

KMT Robotic Solutions Success Story: FACTORY FIVE RACING, INC.

KMT Robotic Solutions' RoboTrim® Router Trimming System Helps Factory Five Reduce Costs and Improve Quality

Factory Five Racing, Inc., a Massachusetts-based kit car company, teamed with KMT Robotic Solutions to improve part quality by more than 200% and reduce trim time by more than 95%.

Challenge

Factory Five Racing, Inc., was faced with the challenge of trimming fiberglass and plastic reinforced kit car panels by hand using routers and trim fixtures. The hand trimming process and accidental fixture movement created inconsistencies in quality and contributed to a high reject rate.

Solution

KMT Robotic Solutions responded to Factory Five's needs by developing a fully-enclosed robotic router system with the flexibility to trim each of Factory Five's seven unique parts – all while improving quality and reducing production time.

The system features an M-710iB FANUC robot mounted on an 18-foot overhead rail. Parts are presented to the robot on a fixture cart equipped with a uniquely encoded ID tag that identifies the trimming program. The interchangeable router bits are powered by a 10 hp electric spindle.



Results

With the help of KMT Robotic Solutions, the process of trimming four sets of panels (eight doors, four hoods and four trunks) that used to take 7.5 hours to complete now takes 24 minutes. This success has allowed Factory Five's molding department to increase quality and productivity without backfilling positions vacated due to normal employee attrition.

"This robotic trimming system is an extension of the trend we began when we started Factory Five Racing, Inc.," said Factory Five Racing, Inc. Owner Mark Smith. "We are on the leading edge of engineering and technology and will continue to make improvements that lead to higher quality, world-class parts and innovative designs."

Factory Five Racing, Inc., competes in the hot rod/component kit car automotive niche and has been a leader in the industry since its inception in 1995. The company uses first-rate technology to deliver world-class parts at a price that ordinary people can afford. Factory Five Racing, Inc. can be found online at www.factoryfive.com.

www.kmtrobotic.com



KMT Robotic Solutions.
Creating value through automation.

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