



MACHINE TENDING CASE STUDY

AT A GLANCE

CHALLENGES

- Precision, ± 0.1 mm repeatability required
- Flexibility, support 7 different part numbers
- Decrease # of operators

BENEFITS

- Easy programming
- Space-saving
- Collaborative and safe
- Good repeatability
- Runs unattended

OBJECTIVES

One of the manufacturer's primary goals was to implement a robotic process to automate the feeding of surgical tubing to a CNC lathe machine. The robot needed to be highly repeatable in order to accurately insert the part into the machine and the solution to be flexible enough to support multiple part numbers of varying length and width. Ultimately, the end goal was to deliver an automated solution that helped streamline operations while minimizing repetitive and hazardous tasks.

SOLUTIONS

- A single robot, gripper, and part dispenser system to handle 7 of their highest volume parts.
- Operator loads parts to universal dispenser and system can run unattended for entire shifts.
- 2-day training course for 5 employees on operation and programming of the robot.

BENEFITS

Product quality and consistency increased

Increased quality, consistency and operational efficiency, all the while decreasing labor costs.

Lights out manufacturing

The process is fully autonomous and can run hundreds of cycles unattended.

Reduced labor cost

Displaced 1 operator allowing him to focus on more value-added tasks. Cost of man-hour production per item reduced.

Flexible and spave-saving with no caging

No changes required to manufacturing floor set-up in order to add automation thanks to small footprint of system and cobot.