Sign up for this time critical program and you will completely understand how to

Permanently Eliminate 92% of Your Unscheduled Equipment Downtime Within 30 Days

Give Your Company the Near 100% Equipment Uptime and Reliability It Demands While Cutting Your Maintenance Expense by 50% and More

Protect from the real causes of equipment downtime--not just their symptoms.

Finally, a program for protecting automation, electronic and computer-controlled equipment from the <u>real</u> cause of malfunctions, failures, and downtime--**chronic stress**. Learn why circuit board failures, hydraulic system failures and other malfunctions are only <u>symptoms</u>, not the underlying cause of unscheduled equipment downtime.

Unlike "preventive maintenance" programs which focus primarily on periodic replacement, monitoring, measuring, and reporting of equipment failures, <u>this unique program</u> focuses instead on total **elimination of stresses** which cause your malfunctions and <u>unscheduled downtime</u>.

Discover dramatic reductions in downtime and costs--without capital requests.

Most companies implementing this program find <u>maintenance cost savings</u> alone pay for their <u>entire</u> program, thus eliminating their need for capital requests. Your typical <u>payback period</u> for an investment in this program <u>averages only 2 to 3 months</u>! No other investment your company can make this year will offer a greater return. Companies who have implemented this program are experiencing average reductions of 92% in computer, automation and telecommunications equipment malfunctions and unscheduled downtime--within 30 days. For example:

- <u>B.F.Goodrich</u>, the PVC plastic and chemicals division, is now saving over <u>\$720.000</u> per year on the very first system they protected. Cost for protection - less than \$2,900.
- <u>Intel</u>, the world's leading manufacturer of microprocessor chips, spent only \$219 on our recommendation to eliminate an "unsolvable" occasional wafer processing machine glitch. The savings--<u>\$540,000</u> their first year.
- At <u>Warner-Ishi</u>, an automotive turbine blower manufacturer, malfunctions and unscheduled downtime in their Flexible Machining JIT cells stopped assembly 3 to 5 times a week, at a cost of \$2,300 per hour. During their first 5 months after implementing our recommendations, they experienced zero downtime. While they invested over \$27,000 in this program, ongoing operations now realize savings of <u>\$1.2 million per year</u>, with <u>better than</u> 92% reduction in equipment downtime.

Experience our better-than-risk-free guarantee.

You pay nothing up front. And there is never a charge until you are totally satisfied this program has met your expectations. You alone decide.

Should you have any future electronic failures, caused by failure of our protection devices, your repair costs will be <u>paid</u> by manufacturer warranties up to \$25,000.00.

7 Ways You Benefit Immediately From This Program

Your frustration with <u>unscheduled downtime</u> and <u>daily malfunction crises</u> are effectively eliminated.

With this program, scheduled maintenance can be performed <u>when it's scheduled</u>, not when you hope to fit it in. You will prevent "fires" thus avoid "fire fighting".

You experience freedom from worry about downtime, malfunctions, and "scrap parts" costs caused by:

<u>Lightning storms</u> striking your area. No more data errors, system lock-ups, or component failure. <u>Summer-heat</u> waves and other electronic cabinet over-temperature problems. Equipment generated voltage surges, spikes, and other transients. Remember, over 65% of these transients are <u>generated by your own</u> plant operations!

Oxidation on aging cable and circuit board connectors, hydraulic contamination, etc..

The crippling effects of <u>power outage</u>. Expensive UPS backup systems can almost never be cost justified when compared with this program.

<u>Alert monitoring & reporting</u> of critical components, functions and processes. We can alert you at work, at home, or on the golf course when critical components or processes are about to fail.

You typically see 92% reduction on what you now consider <u>"normal"</u> electronics systems downtime, and you'll see it within 30 days. 'See 80% reduction on hydraulic systems and 50% reduction of mechanical downtime!

Your spare parts <u>inventory is dramatically reduced</u>. With 92% reduction in unscheduled equipment downtime, most spare parts simply are no longer needed. 'Lean Maintenance for Lean Manufacturing.

You greatly enhance and extend the useful <u>life of your existing equipment</u>, often by as much as <u>10 to</u> <u>15 years</u>. This lets you support significantly higher levels of <u>productivity without</u> buying newer equipment. The avoided costs of downtime move straight to your "profit line."

How this Program Works

This program enables you to eliminate stress from power surges, lightning storm induced transients, and equipment related interactive voltage bumps. You will also eliminate stresses of heat, vibration, oxidation, dirt build-up, hydraulic contamination, and failing components, functions and processes.

Everything is done <u>at your plant site</u>. Neither you nor your people waste valuable time away from your facility. Basically, our program consists of **two key parts**:

First, <u>we survey your</u> automated, telecom and computer-controlled equipment, and if present, hydraulic equipment. This enables us to recommend precise techniques necessary to protect your equipment from the basic stresses causing virtually all malfunctions, failures, and unscheduled downtime.

We survey critical pieces of equipment in your plant or facility, plus other equipment identified by those attending our in-plant seminar.

20 years of experience working directly on plant manufacturing floors, in hospitals and in data centers solving problems just like yours, enable us to <u>quickly identify and recommend</u> exact techniques to eliminate the above stresses and problems--permanently!

How this Program Works (continued)

Within 2 weeks after the survey, you receive, by Express Mail, a detailed 10 to 30 page <u>machine by machine</u> or system by system <u>corrective action report</u> recommending exactly which protection techniques to use, and precisely how to install any recommended devices to eliminate stress from causing malfunctions.

Our corrective action report identifies exact protection devices and <u>precise connection</u> <u>points</u>, right down to specific terminal strip and screw numbers.

You are free to purchase recommended protection devices from any source you choose. We identify the exact manufacturer and model number for each recommendation in our report. Since we are independent consultants, devices and techniques we recommend do change and will continue changing, reflecting improvements and refinements from our ongoing research and <u>field experience</u>. However, we do provide discount prices on most protective devices, to further reduce your investment for needed protection.

Second, we want you to clearly understand the causes of equipment failure, the rationale behind our techniques, and the methods you can use to <u>implement these techniques yourself</u>. So we conduct a 3-hour seminar explaining this to all your key people--again, right in your plant. This usually takes the first 3 hours of the first day.

The <u>seminar concept</u>: Three kinds of "downtime." Which and How are they avoidable.

By eliminating basic stresses causing downtime to telecom, computer and factory automation equipment you can eliminate malfunctions and failures. You can eliminate unscheduled downtime. Removing equipment stress guarantees minimal equipment failure.

We discuss in detail what these stresses are, and explain practical, cost effective, proven techniques to eliminate them from each piece of your electronic and computer controlled equipment--<u>forever</u>! Mechanical and hydraulic system stresses are also covered, if present in your facility. Monitor the rest, then fix before failure.

<u>Who should attend</u>: All technical and management personnel, from maitenance technicians to VP level professionals; all who are responsible for, or interested in, reducing unscheduled equipment downtime, including: Manufacturing Engineering Manager, Plant Engineering Manager, Maintenance Manager, Facilities Engineers, Maintenance Engineers, Supervisors, Technicians, Data Processing Manager, Telecom Engineers, and other company management.

This seminar has been <u>presented at national conventions</u> for the Society of Manufacturing Engineers, the International Machine Tool Show, the American Society of Hospital Engineers, the United Lightning Protection Association and others. It is referred by National Machine Tool Builders Association, TeITech Resources, SME and other national engineering resource centers.

Comments and Testimonials From Major U.S. Companies Utilizing This Program

"...really oriented us to a most practical, cost effective maintenance engineering program. We have reduced electrical tickets or work orders by 70% on all applicable automated machines and systems". *- Clair Bentezl*, NC Technician, Caterpillar, Inc.

" Circuit board failures for 30 NC and CNC systems has dropped from three to four per <u>month</u> to **three to four per <u>year</u>, a 92%** reduction".

- Howard Olsen, Manager Manufacturing Engineering, Colt Industries

We fully agree with the concepts of your seminar and report which resulted from Amemco's survey of our 100 NC Machines. As a test, we installed all stress elimination systems on our 15 worst-case computer controls. The results were so impressive, we budgeted for and installed your recommendations on the other 85 during the next year. We now "harden" each new machine we get. With J.I.T. manufacturing, your hardening methods are a must.

- The TRANE Company, Wisconsin commercial air conditioning manufacturer

"By following your program we have <u>cut equipment downtime</u>, malfunctions and electronic failures <u>to</u> <u>near zero</u>. Thanks, we will expand application of these most cost effective concepts".

- Dick Kohli, Maintenance Manager, Minster Machine Tool

With a new building and all new CNC machines, we were plagued over the first 15 months with "normal maintenance" downtime of 40%, and machine utilization of 50%. This changed dramatically after implementing your program for eliminating stresses. "Normal maintenance" downtime dropped to 6 - 8% and has remained there for over a year. Machine utilization jumped above **90%**, continuously.

- West Code, Inc., Pennsylvania train valve manufacturer

"Benefits of eliminating these stresses have been <u>cost effective</u>, very dependable, and extremely important. Our electronic downtime and board failure has been reduced by 100%. Overall equipment downtime has been reduced by 100%. This has yielded an estimated annual savings of undetermined amounts. However, <u>these savings do go well into the millions of dollars</u>."

- Joseph Dempsey, Plant Engineering Mgr., Chubb Group of Insurance Companies

Partial list of major U.S. companies we've worked with:

G.E.	Cummins Engine	National Semiconductor
FMC	The Trane Company	Rockwell International
Intel	B.F. Goodrich	Fisher Controls Corp.
Honda	American Express	Hercules Aerospace Co.
Eclipse	West Code	Colt Industries
Rexnord	H.C.A. Hospitals	Caterpillar Inc.
Borg-Warner	Texas Instruments	Pratt & Whitney Aircraft
NTN Bower	Hughes-Baker/EIMCO	Chubb Insurance Data Center
S.W. Bell	Exxon Mobil	Helmerich & Payne IDC

Our Unique, Risk-Free <u>Guarantee</u>

First. After visiting your plant, performing the survey of your equipment and conducting the in-plant seminar, then writing your survey follow-up report explaining exactly how to protect each piece of equipment, and mailing this report to you, we then call you to insure we have met your expectations:

If everything you received has met or, more likely, <u>exceeded your expectations</u>, we then bill you for our services at the amount we both agreed on, prior to our visit. No surprises.

If you feel something has not met your expectations, we'll continue to work with you until you are completely and totally satisfied with the results. Only then do we bill your account.

Finally, if after all this effort you still feel our service did not meet our promise, the survey and seminar will cost you <u>absolutely nothing</u>. We want you to be completely satisfied - period.

Second. Even <u>better</u> than our first guarantee:

Your company must <u>save</u> at least **3-5 times** your in-plant survey and seminar investment within the <u>first year</u> of implementing our suggestions or we give this investment back--no questions asked!

In addition you will place most of your equipment under warranty that <u>will pay you up to</u> <u>\$25,000.00</u> should our protective devices fail in protecting your electronic equipment.

Third. The total investment for actual recommended protection devices cannot be determined until after we survey your equipment. However, once you do make this protection investment, we offer <u>one further guarantee:</u>

When you purchase protection devices from us (which saves you money and allows us to monitor exactly which techniques you implement, and to provide ongoing application and technical support) and if these devices do not fully meet your needs, we will <u>buy the devices back from you!</u>

Regardless, all the following are yours to keep:

- Your entire 10 to 30 page equipment survey report with all it's recommendations, suggestions, and ideas.
- All technical information on stress reduction distributed at the seminar.
- Our complete maintenance engineering binder packed with invaluable reference information, published articles covering all aspects of equipment stress reduction techniques, and much more.
- And, of course, all knowledge you gained from participating in this program.

Questions and Concerns You May Have About the Program

Q: How do I know this program will really work for me?

Answer: This program is definitely not for every company. It can help your company if:

Your maintenance department is proactive, constantly looking for ways to <u>eliminate</u> unscheduled equipment downtime not just continually <u>fixing</u> it!

Your stated goal is to provide greater than 95% equipment uptime.

You have at least \$4,000,000 invested in computer-controlled machines or systems. However, we solve many smaller operation and individual equipment problems right <u>over the phone</u>.

Your facility is more than 10 years old. But note: we'll show you actual cases where this program has provided absolutely brand new, but <u>under protected</u> equipment, with the same dramatic reductions in unscheduled equipment downtime (see two "new facility cases," Intel and Warner-Ishi on page 1).

Q: This looks interesting but we've already done a lot of these things.

Answer: The <u>techniques</u> used to implement these concepts are critically important! While some companies have implemented a few similar concepts, what we invariably find is that their methods often can be enhanced, offering dramatically improved results. We have not found a single company which has implemented the <u>entire range</u> of techniques we employee, which are so <u>critical</u> to making this program work.

One more thing is <u>important</u>. Your company could not possibly experiment with as many different techniques under as many different environments as we have over the past 18 years. Working with thousands of different systems has enabled us to determine precisely how to best accomplish maximum equipment protection and uptime for the least cost and effort, guaranteeing you performance and the greatest possible benefit.

Q: I'll bet this program is really expensive? And we're in a tight budget crunch right now.

Answer: This program is the least expensive yet the most cost effective way to attack your unscheduled downtime. As one Mid-west machine tool manufacturer recently said, "My machine downtime averages \$100 per hour per machine. Savings paid for this entire program in our first month alone! Since then, it's been pure profit!"

Q: Is this just another maintenance program?

Answer: No. Unlike preventive and predictive maintenance programs or third-party maintenance contracts, this unique approach focuses on <u>total elimination</u> of stresses causing unscheduled downtime. This one-time program, often implemented within 30 days, requires <u>no ongoing expenditure</u> by you. Yet its benefits continue for the extended life of your equipment.

Q: Capital expense requests are a real pain, and often not worth the hassle.

Answer: <u>Maintenance cost reductions</u> alone normally pay for <u>complete</u> installation of recommended protection, totally eliminating your time-consuming capital appropriations hassles. Remember these are one-time cost, one step procedures to permanently avoid future costly problems.

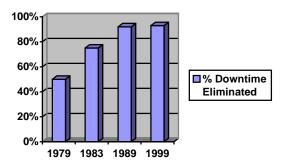
Q: Our maintenance department is understaffed and too busy to implement any new programs.

Answer: By focusing on permanent elimination of root causes of equipment downtime, this program offers you the <u>only</u> effective <u>way</u> to end your reactive approach to daily problems. It assures consistent performance even with minimal staff and keeps you on track, allowing you to remain proactive. Otherwise, you'll never have enough time.

Our Credentials and Background

Mr. Howard Cooper, President and Directing Engineer of Amemco, spent over 10 years providing

electronic and hydraulic maintenance engineering services employed by Signetics, Baker/Eimco, and John Deere Company, <u>working directly on their</u> <u>manufacturing floors solving problems just like</u> <u>yours</u>. In his final year with John Deere, Mr. Cooper discovered the key to dramatically reducing unscheduled equipment downtime: by eliminating six basic stresses that cause the downtime. During it's first year of application, his 1979 maintenance engineering program generated average downtime reductions of **50%**.



During the next 4 years, till 1983, continuous improvements and enhancements to his techniques resulted in his reducing downtime for Baker/Eimco by **75%**.

Now, for the past 21 years, Mr. Cooper has consulted directly with <u>top manufacturing companies</u> <u>across America</u>, (see page 4) and helps them eliminate an **average 92%** of their downtime.

Mr. Cooper is widely **published**, having written several technical conference reports and more than 20 different articles for engineering and technical magazines including:

Computer/Electronic Commline American Machinist Service News Control Production Engineering Electrical Contractor Plant Services ComputerWorld Tooling & Production Medical Electronics Pittsburg Engineer Measurement & Control Manufacturing Engineering S.M.E.

Call Amemco at 801-544-9999 for copies of any of these results-oriented articles. A select set of these articles is included <u>at no charge</u> as part of this program.

How To Begin Eliminating 92% of Your Unscheduled Equipment Downtime

Call Howard **today at 801-859-2073.** Together you will evaluate your individual situation and, using his 25 years of experience, lay out a customized strategy for maximizing your equipment uptime, reliability and productivity--all right over the phone.

Next, you may schedule a time for Mr. Cooper to visit your plant. He will quote an **exact amount** for this in-plant equipment survey and seminar, based on your equipment types and numbers.

Remember you <u>invest nothing at this time</u>. You are billed only after all your expectations are met to your satisfaction, as fully described in our **Unique**, **Risk-free Guarantee** described on page 5. <u>Call today</u> for less downtime, maximum uptime and for <u>higher profits tomorrow</u>!