

WHEN YOU'RE THE ESTABLISHMENT II

What mismanagement of Plant Maintenance certificates, certification and licensing programs has cost this profession. Why corporations don't demand Maintenance certification when hiring. Why the entire plant maintenance profession could be gone in 7-8 years! How this crisis should be turned around, organized, administered, and managed for future growth.

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Three years ago, I penned an article called "When You're The Establishment." In a sentence, it described what guidance, protection friendship and mentoring is all about. Back then, I forecasted the downfall of a professional maintenance association, the Association for Facilities Engineers, and much to my regret it has come to pass. This time around, I'm concerned that the entire plant maintenance profession could be gone in 7-8 years!

What happened to the AFE could happen to the SMRP, if they forget this most important theorem. The plant maintenance establishment has many responsibilities that I can think of off the top of my head. The most prominent of them is protection, guidance and fellowship. That we of the establishment are a kind of regulatory agency for younger professionals in this business, and we are bound by the duties of regulators: Orderliness, and Protection. Setting up solid, mature, responsible certification programs for the maintenance profession is important, but it accomplishes less than 20% of the mission. The harm that is allowed to occur by the 80% portion left wanting, cannot be reversed by well thought out certification programs or imagined standards of excellence.

Why I Sound the Alarm

I have been dismayed by the victimization I have seen. This profession as a whole has been mistreated by consultants' and outsourcers' activities dealing with unscrupulous application of TPM/Lean Manufacturing and predatory competitive pricing respectively. Imagine an instance where an outsourcer calls upon your management, quoting prices for carrying out maintenance that is a fraction of that needed to employ you and your staff. Not until you and your intrinsic certified knowledge of maintenance, and that of your in-house staff has been replaced, perhaps resulting in the operation later experiencing a sizable diminution in its ability to deliver plant throughput, does the truth about the outsourcer become known. I found an employer whose employees were made to work as contractors, working without fringe benefits, or even employer-supplied workman's compensation. The employee was expected to supply it themselves.

The net costs to the primary outsource contractor was indeed reasonable. They could geometrically reduce their blanket business insurance coverage on an individual and vacate those matching contributions to Federal & State Income Taxes, Medicare, and Social Security, that occur when they employ these people. The really bad news: On any given day, a contractor-supplied "Contractor" might commit elsewhere, leaving no assurance that your plant would be serviced by the same team. This practice is now being

investigated by the Department of Labor, the good people (among others) who should have been on station to prevent the Enron debacle. These are subjects not covered in pristine certification courses.

As to TPM/Lean Manufacturing: When JIT and Fast Flow emerged, with it came its brilliant theorem for reduction of WIP component Cost of Possession, and another; reducing management layering, reducing personnel - Downsizing. Later, Downsizing would be blamed on Business Process Reengineering, which was totally the wrong thing to do. Lean Manufacturing: The hacking away at three levels of management appeared to be brilliant; but not validating that those management levels remaining were servicing all of the Product/Services "Fulfillment Functions," proved disastrous. The precept: Get rid of those middle managers and first-line supervisors performing fulfillment function oversight, replacing them with Parkinsonian Theory and Outsourcing. It's gambling against the house.

Parkinsonian Theory: Work fills available time. Demand that a technician do an hour of mean engineered work in ½ an hour, and they will get it done. Theoretically, you could eliminate supervision, and pile on the work; and it would be accomplished! Exhaustion, dissatisfaction & buried in work; that is how many of the "Surviving" managers describe themselves. For the first nine years of the 1990's, middle managers were scrambling to hold on to their jobs amid arbitrary and capricious downsizing. Upper management didn't care, as they were ignorant of what it took for maintenance to produce sustained equipment capacity on the plant floor: "Half of you will to hold on to your jobs, by working half again your present hours for the same pay." They care now, even with today's higher unemployment rates. With the public awareness of "Nursing Shortages," recent articles have begun to note a maintenance technician shortage among other tech skills: Companies are going begging for these very folks, and those who stayed are exhausted. Daily we hear the "Horror stories:"

In their 1st book on Business Process Reengineering, Hammer & Champy stated emphatically that BPR was "Breaking Rules," not downsizing, and went on to prove it. They used purchasing as an example of how you could reengineer a function, improving it geometrically. They were so correct in their observance, that if today's Enterprise Resource Planning, Computerized Maintenance Management Systems, and now, E-Commerce purveyors truly delivered their acquisition prognostication, corporations would be saving tens of millions of dollars in cost of acquisition and punitive costs of postponement alone. However, such functionality isn't

anywhere near to being served because corporate management is unaware of what plant maintenance contributes, or what a certified maintenance officer is supposed to know and produce via management disciplines and comprehensive maintenance decision-support engines. We're missing the functional-savvy, businessperson/manager in the ranks of maintenance professionals!

The 40% Portion

You're never going to get the job done of saving this profession. Not unless "The Establishment" rolls up its sleeves and drags those outside of the profession, those with the checkbooks, into executive briefings on plant maintenance, and teaches the suits to have standards for equipment reliability & throughput, not expectations. Armed with knowledge, the burden will be on them to make the changes. Yet, only 1 out of 50 senior execs knows what plant maintenance manages. That's why they don't demand maintenance certificates for new executive hires as they do from accountants, purchasing and manufacturing specialists! Get them into workshops, where they can be exposed to manufacturing-oriented common sense presentations, not promotion of TPM/Lean Manufacturing theory. These people want to know why their plant processes aren't performing even during this recessionary period, and I keep asking:

Are you a plant or corporate manufacturing manager who can't answer these scary questions:

1. Do you know whether your manufacturing plants have enough physical equipment capacity on its production equipment, to keep producing to end-of-month?
2. Even if your maintenance department has specific answers to question #1, do you know if it has in place a working, integrated physical equipment capacity replacement program for each of its pieces of equipment, manufacturing cells and systems on the production floor?

We're Not Ready To Be That Accomplished

It was easy to whine and complain about prejudice and injustice when we were the impatient youngsters trying to survive in this profession. Our predecessors on the other hand, had more respect for the establishment, authority, the rule of law, and perhaps for each other. More to the point, they balanced discipline, certification and education more finitely than I have witnessed in over twenty years. The plant maintenance profession wasn't as embattled then, as it is today, but yesterday's cohesiveness could have handled today's problems with more ingenuity. Getting an answer; "We're not ready to be that big," is unacceptable given the looming battle to preserve plant maintenance, a profession that could be gone in 7-8 years! But that was the response when I asked the Board of Directors of a leading society why they limited the number of exhibitors at their conferences, and why they weren't trying to enlarge their membership to between 60,000-80,000 members. The job of the Establishment is the cultivation, education and the protection of its members.

Conclusion: We have many obligations to the impatient and embattled plant engineering youngsters of today, now that we are the establishment. Across-the-board businesslike maturity is nurtured and managed by an adult, directioned leadership. I'm one of them. We must come into sight as a business-centered fraternity, providing the type of comprehensive coaching to corporate management that will have them emerging from executive workshops with detailed answers to the two questions offered above; to stimulate them to hire the Certified Reliability and Maintainability personnel, the next generation of competitive problem solver. This is serious national business.

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Dr. Goldstein is the principal owner of Manufacturing and Maintenance Associates, Inc. of New Jersey, Manufacturing and Maintenance InfoSource of Northern Virginia, and is the founder of Manufacturing and Maintenance Systems, Inc. of Illinois. With over 41 years of corporate experience, he has served such companies as ITT, IBM, Honeywell, DTI, Inc., Ogden and COMNET Corporation.

He has an extensive background in manufacturing, engineering and purchasing systems, including applications of maintenance management, maintenance planning & scheduling systems, process control, methods engineering, industrial engineering, production planning and inventory control, materials management, shop floor control, safety engineering, test equipment design, distribution management, automation of warehousing and accounting. An experienced lecturer with over 40 years of experience on the podium, he has made presentations to over 186,000 attendees.

He is the author of several industry standards TPM II/GAMASP-RBMS/CMMS© (Total Productive Maintenance/ Generally Accepted Maintenance Application Systems Principals- Reliability-Based Maintenance Systems/Computerized Maintenance Management Systems) plus CLASS "A-D" GAMASP/GUI (Graphic User Interface).

Dr. Goldstein has conducted hundreds of seminars concerning manufacturing, process, purchasing, plant maintenance and distribution disciplines and is a contributor to many professional publications including: Computerworld, Business Week, Barron's, Chemical Week, Chemical Engineering, Modern Plastics, High Technology, Electronic Week, Purchasing Magazine, Maintenance Technology, Plant Engineering, Industrial Maintenance & Plant Operations, Reliability, Engineers Digest, Canadian Plant, Plant Services, American Machinist and Facility Maintenance and Operations Magazine.

As an enthusiastic supporter of several professional organizations, he has conducted hundreds of seminars for AIIE, IEEE, APICS, ASME, SME, AFE, AITPM, ICM, DPMA, ACM, NPRA, NAPM, PMA, the American Management Association, the Portland Cement Association, and over two dozen universities and polytechnic institutes.

He has been a technical advisor and consultant to dozens of major corporations including: Union Carbide, U.S. Steel, IBM, Boeing, Digital Equipment Corp., Data General, Varian, General Electric, American Cyanamid, Texaco, Mobil, National Lead, Chevron Oil, Olin, Exxon, Merck, Pfizer, Schering, General Foods, Nestle's, Textron Lycoming, United Technologies, Hercules, Bethlehem Steel, Inland Steel, Reynolds Metals, Philip Morris, RJR, BAT and Lone Star Cement. He is currently a technical advisor and consultant to dozens of major manufacturing, maintenance and process-oriented hardware and software firms.