

# Green means GO at Pennsylvania Manufacturer

Company: TL Technologies, Inc

Location: Lancaster, Pennsylvania

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## THE PROBLEM

Low OEE Availability due to downtimes caused by **not having the staffing to handle planned and unplanned stops**

## THE SOLUTION

Add automation system, in the form of the FANUC RoboDrill Plus-K60, to perform unattended runtimes

## RESULTS

- Completely eliminated OEE Availability problem just six weeks after install
- Three weeks after install the RoboDrill Plus-K ran for 97 hours straight
- Increased productivity due to reduced downtimes and unattended weekend machining

## The Methods Difference

TL Technologies Inc, based in Lancaster PA, opened 9 years ago with a vision of becoming a lights out producer of precision machine products. Working out of a 10,000 sq. ft. state-of-the-art facility, they specialize in mid- to high-volume production runs for complex parts with challenging dimensional tolerances. Steve Norcio, Owner and President at MTA Company, Inc., noticed the "red light" issue that TL Technologies was experiencing in their production schedule. **TL Technologies has been working with MTA and Methods for years, first purchasing a Nakamura-Tome WY-100 to increase production, accuracy and help them lower the cost per part for their customers.** Steve and Jon Thompson, VP of manufacturing and engineering at TL Technologies, spent time reviewing TL Technologies current operations and discussing various solutions available to address this downtime.





Three weeks after install, the Plus-K60 ran for 97 straight hours. Compared with just doing the numbers, seeing the results is just incredible.

- Chris Leh



### Return on Investment with New FANUC Machine

The answer to TL Technologies' was the FANUC RoboDrill Plus-K60 with RoboDrill D21MiB<sup>ADV</sup> through Methods Machine Tools, Inc. This pre-engineered automation solution uses a robot to automatically load pallets and additional tools in and out of the RoboDrill. It utilizes a FANUC LR Mate 200iD robot to load/unload 60 pallets stored on a carousel as well as access to 44 additional tools, increasing the number of tools in the RoboDrill to 65. The system features an easy to operate control pallet scheduling system, as well as the extra tools and pallets.

The RoboDrill Plus-K60 purchased by TL Technologies was configured with a 5-axis direct drive table allowing them to complete a part in one operation further eliminating human interference and keeping the lights green.

### OEE Availability Limited Production

A small shop running a high variety of parts in low lots sizes, one of their biggest challenges was having a poor Availability in their OEE, overall equipment efficiency. "Our OEE was struggling due to our Availability number hovering around 45%," said Chris Leh, President of TL Technologies, Inc. "Our quality and efficiency numbers were excellent, but we were losing money on the extended downtimes due to not having the staff to handle the planned and unplanned stops." Chris went on to explain that a shop excelling in OEE would have an availability score of 97%. Six weeks after installation and training the Plus K-60 has completely eliminated the OEE availability concerns of TL Technologies.

### Results Driven Growth

By machining in full 5-axis with the additional pallets and tools, and quickly doubling their OEE Availability, TL Technologies saw a direct increase in productivity. "Three weeks after install, the Plus K ran for 97 straight hours," said Chris. "It would have kept going too if we didn't stop it to inspect the machine." The direct increase in productivity came not only during the week, but during the weekend as well, as the reliability of the RoboDrill Plus-K60 allows them to run through the weekend further utilizing their machine. "Compared with just doing the numbers, seeing the results is just incredible," said Chris. These immediate results lead TL Technologies to invest in a second RoboDrill Plus K-60 just six weeks after install.

