# MICROSCAN.

## **Laboratory Automation:** Scanners on Robotic Arms

### **BAR CODES ON SPECIMEN TUBES**

A manufacturer of automated clinical laboratory equipment needed to integrate a scanner onto their robotic arms to help with sortation and inventory control.

As the robotic arm lifts each tube, the scanner reads the bar code on the tube. The robot then uses the encoded information to identify the tube and consult the hospital's central computer to determine what tests are needed.

Once the proper test is determined, the robotic arm then places the tube in the proper location.

#### THE SYMBOL

Code Type: Code 39 and Code 128.

Marking Method: Laser and thermal printed labels.





#### THE APPLICATION

At this facility, the bar code labels are produced by printers set up at nursing stations around the hospital.

As a doctor orders a specific test, the instructions and patient information are entered into the computer at the nursing station. The printer then prints out a bar code, and the nurse attaches it to the vial containing the blood sample. The sample is then transferred to the lab for testing.

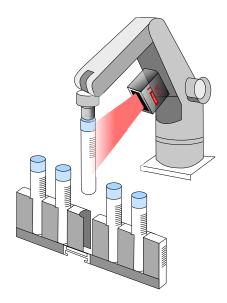


Figure 1: MS-3 assists with sortation and inventory control when mounted on Robotic Arm

#### THE INSTALLATION

The MS-3 was mounted in a vertical position to the robotic arm, approximately 2.5 inches below the second axis.

This mounting position places the scan beam in the optimal position to read the bar codes on the tubes.

As a result, the scanning function was performed quickly to maximize production efficiency.

#### WHY THE MS-3

The MS-3 Laser delivered outstanding read rate performance and offered the following features:

- · Wide scan width
- · Light weight
- · Small package size
- · High reliability

#### THE BOTTOM LINE

The intelligence provided by the MS-3 bar code scanner helped the robot efficiently locate each tube among the hundreds of tubes and vials processed each day in the lab.

As a result, the lab's accuracy rate has increased and production has improved by more than 25%.



#### **MS-3 LASER AT A GLANCE**

• Scans/second: 1,000

• Read range: 2 to 10" (50 to 250 mm)

• Light weight: 2-oz. (57 g)

• Test Button and Read Rate LEDs

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