

COMPANY
FARO

LOCATION
Lake Mary, Florida – Global HQ

SOFTWARE
CAM2

SOFTWARE DEVELOPMENT KITS
HOOPS Native Platform

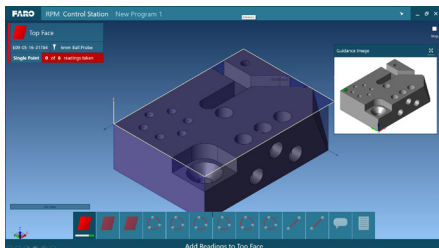
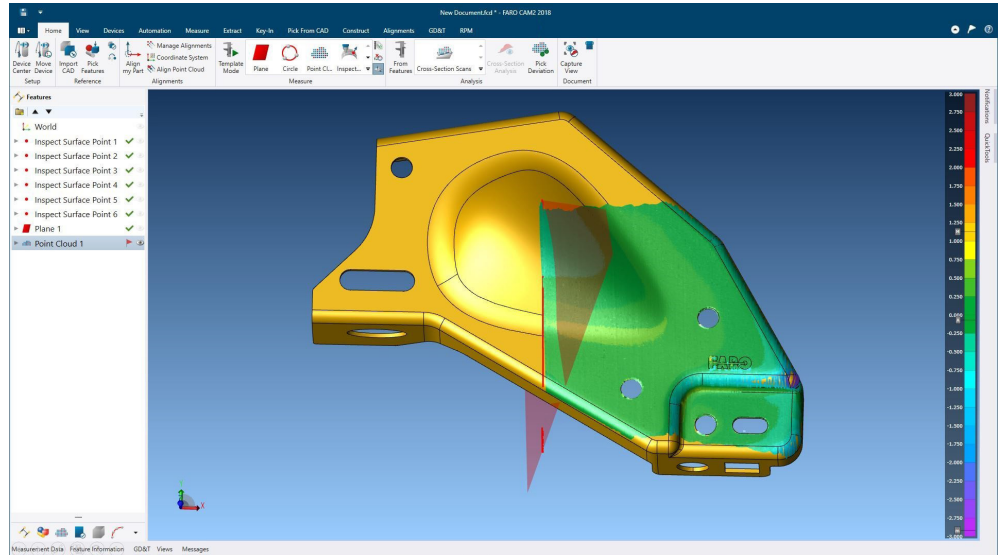
COMPANY WEBSITE
www.faro.com

Tech Soft 3D partner success story: FARO

FARO Expands Usage of HOOPS Toolkits to Enhance Its Industry-Leading Metrology Software

“We did a benchmark comparison of our existing CAD translation platform with HOOPS Exchange, using 800 different CAD files. After testing and evaluating the performance side by side, we were fully convinced that moving to HOOPS Exchange was the right move.”

- Samuel Moura, Director of Software Engineering for CAM2, FARO



The Challenge

FARO is the world’s most trusted source for 3D measurement, imaging, and realization technology. As a full solutions provider, FARO’s offerings encompass hardware, software, and services, enabling customers to realize the full operational potential of their FARO metrology equipment.

For its manufacturing customers, FARO offers CAM2 software – a powerful, intuitive and application-focused 3D measurement software platform designed to enable users to efficiently fulfill their quality assurance and inspection tasks.

“CAM2 is very much a workflow-driven software,” said Darren Crann, Technical Product Owner for CAM2 at FARO. “We work very hard to understand the customer’s

problems and how they need to do things – whether that’s working with point clouds, or doing repeat part inspections – and then we develop the product to meet those needs. We’re really aimed at providing a full metrology solution with comprehensive functionality to our customer base.”

At the same time, FARO places a special emphasis on usability. “One of our key competitive advantages in the market is that we’re very focused on making the product easy for customers to use,” said Samuel Moura, Director of Software Engineering for CAM2 at FARO. “We want to make it intuitive and simple without sacrificing any power or strength when it comes to functionality.”

The Right Foundation for Advanced 3D Measurement Workflows

Tech Soft 3D software development kits like HOOPS Visualize and HOOPS Exchange are playing a key role in ensuring that CAM2 continues to strike the right balance between powerful capabilities and a smooth user experience, helping FARO deliver a valuable product to market.

HOOPS Visualize is the gold standard graphics engine for developing high-performance applications. "Initially, we used a proprietary graphics engine in CAM2," explained Moura. "Several years ago, we started using HOOPS Visualize for CAM2, and that allowed us to very quickly ramp up the product and provide support for the advanced 3D concepts that our previous engine couldn't handle. We saw an immediate boost in the visualization experience."

Beyond the solid technological foundation that HOOPS Visualize provided, FARO appreciated that it allowed the development team to devote resources to other priorities.

"Bringing HOOPS Visualize into CAM2 helped us focus on our own business and on developing a competitive product, rather than worrying about acquiring an in-depth knowledge of the different hardware requirements of various computers and how to support different graphics cards," said Moura. "That sort of thing is really quite a labor-intensive effort and requires a dedicated team, which is why HOOPS Visualize was so appealing to us as an alternative."

More recently, the company incorporated HOOPS Exchange – the fastest and most accurate CAD data translation toolkit – into CAM2, expanding its usage of Tech Soft 3D products.

"We had been using a different CAD translation kit in our product, but after our

success using HOOPS Visualize, we saw the value in exploring other parts of the Tech Soft 3D ecosystem," said Moura. "We did a benchmark comparison of our existing CAD translation platform with HOOPS Exchange, using 800 different CAD files. After testing and evaluating the performance side by side, we were fully convinced that moving to HOOPS Exchange was the right move."

"One of the most significant benefits of HOOPS Exchange is that it gives customers access to all the different CAD formats, right out of the box," said Crann. "This way, the customer buys one license and gets native access to their CAD data as part of the CAM2 package, no matter what format the file might be. We don't have to sell them different versions of CAM2, each of which is licensed for a particular CAD vendor."

Crann added, "Moving to HOOPS Exchange also provided an advantage from a distribution perspective, because it's a more consolidated package. That allows us to distribute a smaller software package to customers, even though it still has the power that we're looking for in terms of CAD translation."

Overall, the partnership with Tech Soft 3D has been a valuable one – not just for the technology it has provided, but also for the shared knowledge and expertise it has allowed FARO to access.

"We have a close working relationship with Tech Soft 3D," said Crann. "The tools that Tech Soft 3D provide are one thing, but their people also add tremendous value. I'm not just talking about addressing a support issue – I'm talking about the ability to call upon Tech Soft 3D's expertise to help guide us and advise on what approaches to take as we develop CAM2. That relationship aspect has been extremely beneficial, and helps ensure we're developing the best 3D measurement platform we can."

Industry:

- Manufacturing

Challenge:

- Provide support for advanced measurement workflows while maintaining product ease of use
- Deliver strong visualization capabilities for point clouds, CAD files, and other 3D data
- Give customers native access to CAD data from multiple software vendors

Solution:

- HOOPS Visualize delivers best-in-class graphics technology to provide users with powerful 3D visualization, and HOOPS Exchange provides fast, reliable 3D CAD data access

Results:

- Provide a simple and streamlined user experience by giving customers access to more than 30 CAD file formats through a single software package
- Incorporate powerful visualization technology into application to support advanced 3D concepts
- Ensure competitive edge by focusing internal resources on core competency of metrology rather than fast-evolving areas like graphics technology or data translation

Contact Tech Soft 3D to learn more about how the HOOPS software development kits can benefit your organization.

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