

Take back control and stay one step ahead

VERICUT Force revolutionizes NC program optimization – interview with Gavin Powell

VERICUT Force is new and is leading the way. The physics based software module for NC program optimization analyzes and optimizes cutting conditions during the entire NC program operation. Taking into consideration the respective material, cutting tools and the machining conditions, VERICUT Force generates the maximum reliable feed. Current users see it as one of the best tools in the world of machining in terms of effectiveness and usability. Gavin Powell, Technical Director at CGTech Ltd. comments on VERICUT Force in an interview.

What is Force?

Gavin Powell:

VERICUT Force is a physics-based NC program optimization software module that analyzes and optimizes cutting conditions throughout NC program operations.

Why use Force?

Gavin Powell:

It is by far the best optimization solution on the market. Force makes the most effective NC program for the given material, cutting tool, and machining conditions. The results are significant time savings, and improved cutting tool and machine life. Machining improvements are a balance between tool life and speed. Force optimization provides the flexibility to tip the scales to match your machining goals.

How can these benefits help my machine shop?

Gavin Powell:

The benefits of Force are endless - better cutting tool and machine utilization, as well as better utilization of the machinist's time, so you can increase capacity without adding another machine and have greater confidence when running lights-out machining. There are also significant improvements in part to part and job to job consistency. All this ensures reduced cycle times, faster delivery and improved margins – ultimately making you more competitive.

How can I calculate my expected savings?

Gavin Powell:

Most users see a return on their investment in just 3-6 months. Some of our customers have paid for VERICUT Force on their first optimized project. We have a handy [Force Calculator](#) on our website so you can see for yourself exactly what Force could save you.

How does Force make my parts cut faster?

Gavin Powell:

VERICUT Force maximizes the chip thickness, keeps it constant, matches the cutting conditions to the cutting tools performance parameters all while protecting the cutting from excessive Force, feed rates, spindle power requirements.

How easy is Force to setup and use?

Gavin Powell:

Easier than any other type of NC program optimization process. User knowledge or software tests are not necessary. Force can optimize every material, on any machine tool, with any cutting tool,

using any NC program – whether it's newly created or old. We have successfully Force optimized many parts improving them further than had already been optimized by other methods.

Does Force overwrite the existing NC program

Gavin Powell:

No. it creates a separate file with a “.opti” extension. Force has a feature to display the original and opti. file side by side. With the Force graphs you can see things like cutting conditions, excessive forces, machining rates, power/torque, chip strength, material removal, tool deflections and feeds for the original and optimized program.

CGTech will be demonstrating VERICUT Force at MACH between 20th – 24th April on stand 17-320. For more information visit: <https://www.cgtech.co.uk/products/product-line/92-force.html>