

Cost efficiency through virtual programming

Dear customers,

In this edition of our newsletter, we would like to introduce you to the topic of "Virtual Programming for Measurement Machines and CNC Machines." By utilizing virtual programming techniques, new opportunities arise to enhance the efficiency and accuracy of measurement and CNC machines.

Virtual programming enables the development, optimization, and validation of programs for measurement machines and CNC machines within a virtual environment before deploying them on actual machines.

By employing virtual programming techniques, companies can enhance the efficiency, accuracy, and reliability of their measurement and CNC machines. The combination of virtual simulations, tests, and optimizations leads to higher product quality and improved production performance.

We conducted a short interview with our Turning Division Manager, Alexander Bahé, on this topic:

Alexander, which advantages do you see from virtual programming at Polymeca?

Cost savings: *Developers can test and optimize their programs in the virtual environment without the need for real machines or workpieces. This leads to significant cost savings. The internal flow of information between project management and programming could also be optimized because these employees are in the same office.*

Error reduction: *Virtual programming makes it possible to identify and eliminate potential sources of errors before they affect production. Problems such as collisions or undesired movements can be avoided through simulations and tests in the virtual environment.*

Machine downtime: *Since our programming takes place in the virtual environment, there are no machine downtimes for production. This keeps the production capacity high.*

How much time savings are we talking about?

With the virtual program creation, we can avoid between 3 and 5 days of machine downtime per order. During programming in the virtual environment, other orders can be produced in parallel on the production machines.

Do you still see potential for development in virtual programming or are the possibilities completely exhausted?

In my opinion, virtual programming combined with artificial intelligence is the next step to improve this process. This would mean that a system would dictate the programs itself by means of technical drawings.

We hope that this newsletter article has provided you with insight into the topic of virtual programming for measurement and CNC machines. Should you have any further questions, please don't hesitate to contact us.

