

# KMT Robotic Solutions Success Story

## MEDALLION PLASTICS, INC.

### Medallion Plastics Reduces Cycle Time, Scrap and Increases Production by 25 Percent

#### Challenge

Medallion Plastics, Inc., one of the largest custom thermoformers in the Midwestern United States, has undergone tremendous growth in size and diversification since the company was founded in 1976. The company started as a manufacturer of thermoformed products for the recreational vehicle industry and now supplies quality products around the world to industries such as communications, defense, auto-motive, transportation, recreational vehicle and manufactured housing.

Medallion found that the CNC machine they'd used in the past was less flexible and reliable and more costly to run than they desired. In 2005, Medallion Plastics purchased a large KMT router trimming solution to process its custom thermoformed parts.

The RoboTrim® router trimming system increased production and was more reliable and cost effective than their 5-axis CNC trimming system. It also enabled them to benefit from reduced cycle time, scrap and labor costs, as well as increased part quality, overall process efficiency and competitiveness. The increase in orders led to a need to increase trimming capacity in two of its plants.

Orders to trim small, complex parts were also on the rise. The size of the R-2000iA robot and its 10 HP spindle limited its ability to trim inside small areas. Medallion needed to find trimming solutions that that could meet its new production and quality demands.

#### Solution

KMT Robotic Solutions recommended two RoboTrim® RT-1000 Router Trimming systems. Both systems have 3 HP, 40,000 RPM automatic tool change routing spindles for increased trimming flexibility, KMT/FANUC System Calibration Tools to quickly achieve process



repeatability, KMT RouterWare® software to greatly reduce programming time, and a vacuum system for increased part hold-down.

KMT Robotic Solutions also provided a custom fixture mounting plate that permitted Medallion to use its existing CNC fixtures with the new robotic trimming systems. This saved Medallion the cost of having to rebuild fixtures.

#### Results

The RoboTrim RT-1000 systems have reduced cycle time, which increased production by 25 percent. The systems' trimming ability has also resulted in a 5 percent decrease in scrap and an 8 percent reduction in labor costs.

"The technology and capability of the RoboTrim RT-1000 systems have made our company more versatile, which in turn meets our customers' needs. Our company has high standards for our customers and the RT-1000 is the best fit as we move forward," said Rob Moreno, robotic manager, Medallion Plastics Inc. "Customers continue coming back to Medallion Plastics Inc. because of our ability to constantly add new technologies such as the RT-1000."



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