**Mobile Match Code**

**Challenge:** Ensuring accuracy of products being picked for final packaging of a multi-item medical device kit.

**Solution:** Custom MCL-based Software Application combined with a cordless bar code scanner (Motorola MT2070) paired to a mobile wireless printer (Zebra QLN220).

**Story:** A long-time customer of EMP Technical Group (EMPTG) was looking for a solution to improve the accuracy of their product picking. Previously, the customer was not using any form of software or hardware to verify that the correct items were being picked. The kits being assembled at this particular location include numerous components, making the potential high for human error during the fulfillment process.

To solve this challenge, the EMP Technical Group developed a straightforward, user-friendly, and cost-effective parts verification solution. Using MCL-Collection software, EMPTG created a custom data capture and verification application to run on a mobile device (in this case, the Motorola MT2070). When picking an item, the user must first scan the bar code (master) from the fulfillment paperwork, followed by the bar code on the item (item). The master and item codes are similar but not identical, which prevents a user from circumventing the system by scanning the same code twice. Scanning an incorrect item code results in an error message and no label is printed. When the software recognizes a positive match between the item code and the master code, a label is printed. The user then places the label on the fulfillment paperwork to verify that they selected the correct item.

Developing this application with MCL-Collect software provided numerous benefits. The primary benefit was a drastic reduction in the length of time from development to deployment. In this particular case, the time from development to deployment was approximately 2 weeks. By shortening the development cycle, the cost-savings to the customer were significant. Using MCL also allows for easy application modification in the future, which allows it to change with the customer’s evolving needs. From a user perspective, the application is designed to be very intuitive and user-friendly. One of the most notable user-oriented features is how simple it is to pair the scanner with the printer via Bluetooth. To connect the two devices, the user selects “Pair” on the MT2070, and scans the corresponding bar code on the printer.

By combining affordable hardware offerings with an intelligent and cost-effective software application, EMPTG was able to provide a complete solution that is a giant step forward in process improvement for the customer.