

Teleflex®

A Global Provider of Medical Technologies

CAM-TOOL

CAD/CAM System for Molds & Dies

- Teleflex is a global producer of medical tooling including Injection Molds, Extrusion Dies, Precision Components, Prototype Molds and Parts with Intravenous Catheters as the Vascular BU's largest product. With over 14,000 employees worldwide, Teleflex continues to grow by keeping up with the latest manufacturing equipment. One of the pieces of equipment is the CAM-TOOL CAD/CAM software sold by CGS North America.

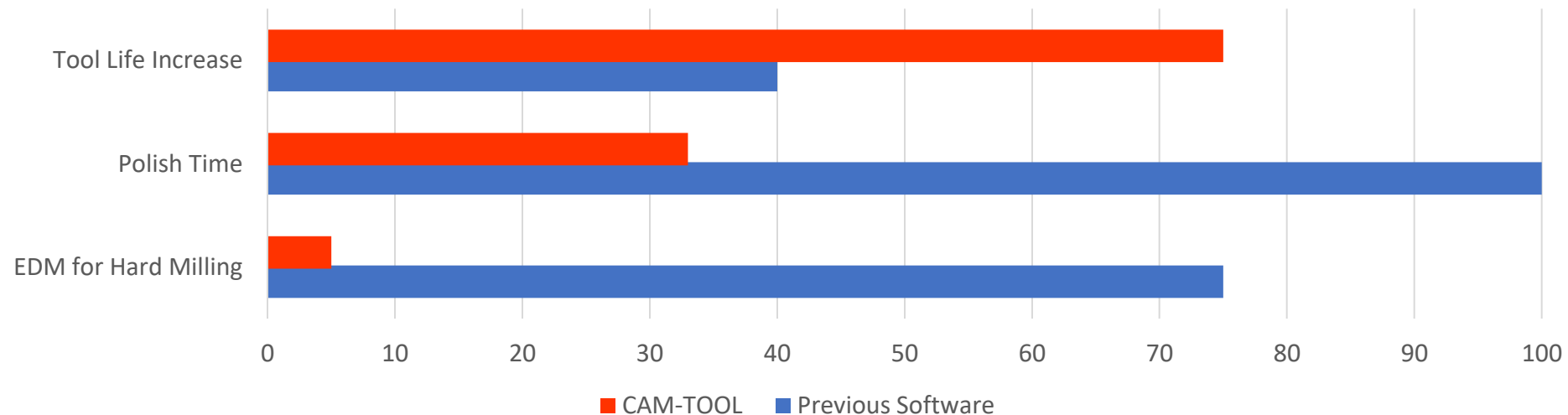
Teleflex Website: <https://www.teleflex.com/usa/en/index.html>

- Utilizing the Mikron HSM600U and the coming Mikron Mill S600U with Heidenhain TNC 530 and TNC 640 controllers required a highly accurate and proven CAM software. After much testing and consideration, Teleflex decided to switch from their previous CAM provider to CAM-TOOL. Part of their rationale was to improve surface finishing to provide the accurate size immediately. CAM-TOOL's hard milling capabilities was also a big factor in this switch as the raw material is generally S-7 56-58Rc.
- When asked what issues Teleflex was having before CAM-TOOL they mentioned, surface finish, the time it took to produce 5 axis programs, collision detection, and the overall reliability of the toolpaths. On one of the first test cuts using CAM-TOOL they also saw a "40% reduction in machining time".



- Here are some of the significant improvements shown by switching to **CAM-TOOL**:
 - They previously had jobs that required multiples of the same tool due to tool breakage or wear.
- **CAM-TOOL** has allowed them to achieve the same features with one tool and sometimes multiple cavities before changing.
 - Polishing reduction within days due to the excellent surface finishing compared to their previous software.
 - Prior to hard milling, they 100% EDM'd their mold tooling. Prior to **CAM-TOOL**, they hard milled about 75% of their tooling. After **CAM-TOOL**, they were able to tackle a lot more complex tooling and hard mill about 97% of their mold cavities complete. Additionally, the parts that were finished on EDM were roughed in closer creating less work for the electrode.

CAM-TOOL vs. Previous Software





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- While asking Erick Crouthamel, a Sr. CNC Machining Specialist at Teleflex some questions about **CAM-TOOL**, we learned that the cutting mode he likes the most is “Rough Cut with Multiple Tools”. This roughing function can be calculated directly from the remaining stock model creating an efficient and accurate roughing toolpath that has a minimal number of rapid moves. He uses this roughing strategy for every part with excellent results.
- Erick’s favorite feature of **CAM-TOOL** is the newly developed “Surface Plus” surfacing add-on that makes complex surfacing tasks as simple as a couple of mouse clicks. One example he gave was filling ejector pin hole on the part face, this task which once took tens of minutes now takes just a few seconds all completed by the CAM programmer.

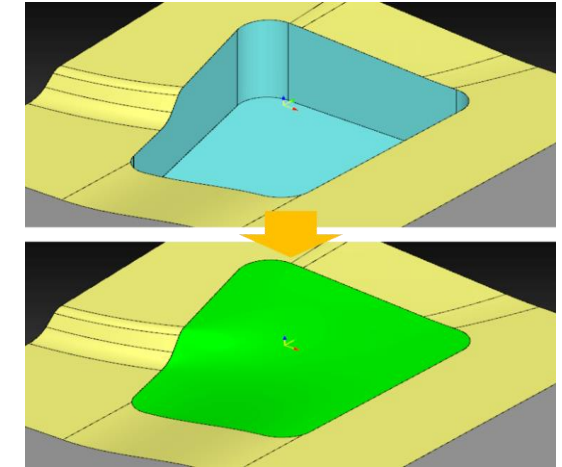
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-Erick Crouthamel, Senior CNC Machining Specialist at Teleflex

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Surface Plus - Fill Surface



Teleflex R&D Center

