMING AND JURAN

orld Executive Digest (Hong Kong) selected Dr. Richard J. Schonberger as a "significant pathfinder...thinkers and practitioners whose ideas continue to shape management today."

Also included with Dr. Schonberger were Dr. Deming, Dr. Juran, IBM founder Thomas Watson, former GM CEO Alfred P. Sloan, Jr. and quality expert Philip Crosby.

A Quality Digest cover story included Schonberger as one of "The New Gurus -The Next Leaders of the Quality Revolution." Schonberger was joined by Tom Peters, H. James Harrington, Stephen Covey, Eliyahu Goldratt, Ken Blanchard and other leading edge thinkers.

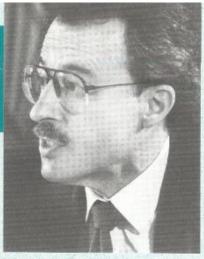
For the past 15 years, Schonberger has been on the forefront of world-class excellence. total quality management and process redesign. While other "gurus" have focused on part of the equation, Schonberger's unique contribution is pulling it all together - from strategy to front line operations, across all the business functions and from deep in the supplier base to the final customer.

This integrated treatment is one reason why his first two books became two of the top three selling manufacturing books of all time and why his casebook is thought to be the best-selling business casebook of all time.

Just under 60,000 managers and professionals have participated in Dick Schonberger's one and two-day seminars. While production/ operations managers made up the bulk of his early seminar audiences, it wasn't long before their counterparts on the service side of manufacturing saw the critical role they played in redesigning their processes and functions for dramatic improvements in quality, cost, speed and service.

An engineer, analyst, and consultant early in his career, he has published over 100 articles and papers in such publications as The Harvard Business Review, Quality Progress, The Wall Street Journal, Journal of Cost Management, Datamation, Personnel Journal, and National Productivity Review.

Prior to serving as an advisor and trainer to business and industry, Dr. Schonberger was awarded the George Cook Distinguished Professor of Management Chair at the University of Nebraska. Among his other honors are the British Institute of Production Engineers International Award which he



received in 1990, and the Academy of the Shingo Prize for Excellence in Manufacturing in 1995.

His clients and sponsors include Procter and Gamble, Levi Strauss, Touche Ross, Dover, Jostens, Sunrise Medical, AT&T, NCR, Cullinet, Microsoft, IBM, Baxter Health Care, the Young Presidents Organization, Singapore National Productivity Board and Fiat, Italy.

### SHOULD YOU ATTEND? YES IF YOU:

- Have business unit or corporate level responsibilities
- Manage or supervise a department
- Are a team leader or lead staff professional
- Are an operator/associate who aspires to a lead/supervisory or management position

Some of the departments and functions which have participated and benefited are: production, operations, industrial/manufacturing engineering, quality, purchasing, materials, accounting and finance, marketing & sales, HRD and information systems.

### WILL YOU GET YOUR TIME & MONEY'S WORTH IF YOU AND YOUR TEAM ATTEND AGAIN?

We'll let Mr. Doug Pratt, Site Manager with Dow Corning Corp. who attended in '87, '93, '95 and the World Class by Principles Users Group Conference in '97 answer that question. In early 1993 he said, "Once again excellent seminar...I heard (Schonberger) first in 1987 and have been implementing the concepts since." Then in May of 1995 he again brought 20 team members and concluded, "Schonberger's seminar continues to inspire all my leaders to improved world class performance."

If you haven't participated in Schonberger's program since June, 1995, you'll find new insights on taking world class to the next level at this continually updated, reorganized Institute.

### **MANUFACTURING**

COMPANIES WHO'VE SENT **MORE THAN 100** PARTICIPANTS TO SCHONBERGER'S INSTITUTES

You'll be in good company when you join the following manufacturers, and others, who have sent a total of just under 60,000 to Schonberger's seminars.

3M · Hewlett-Packard

Dover . Kodak . GM

Xerox • Hon • Apple

Baxter Healthcare

Siemens . Honeywell

DuPont • AT&T

FMC . Caterpillar

Johnson Controls

Baldor . Solectron

Smith Kline Beecham

Ford . Dow Corning

Emerson Electric

Whirlpool • Amoco Steelcase . R.A.Jones

Texas Instruments

Sun Microsystems

Arrow Group Industries

Scimed Life Systems

Hallmark . Rogers

Target Therapeutics

Mine Safety Appliances

Hughes Aircraft . D.E.C.

Oral B Laboratories

Carrier • Ethicon

Miller Brewing . Amdahl

Jostens • Wheelabrator

Scientific Atlanta

Abbott Labs • Medtronic

Northern Telecom...

and many others.

# Learn how the quality and customer award winners are ramping up performance for the decade ahead

661 now bave an objective way to rate my organization; a clear road map to become world class?

Noell Nassar, Field Ops Support Manager Nabisco

### FIVE-STEP IMPROVEMENT PROCESS IN 16 GUIDING PRINCIPLES

- ---World-class through the next decade
- —Innovation Era: Japan Decade (1970s), U.S. Decade ('80s-90's), World Decade (now)
- —16 guiding principles of customer-driven performance
- Benchmarking/improvement tool; using the 5-step self-assessment sheet
- A quarter century of change: from massively transformed (tool level) to glimmers of enlightenment (executive level)

### Guiding Principles 1-4: General

### 1. Teaming up with customers:

- Interlinked world-class processes toward sustained competitive advantage
- -Competing in a global world of excess capacity
- —Commerce inhibitors: Two thick-walled "castles" in one company
- Toward strategic collaboration: Internal, immediate external partners, whole supply chain
- Roles of multifunctional product strategy team under low, medium, and overheated demand
- —Companies with a new, high-profit solution: Preference for best customers/products; raise the bar for the rest
- —Unifying production and final-use demand through QR & VMI
- Using cells in administrative processes to cut cycle times from days to hours or minutes
- -Cellular approaches even in process industries
- New wisdom on cells: Divide by volume (management issue), not just by process flow (technical wisdom)
- Line-of-sight linkages to resolve process-toprocess variation
- Key issues in breaking up the functions to achieve customer/product focus

### Know your customers, know the competition, know the best

- —Goal convergence: Leading global manufacturers discover the customer
- -Follow the "golden rule" of customer focus
- -Weekly customer feedback the Solectron edge
- Tapping external data Achilles heel in most companies
- Segmented customer and QFD surveys stratified, not just averaged
- -Validate your internal metrics with external data
- Benchmarking options: visitations, clearing houses, award criteria, research

### 3. Continual, rapid improvement in universal customer wants

- —Manage the basics (the processes), watch the results (the "financials") –and knowing how
- What history tells us a half-century analysis of inventory turnovers from four countries
- —Leading-edge strategy: Slash inventory and generate cash for growth through acquisition—debt free!
- -Competitive imperative: Value, not cost
- Establishing value (and non-value) as a key indicator – definitions and metrics
- -Find out your true costs to make products,

- generate customers, process invoices, etc.; revise your competitive strategies accordingly
- -The costing paradox in process industries
- Management transition: edict to procedure to policy to principle

### 4. Frontline teams involved in change and strategic planning

- How a Baldrige winner employs high-impact workforce involvement
- -How many people per process team?
- —Makeup of an effective team: What's most important?
- -Linking geographically spaced team members
- -What implementation is and is not
- —Diverse pathways to excellence from 18 high-scoring companies
  - How your team measures up Do assessment exercise

How to use the customer-focused principles

### Guiding Principle 5: Design; Supplier Partners

### 5. Cut to the few best components, operations, and suppliers

- -Innovations in product development
- -Target pricing and life-cycle product development
- Miscues in the Far East: Over investment in variety, automation
- Design-for-operations guidelines for piece goods, process industry, and support operations
- —Rise of production volumes
- -Reining-in variety; watch out for "style quirks"
- -Supplier partnership issues
- The sourcing team sourcing on total quality, total cost
- Cut final assembly parts through delivery in modules, commodity families; building stronger suppliers
- Outsourcing benefits and downside (virtual uncertainty and confusion)

### Guiding Principles 6-7: Operations

### Cut flow time and distance, start-up/changeover times

- Calculate your percent value-added (PVA), a.k.a., response ratio
- Example: Using PVA in an apparel plant to reveal need for reengineering
- —The widening role of queue limitation (a.k.a., kanban)
- —Choose your competition-beating cycle time; then achieve it through
- queue limitation plus enhanced labor flexibility —Move your emergency buffer stocks to off-line
- locations out of sight, out of cycle-time loop.
  —Quick-changeover, a never-ending pursuit;
- quick-change guidelines and documentation
  —In process industry turn the product wheel faster;
- -Evening project: Complete principles-based self-assessment and your plan for step-by-step year-to-year improvements - for presentation

### Operate close to customers' rate of use or demand

-Scheduling modes - from high complexity

- (projects) to dedicated, rate-based simplicity
- Pick your synchronized scheduling method: match the order book, or smooth it into a rate
- —Monitor the schedule with the linearity index
- Calculating takt time, and using it for capacity determination
- -In the job shop, sequence, don't schedule
- How to do "slow-rate scheduling" for complex, out-sized products
- —Seasonality: planning the base, upslope, downslope, and peak on the "demand mountain"
- -Distribution centers/distributors in transition
- Kaizen Blitzes, success formula for certain small manufacturers

### Guiding Principles 8-9: Human Resources

### 8. Continual training for new roles

- —Shifting premises and practices in human resource management
- From leadership to teamsmanship, manager to facilitator
- -Maximizing employee value
- Two-track learning: whole-system knowledge, tools and techniques
- Star system: How to achieve self-managed teamwork
- —How to upgrade manual assembly work: guidelines
- H.R. management what to keep, what to outsource, what to line absorb
- -Roles of middle managers and leads/supervisors
- —Improvement teams for temps and minimumwage associates, too!

### Expand variety of rewards, recognition, and pay

- -High-grade H.R. one company's system
- -Basket of values:
  - Identification . Job . Career . No-cost, low-cost
  - · Monetary

### Guiding Principles 10-11: Quality and Process Improvement

### 10. Continually reduce variation and mishaps

- Expanding our concept of quality from corrective to customer-serving
- Seven basic tools for everyone; applications and mis-applications
- -Coping with part-to-part variation
- Improvements that "stick": First improve, then stabilize and standardize
- Process capability a moving target under a system of continuous improvement
- Why projects are "always" late and what to do about it (how to combat project uncertainty, complexity, delay)
- Exercise: Design your personal (or your team's) quality check sheet

### 11. Frontline teams record and own process data at workplace

- -Keys to employee-driven process management
- Designating a best-qualified associate for each process
- Fixing the suggestion system; toward team suggestions

### Guiding Principles 12-13: Information for Operations and Improvement (Control)

### 12. Control root causes to cut internal transactions

- -Fail-safing-key focal point for improvement
- Emerging, growing (shrinking) uses of information technology
- -Cutting transactions via incremental kanban
- Today's manufacturing software mostly designed for yesterday's company
- Design for tomorrow's software-outside (customers, suppliers) in
- Shifting production control toward process discipline

### 13. Align performance measures with universal customer wafts

- Praise improvement, scold laxity via signboard management
- Cautious approach to open-book management;
   open the books by degrees
- -Making the numbers but whose numbers
- Results not always what they seem (beware of an imbalanced scorecard)

### Guiding Principles 14-15: Capacity

### Improve present capacity before new equipment and automation

- —From conventional preventive maintenance to total PM
- -Monitor the 5 S's using the spider chart
- —Get the most from your present capacity through pre-automation

### Seek simple, flexible, movable, low-cost equipment in multiples

- -Capacity forecasting/capacity management
- Capacity unchained and stretched beyond limits
- Lean machine concepts in the process industries, too
- -The "dreaded" demand/capacity triangle
- Shaping production lines for teamwork and process-improvement flexibility
- Fallacies of cost-based studies: Why feasibility studies go wrong
- -Finding the limits of flexibility

### Guiding Principle 16: Marketing and Customer Presentation

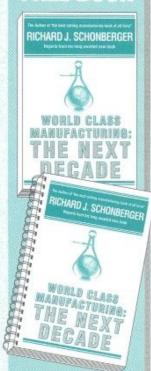
### 16. Promote, Market, and Sell Every Improvement

- -Four more tools in the sales kit
- Promote each improvement internally and externally
- Joint marketing strategies for manufacturer, distributor, retailer
- —Fact-driven proposals: an end to pricing, promising "in the dark"
- —From the reality of quality, to its management, to its external presentation

### NEXT GENERATION STRATEGIES

- Implementation obstacles and setbacks and common diagnoses
- ---Strategic evolution, 1980-present
- —A ten-year plan for industry and for your company

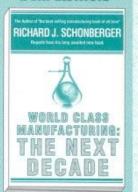
### FREE BOOK



Highly touted by St. Execs gatticipants will expens a copy of Schemberger's latest break Expensive by Industry Meek, it's a must-read.

You'll rise receive a workbook including over 150 pp of each generation world class processes, strategies factics. Now chapts, checklists before & after surphishes and a perchanak set scoroto assessment.

### PRESENTING A 2-DAY INSTITUTE



Best selling author R. J. Schonberger reveals how the "best-of-the-best" are taking world class performance to the next level.

### Your Pre-arranged Group Could Save Thousands...And You Can Include Suppliers and Customers

Organize a group now, and you can save thousands of training dollars. If 20 of your division/plants/offices/departments enroll one person each, the tuition is \$895 x 20 or \$17,900 total. However, if you assign one individual to coordinate a pre-arranged group of 20 and pay from one invoice per city, the rate drops to \$475 each or a savings of \$8,400.

### 12 Subsidiaries Coordinate Groups from 1 to 9 each, totaling 41 - SAVE a Potential \$17,220

A 2 billion plus dollar conglomerate asked us to coordinate groups from their subsidiaries. 12 subsidiaries sent groups ranging in size from one to nine people each for a total of 41 participants attending different seminars. As a result, they saved a potential \$17,220 at today's fees (41 at the \$895 individual fee versus 41 at the \$475 each group rafe). Other companies have invited suppliers, customers and even their neighbors to "join their invoice" and lower the fee for all. Call for more information.

### Your Smaller Groups in Different Cities Still Earn a Combined Discount

Another way to save is to appoint a national group coordinator and send groups to all four sen Pittsburgh and 3 in Dearborn, you still earn a discount for a total group of 10 and save \$2,820. aminars. For example, if you enroll a group of 2 in San Jose, 2 in Minneapolis, 3 in

### **How to Start Earning Discounts**

1) Assign one individual to coordinate and phone or send in all reservations from all plants, offices, business units, and locations. 2) Pay from one invoice per city. 3) Once you have enrolled a group on a single invoice you can add to it any time.

### Fees-Discounts up to 47%

Full fultion is payable in advance and includes: 1) cost of session, 2) a workbook, 3) a copy of Dr. Schonberger's book, 4) two functions and refreshments during the program. Your fultion level depends upon the number in v

CONTRACTOR AND INCIDENCE AND ADDRESS OF THE PARTY OF THE	The state of the s	THE RESERVE TO SHARE THE PARTY OF THE PARTY	Territory College Coll			the state of the s	
Individual: \$895 ea.	3: \$825 ea.	5: \$745 ea.	7: \$650 ва.	9:	\$565 ea.	15 - 19:	\$495 ea.
Groups of 2: \$845 ea.	4: \$795 ea.	6: \$695 ea.	8: \$595 ea.	10 - 14:	\$525 ea.	20+:	\$475 ea.

### Cancellation, Transfer, and Substitution

he tuition fee is refundable, less a \$25 registration fee, if cancellation notice is received in our office up to five weekdays (M-F) prior to the seminar. Otherwise, the fee is transferable to a future program within 12 months. Substitution(s) may be made at any time.

### Meeting Room Locations and Accommodations

Meetings will be held at the following hotels. Ask the hotel for our low-meeting rates, if you have any difficulty with the reservations department, just let us know and we'll have the

gains waitafier her	surially take care of you.		
Atlanta, GA	Atlanta Mariott Northwest 30 min Hartsfield Airport	Suburban, indoor/outdoor pool, exercise room, tennis courts, jogging trail	(770)952-7900
Chicago, IL	Marriott Lincolnshire Resort 25 min O'Hare Airport	Suburban, indoor/outdoor pools, health club, steam room, indoor tennis & racquetball, PGA golf course	(847)634-0100
Cincinnati, OH	OH Cincinnati Marriott Suburban, indoor/outdoor pool; access to private fitness club for tennis/nautilus equipment 40 min Cincinnati Airport		(513)772-1720
Costa Mesa, CA	Doubletree Airport  10 min Orange County Airport  45 min Los Angeles Int'l Airport	Airport hotel, outdoor pool, exercise room, across from the South Coast Plaza Shopping Center	(714)540-7000

### Schedule

issions will be conducted from 9:00 a.m. to 4:30 p.m. on the first day and 8:30 a.m. to 3:00 p.m. on the second day. Please arrive between 8:15 and 9:00 a.m. to check in and pick

### Frequent Flyer Program - Fly Once, Earn Twice for FREE Airline Tickets

There's no faster way to earn free air tickets than through membership in the Travel Network, Loveland, Colorado's Matching Miles Club. Earn matching miles every time you nany major airline. Just purchase your ticket from Travel Network by calling (800) 635-1903 ext. 03, 8:30 a.m. - 5:30 p.m. (MT) Monday-Friday, Saturday 9:90 a.m. - 1:00 p.m. ork, Loveland, Colorado's Matching Miles Club. Earn matching miles every time you fly on Free overnight ticket delivery.



CLIP AND MAIL OR FAX

### MANAGEMENT RESEARCH CORPORATION

1119 Wrangler Way, Loveland, CO, 80537 USA

\*\*\*\*\*\*\*3-DIGIT 076 09 PRIORITY CODE: 620 W BLY WACKENBUSH AVE NJ 07628-3055

**BULK RATE** U.S. Postage PAID Denver, CO Permit No. 3735

	Phone/Fax: (970) 669-8855 or 1-8  CALL: (970) 669-8855 or 1-800-484	100-484-5886 ext. 8855	11 mm mm 11 1 11 11	PRIORITY CODE: 620 BLY (ENBUSH AVE 07628-3055
	MAIL: Cut on dotted line and mail this	s form		
l	FAX: Registration Form (970) 669-88			
	Please reserve a place for the followi author, Dr. Richard J. Schonberger's		Illintintillin	.ldb.dadldlaaddabladdablbad
		as \$475 each if there are 20 or more can send groups to one or all four U.S unt.		Fill in the 3- or 4-digit priority code that appears on name or to the right hand side of the address). The
	Select your city:  March 24-25 Chicago, IL  April 23-24 Atlanta, GA	May 12-13 Cincinnati, OH	6	be addressed to you.  Tuition due prior to Institute: Please fill in Our check enclosed in the amount of \$
	2 Team members who wi	June 4-5 Costa Mesa, CA	6	Purchase order attached #  Check all that best describe your organ  Repetitive mfr/Hi volume  Job shop/Custom
	Name Name	Title Title	7	What general type of products do you produce ( electronics, automotive parts, medical equipme
	Please list additional participal		O	How many neonle work at your location only?

Approving manager's name and your address:

Company

Phone No. Ext.

Internal Mail Code

Zip/Post Code

Name of approving Manager

Mailing Address

State/province

Fax

4	Your priority code:
	Fill in the 3- or 4-digit priority code that appears on the mailing label (above the name or to the right hand side of the address). The brochure does not have
	be addressed to you.

Tuition due prior to Institute: Please fill in one of the following: Our check enclosed in the amount of \$

Purchase order attached #

### (6) Check all that best describe your organization:

- Repetitive mfr/Hi volume Job shop/Custom mfr Process industry
- What general type of products do you produce (for example, consumer electronics, automotive parts, medical equipment, etc.)
- How many people work at your location only?

### Bring this best-selling program to your company or your professional association/society

This institute, with best-selling author Richard J. Schonberger in person, or his staff, is available for presentation to your company or your professional association. Join companies such as Hewlett-Packard, 3M, Dupont, Hallmark and Whirlpool plus societies such as APICS, IIE, and SME who have trained tens of thousands of managers and professionals in hundreds of on-site seminars. Sessions have been conducted throughout the U.S., Canada, the European Union, Scandinavia, South America, Africa and the Pacific Rim.