

Automated Tool Wear Compensation Software Contributes to Unmanned Operations

RESULTS - INSTALL 5369

CHALLENGE

The customer was bidding an aerospace contract and needed to automate a lathe for a production part with extremely tight tolerances.

In order to win the manufacturing contract, they knew they would require unmanned operations. Due to the tight tolerances, every part needed to be measured in the process.



SOLUTION

The customer installed Caron Engineering's AutoComp software. AutoComp automatically reads the measurement file from their electronic gauging device to determine if and how much compensation is required. Then, AutoComp directly compensates the CNC control, without any manual data entry or operator intervention.

With AutoComp, the process is controlled automatically, without the extra labor of a machine operator having to manually adjust the tool offsets. AutoComp prevents the offsets from being adjusted incorrectly, to accurately maintain even the tightest tolerances. The implementation of AutoComp assisted with this customer winning the aerospace contract.

RESULTS

- Eliminated human error associated with manual offset adjustment and calculation
- Maintained part accuracy with very tight tolerances

INDUSTRY

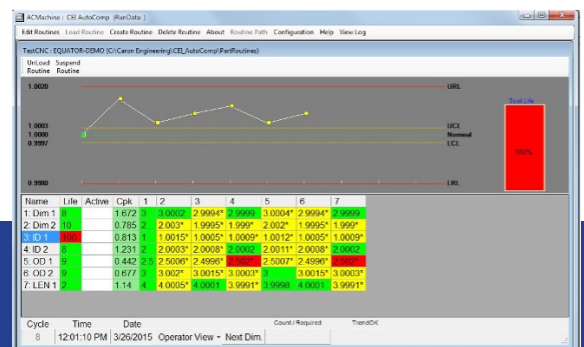
Contract Manufacturing
Aerospace

MACHINE TYPE

Swiss Lathe

MATERIAL

Aluminum



The AutoComp run time display shows the measurement data for each dimension. Green indicates the part is good, yellow indicates compensation is required, and red indicates the part is out of tolerance.