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The Company

Green Dental Laboratories help dentists throughout North America by delivering quality restorations at competitive fees. Green’s primary customers are dentists and their end user patients. The Green Dental Lab production facility features ergonomically designed workstations and color corrective lighting to provide to provide their highly skilled technicians with an unmatched work environment. Located in Heber Springs, Arkansas, Green’s focus is on providing state of the art abutments to cosmetic ceramic veneers. Green makes whichever restoration and removable appliances are necessary to meet the needs of their customers and in fact, almost every item they produce is a unique, custom product.

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GREEN DENTAL LABORATORY

THE CHALLENGE

Due to the success of their business, Green was receiving 500 to 800 cases per day. If that was not challenging enough, these cases were expected to be delivered in a five day turnaround. This means that at any particular time, there are several thousand cases within the lab. When these cases are received, paperwork is created and the case is clipped onto the case pan. These cases are then fulfilled by Green technicians. This involves being handled by a number of different personnel, located in various locations within the facility, during the process.

The challenge is whenever a specific case pan is needed for a review or alteration, supervisors were spending a great deal of time manually locating specific case pans. Dentists need an exact time of delivery from these cases. Since they are scheduling their patients for return visits, it is crucial that Green Dental Laboratory be able to instantly identify the location of any case pan at any given time. One issue in the process is the actual size of a case pan, with the average size being 5 inches by 8 inches. As they are moving through the process, they are stored in stacks. Even though they use case expeditors for keeping track of the cases, time was wasted searching through stacks instead of fulfilling cases.

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– Joe Bowers, the Director of Information Management
(Green Dental Laboratory)

Joe Bowers, the Director of Information Management of Green, and inventory manager, was tasked to improve the current system of manual location and identification. Prior to his three years at Green, Joe had been involved in network integration and other IT roles; thus familiarity with the potential of RFID to manage this process. “We thought the implementation of RFID would lead to being able to see where the case had been, where it is right now, and why a case has not moved,” notes Bowers.

MSM SOLUTIONS

With the goal of implementing an RFID system, Joe and his team at Green began a search for the right partner, not to just install the technology but to provide a true solution set for their particular case identification needs. “MSM Solutions came, looked at our facility, and laid out a plan. Some rooms are separate but there is a big open area lab with workbenches everywhere.



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We wanted enough coverage to move something from one area without losing track of the cases," noted Bowers. "Since MSM Solutions acted more like a consultant, a partner, more than just a hardware sales company, we settled on them to help with the new system." MSM Solutions' experience in healthcare was also appreciated by Green.

The implementation of RFID tags on the case pans was just one aspect of the comprehensive solution brought by MSM Solutions. Bowers liked the history of what they had done and liked that everything was inclusive-labels, software, service and hardware. One example of the depth of the solution was the inclusion of MSM Solutions PortalTrack™, an RFID data management tool which provides real time access to information passed through Active and Passive RFID System installations. With PortalTrack™, any authorized personnel at Green can pull up a web page and located the desired case on a map of their facility. Designed on a scalable platform, the PortalTrack™ solution has been deployed in a cross section of industry applications ranging from Manufacturing, Healthcare, Department of Defense, Distribution and Retail. Offering customizable reports and integration, PortalTrack™ made this solution quick to install and seamless to operate.

As a certified Partner of Zebra Technologies, MSM Solutions utilized RFID printers and encoders that were provided by Zebra, which was also a known entity to Joe Bowers of Green Dental. "I have been working with Zebra printers since 1995. They were a proven entity and I really liked that with this new system," adds Bowers.

Zebra also brought an innovative way to alleviate the cost differential that is part of the challenge with full implementation of RFID. With Zebra being able to encode on pitch tags, the cost comes down and makes the technology affordable. When they do not have to go through a converting process, it keeps costs down.

Part of the implementation included two hand-helds that were used throughout the day to locate cases in the lab. 17 fixed readers were deployed throughout the facility to

provide real-time location of product moving through the facility. The range of these readers was set at 40-50 feet, though Green learned that they could go even further.

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POST IMPLEMENTATION OF RFID

Green personnel, cases expeditors, supervisors, and team leaders looking for a case can now pull up the history of every order and instantly identify its location and status in their process. Now, they can see where the case was and its current location. They can also see why a case has not moved and quickly address any issue with a stagnant case. Green Dental has decreased the lost hours significantly.

Green's dental customers also enjoy the benefits delivered by this new RFID solution. Since dentists schedule specific patient times, there are no delays in the receipt of their Green orders that could lead to patient dissatisfaction. With Green, the unique dental equipment needed by dentists to provide their patients is fulfilled.



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