

MRO Software Helps Callaway Golf Company Improve Maintenance Operations

Very few sports rely on the quality and precision of its equipment the way that the sport of golf does. Synonymous with quality equipment is Callaway Golf Company, which designs, creates, builds and sells “Demonstrably Superior and Pleasingly Different” golf products. Founded in 1982 by Ely Callaway as Callaway Hickory Stick USA, Inc., Callaway Golf’s products are created for the average golfer; it just happens that pros have excellent results with them as well. Callaway’s commitment to excellence is reflected in its financial numbers: Last year, Callaway Golf revenues increased 16 percent to \$838 million. In the first quarter of 2001, the Company reported record sales of \$261 million. Callaway is the No. 1 manufacturer of drivers, fairway woods, irons and putters and its golf ball business is growing. From the Big Bertha line of clubs to Odyssey Putters and Callaway Golf balls, the company’s goal is to give every golfer a few more opportunities to hit rewarding shots more often.

Callaway Golf’s products are designed and built on its eight-building campus in Carlsbad, California, where the majority of its 2,500 employees work. With technology advancements in the manufacturing of golf equipment increasing every year, Callaway employs scientists, engineers, chemists and computer experts to ensure that the company’s products are well above the level of its competitors. However, once the design of a golf club has been completed and approved, the manufacturing and production of the club becomes the company’s top priority. Even the slightest error in the production of a golf club can ruin the product’s effectiveness. For this reason, it is critical for Callaway to use a solution that enables them to maintain the high calibration and extend the



life of its capital assets; namely its club production equipment. For Callaway Golf, MRO Software’s MAXIMO® was the ideal solution to this challenge.

“Our customers expect a superior product, therefore our clubs have to be perfect in every way,” said Ed Salinas, a Facilities Supervisor for Callaway’s golf club manufacturing facility in Carlsbad. “The production of our clubs is a critical operation, requiring vast amounts of manpower and overall maintenance. We simply can’t afford to not be running at peak efficiency at all times, which is why we turned to MRO Software’s MAXIMO.”

Callaway’s Carlsbad production facility houses a vast array of manufacturing equipment used to produce clubs to precise specifications. From automated grip stations to tray scales used to measure the exact size and weight of both the head and shaft of the club, Callaway employs a variety of complex machines to construct its equipment. With the multiple production machines used by the facility, Callaway

Goals:	Results:
Extend the life of capital assets →	Extended the life of capital assets
Prevent emergency shutdowns →	Reduced emergency maintenance calls by 50%
Decrease inventory investment →	Increased visibility into inventory limited risk of over-stocking and decreased inventory investment

Callaway Golf Company Customer Profile

is consistently faced with maintenance challenges and the prospect of equipment downtime. Repairs during the manufacturing process can cost Callaway valuable time and resources and decrease revenue for the company.

In 1999, Callaway made the decision to expand its maintenance management initiative. At the time, Callaway used MAXIMO, the market-leading enterprise asset maintenance (EAM) software, to track inventory of over 1,800 pieces of equipment, as well as to monitor the total number of hours that were spent by individuals working on equipment maintenance. In this capacity, Callaway was not monitoring which pieces of equipment required the most amounts of attention and manpower. Consequently, Callaway still spent excessive time and money on manufacturing emergencies caused by equipment failures. The Facilities Department realized they needed to expand their use of MAXIMO to control these emergencies.

"We needed to see exactly where we were spending the majority of our maintenance time and money," explains Salinas, who was placed in charge of the MAXIMO project for Callaway. "Through analysis of the MAXIMO data, we are able to forecast and prevent emergencies from occurring, rather than being forced to react. MAXIMO allows us to improve our maintenance process, and helps ensure parts availability for scheduled PMs while decreasing our investment in inventory."

With MAXIMO and a renewed emphasis on maximizing the full suite of the product's benefits, Callaway is now able to monitor important data regarding its key production equipment. Using MAXIMO's easy-to-use interface, the Company has the ability to track the number of work orders involving certain pieces of equipment, the number of hours spent working with that equipment and the amount of money spent on materials for any given project. Having these numbers at hand enables Callaway to

identify production equipment and projects that are incurring the greatest time and money expenditure. Callaway is then able to implement Strategic MRO practices and accurately predict maintenance emergencies before they occur.

"MAXIMO allows us to better manage our operation," noted Salinas, "For instance, emergency maintenance calls at the club production facility are down 50%. And while we do not currently measure equipment downtime, we have noticed that overall, our equipment is running at peak performance on a much more consistent basis. MAXIMO has significantly increased our department performance as a whole."

In addition, Callaway also uses MAXIMO for industrial collaboration by using the product to assist in purchasing their MRO resources. MAXIMO's inventory module alerts Callaway to which repair parts should be ordered and when the ordering should occur.

"Through MAXIMO we can view historical usage and pinpoint where each part has been issued. Minimum balance levels are constantly adjusted according to usage, thus limiting our risk of overstocking. We use MAXIMO to reveal our inventory shortages and format that information into purchase requisitions," says Salinas. "Once received, MAXIMO automatically updates the part status in the inventory database, allowing us to efficiently track our inventory."

Callaway is pleased with the way MAXIMO has improved the overall maintenance of the Carlsbad facility. "MAXIMO makes it possible for us to measure our performance, thus allowing us to control our operation," Salinas states. "MAXIMO helps us to raise our awareness to what is happening within our department, and in turn improves the functionality of our entire operation."



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

COP1075