

# MRO Software’s Strategic MRO Solution Streamlines Hart & Cooley’s Preventive Maintenance

For 100 years Hart & Cooley manufactured heating and cooling products for the world, and enjoyed unprecedented success. As the U.S.’s leading manufacturer of registers, grills, gas vents and flexible duct systems, the company has maintained its headquarters in Holland, Michigan since 1928, as well as other plants in Alabama, California, Tennessee, Texas and Mexico. The 614,000-square-foot Holland facility remains the company’s focal point, with more than 700 employees.

When London-based investment company Tomkins PLC purchased the company in 2000, it immediately recognized the strategic importance of preserving Hart & Cooley’s Holland facility, particularly its tried and tested manufacturing equipment. This equipment, used by most Hart & Cooley employees, includes rollform, metal stamping presses, multi-point welders and e-coat and powder-coat paint process stamps that successfully manufactured the company’s flagship heating and cooling products for nearly 50 years. The company’s skilled tradesmen depend on this unique equipment for day-to-day operations, making the equipment’s long-term durability and employee safety a major priority.

Previously, Hart & Cooley had no method of tracking and reporting equipment maintenance. This regularly impacted the bottom line of what is a 24-hour-a-day operation. To avoid unexpected delays, Hart & Cooley recognized that they needed a Strategic MRO solution.

In 1994, Hart & Cooley began searching for a system that would enable them to create an “industrial-strength” preventive maintenance reporting system, as well as streamline several other operational tasks. Hart & Cooley needed to create an automated process for tracking nearly 20,000 work orders annually assigned to its various employees. In addition, the company demanded a powerful solution that could be easily implemented and modified to meet their specific needs. While meeting these needs, the system also had to be scalable enough to expand simultaneously with Hart & Cooley for use in all of the company’s facilities across North America. After evaluating several solutions, Hart & Cooley selected MAXIMO® from MRO Software.



“Scalability was a critical factor in our selection of MAXIMO. We needed a solution that could scale from a one man shop to a very large organization,” explained Bill Broughton, Technical Services Manager for Hart & Cooley. “MAXIMO met our diverse needs.”

Hart & Cooley implemented MAXIMO at its Holland facility and immediately witnessed results. Using MAXIMO, the company created templates for over 3,000 highly detailed preventive maintenance (PM) reports, which its employees use on a daily basis. Rather than rely on the personal knowledge of an individual employee to track equipment repair, Hart & Cooley generates MAXIMO work orders through demand, batched or automatic requests. Everything at the Holland facility, from stamping presses to light bulbs, has a designated PM report. These reports include data covering a piece of equipment’s net usage, past failures and subsequent repair tasks. Since Hart & Cooley’s tradesmen are generally responsible for inputting the data, the system needed to be intuitive, thus enabling them to quickly fill out reports and move onto other projects.

Goals:	Results:
Scale from small to large organization	→ Scaled from one man shop to large organization
Avoid expensive downtime	→ Reduced machine downtime
Adhere to government regulations	→ Met OSHA’s standards and assigned priority codes to safety work orders
Save labor costs	→ Saved labor costs
Monitor critical financial details	→ Capital expenditure field allowed management to track expenditure of capital dollars

# Hart & Cooley Customer Profile

"At Hart & Cooley we employ skilled tradesmen who know our equipment better than anyone," explained Broughton. "While we have always worked to maintain our equipment, we needed to find a better way to track which pieces of equipment were failing at which times. Our goal was to avoid expensive downtime. We also needed to consider the fact that our employees, most of whom have little or no IT experience, needed to be able to work with the system on a daily basis. MAXIMO's intuitive nature made it easy for our skilled tradesmen to take full advantage of the product's capabilities."

MAXIMO also makes the MRO inventory specialist's job easier as it allows the skilled tradesmen to enter the tool crib with a detailed PM that exactly outlines the needed parts. These comprehensive PMs provide the MRO inventory specialist with the necessary information to find the part in less time than it previously took. The PMs also permit the MRO inventory specialist to predict the materials that are going to be used.

"Not only does MAXIMO help streamline my job processes with realized benefits such as time savings through quickly finding the part and making sure that the part is in stock, but the product also helps reduce machine downtime as the tradesmen return to work in a shorter amount of time," commented Arie Doolaard, MRO Inventory Specialist for Hart & Cooley.

As with most asset-intensive companies, Hart & Cooley must also adhere to strict government regulations for the maintenance and specifications of its equipment. For example, a stamping press must stop its downward movement within a strict measurement of time and distance. If a press does not meet this measurement then the Occupational Safety and Health Association (OSHA) may issue a violation. The work order data in MAXIMO helps Hart & Cooley meet OSHA's standards as they use the information to recognize and trend even the slightest change.

To maximize the efficiency of its maintenance team, Hart & Cooley uses MAXIMO to track and assign priority codes to each safety work order. If MAXIMO assigns an S1 code to a piece of equipment, it means that there is an emergency, and a lockout/tagout procedure is automatically set to eliminate the safety hazard. Skilled tradesmen must immediately resolve an S1 issue. An S2 code alerts the crew

that there is a problem, but no safety threat exists. An S2 code alert must be resolved within two weeks. An S3 alert notifies the crew that they have 30 days to complete the work order. Finally, an S4 code informs the company about a future problem that will require a large amount of capital to resolve. For example, the equipment may require outside engineering or a separate contractor to repair, or the company may need to replace the entire piece of equipment.

"We've always maintained our equipment up to OSHA standards," said Broughton. "But with MAXIMO we're considerably more efficient in the way we meet those requirements. MAXIMO also helps us achieve one of our main goals of providing a method to track the time it takes to complete safety-related work orders while assigning priority flags to alert the crew about any dangerous conditions."

Not only skilled tradesmen and MRO inventory specialists benefit from using MAXIMO. Hart & Cooley's management team also uses MAXIMO to monitor critical financial details. Every work order contains a required capital expenditure field (CEP). The CEP field allows management to run reports that track the expenditure of capital dollars. Management can then quickly determine the company's overall maintenance expenditures, and more accurately calculate the productivity numbers for the Holland facility.

Additionally, MAXIMO assists Hart & Cooley's accounting department by providing an equipment detail report that gives an inventory of all of the facility's equipment with virtually every necessary detail including amount of use, warranty information, cost of purchase and equipment age. This report allows Hart & Cooley to determine if a machine is operating at full capacity. If the machine is not being used in a facility, then the company can transfer the equipment to a facility that will use the machine.

"Since we implemented MAXIMO, we have not found a function that the system can't handle," said Broughton. "The product is robust enough to do what we need it to do, and flexible enough that we can custom-fit it to our needs. Its flexibility and ease-of-use make it ideal for our day-to-day operations, and we know that as we grow as a company, MAXIMO will grow with us."



## Corporate Headquarters

MRO Software, Inc.  
100 Crosby Drive  
Bedford, MA 01730  
ph 800-244-3346  
fax 770-481-3071

## Asia

MRO Software Hong Kong Ltd.  
ph +852-2166-8760  
fax +852-2166-8555

## Australia and New Zealand

MRO Software Australia Pty.  
Limited  
ph +61-2-9463-7734  
fax +61-2-9957-2669

## Europe, Middle East, Africa (EMEA)

MRO Software  
ph +44-1-483-727000  
fax +44-1-483-727979

## Latin America

MRO Software, Inc.  
ph 305-267-8820  
fax 305-264-8853

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