

COMPANY

DP Technology Corp.

LOCATION

World HQ: Camarillo, California, USA

SOFTWARE

ESPRIT CAM System

SOFTWARE DEVELOPMENT KIT

HOOPS Exchange, the leading CAD data translation toolkit

Company Website

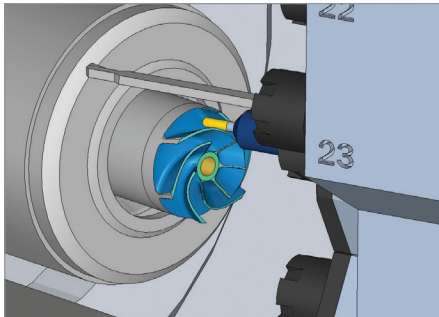
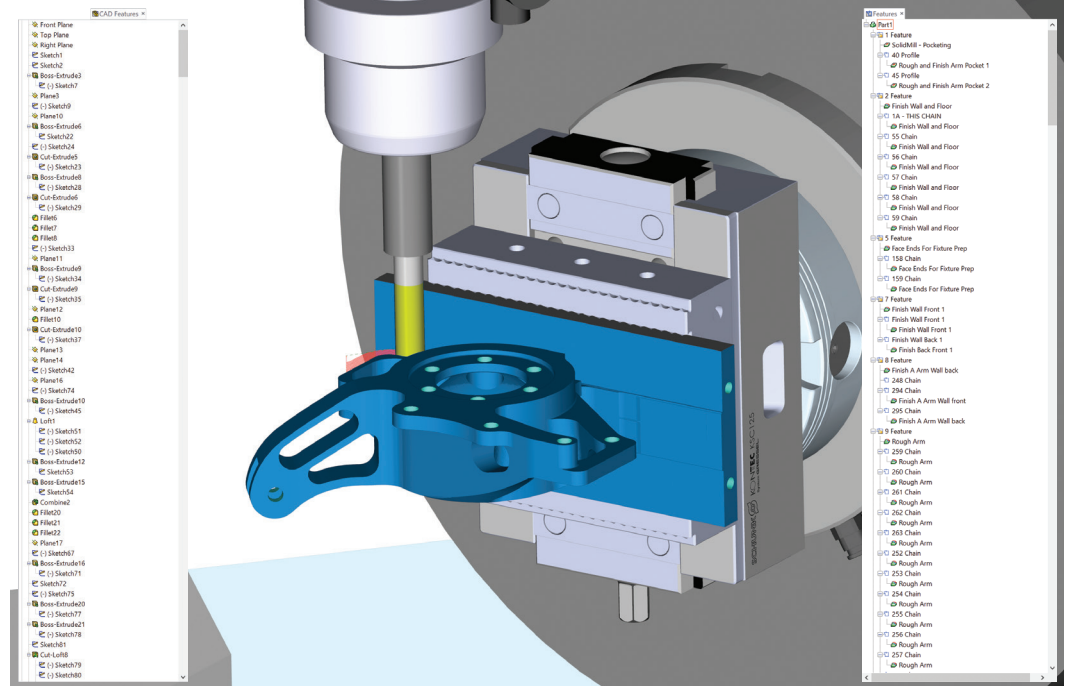
www.espritcam.com

Tech Soft 3D Case Study: DP Technology

HOOPS Exchange Helps Leading CAM Vendor Keep Its Flagship Product on the Cutting Edge

"We put HOOPS Exchange and other potential vendor solutions through a rigorous testing process with hundreds of test files. We found HOOPS to have high import quality across all the CAD file formats, with a very fast loading time, and very low memory usage. That was very important to us."

— Ivan Krstic, DP Technology



The Challenge

DP Technology is the provider of ESPRIT, a full-spectrum CAM system for CNC programming, optimization, and simulation. From its 18 worldwide offices across 8 countries, DP Technology serves customers in a variety of industries – many of whom work with multiple CAD tools and file formats as part of their workflow.

"We aim to provide our customers with total manufacturing flexibility," explained Ivan Krstic, Director of Product Marketing for DP Technology. "Our customers use ESPRIT for more than high-performance machining – they also use it for hybrid manufacturing and additive manufacturing processes like 3D printing. That means our solution has to work with general formats like DXF/DWG,

IGES, VDA, ACIS, Parasolid, STL, STEP, 3D PDF, and JT; native formats like Inventor, Solid Edge, SolidWorks, Rhino, Catia, UG-NX, and Creo; and a combination of geometry types, including solids, surfaces, wireframe, and tessellated."

"Integrity of CAD data input is critical for a CAM system in general," continued Krstic.

"For an application like ESPRIT that sees such a mix of CAD formats and geometry types, it's essential. If the model quality is poor, the quality of the manufactured part will be poor. When we were evaluating data exchange partners, it was very important to us to find one that could properly support all the different CAD formats and geometry types."

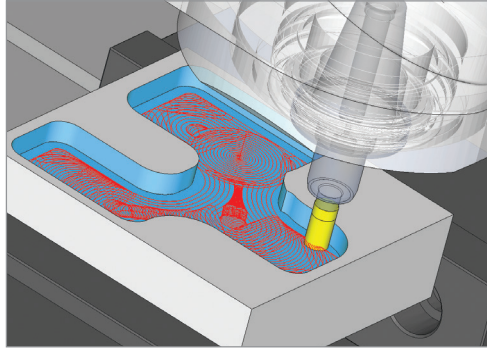
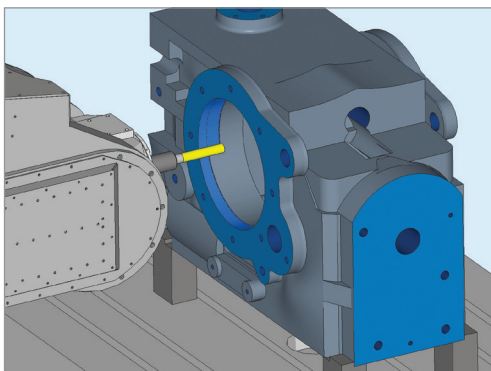
HOOPS Exchange Provides Unparalleled Data Access, Accuracy, and Speed

The importance of data integrity led DP Technology to choose HOOPS Exchange from Tech Soft 3D. The leading CAD translation software development kit (SDK), HOOPS Exchange delivers access to over 20 CAD file formats through a single interface.

"We put HOOPS and other potential vendor solutions through a rigorous testing process with hundreds of test files," said Krstic. "We found HOOPS to have high import quality across all the CAD file formats, with a very fast loading time, and very low memory usage. That was very important to us."

Another key factor in DP Technology's decision was HOOPS Exchange's native Parasolid kernel interoperability. This direct data access maintains Parasolid data integrity, guaranteeing data is pristine and untouched, with no translation.

"ESPRIT has been Parasolid kernel-based since 1998," said Krstic. "The fact that HOOPS Exchange had native Parasolid kernel interoperability was a huge selling point. It was also important to us to have some kind of data healing available, so the integration with Parasolid Bodyshop was an added benefit."



HOOPS Exchange provides access to a broad range of data including boundary representation (BREP), product manufacturing information (PMI), model tree, views, persistent IDs, styles, construction geometry, visualization and more – all without depending on any CAD system. This wide-ranging access proved to be another important element in DP Technology's decision-making process.

"We liked that HOOPS Exchange can provide access to the native CAD feature tree," said Krstic. "Our product has a function called ESPRIT FX, which stands for Feature Exchange. It brings the feature tree from the CAD model over to ESPRIT, enabling a CAM programmer to better understand the design intent of the engineer. We wouldn't be able to offer this function without a toolkit as sophisticated as HOOPS Exchange."

After selecting HOOPS Exchange, DP Technology was rapidly able to start reaping the benefits of its decision by integrating the technology into its product and bringing it to market.

"Beyond the functionality itself, what's impressive about HOOPS Exchange is how quickly we were able to integrate it and deploy it in ESPRIT," said Krstic. "It only took a couple short months. Two versions of ESPRIT that use HOOPS Exchange were successfully released last year, and we look forward to continuing to put HOOPS to good use in the coming year."

Contact Tech Soft 3D to learn more about how HOOPS Exchange can benefit your organization.

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Industry:

- Manufacturing

Challenge:

- Make sure that full-spectrum CAM product can successfully work with multiple CAD file formats and geometry types

- Ensure integrity of CAD data input

Solutions:

- HOOPS Exchange, the leading CAD data translation toolkit

Results:

- Build robust data access and translation capabilities into product, with native Parasolid interoperability and support for 20+ file formats

- Provide better support for emerging manufacturing workflows, like hybrid manufacturing and additive manufacturing

- Anticipate market needs around manufacturing and deploy functionality that meets those needs within months



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