

AU 2017 London Choosing The Right CAM Package

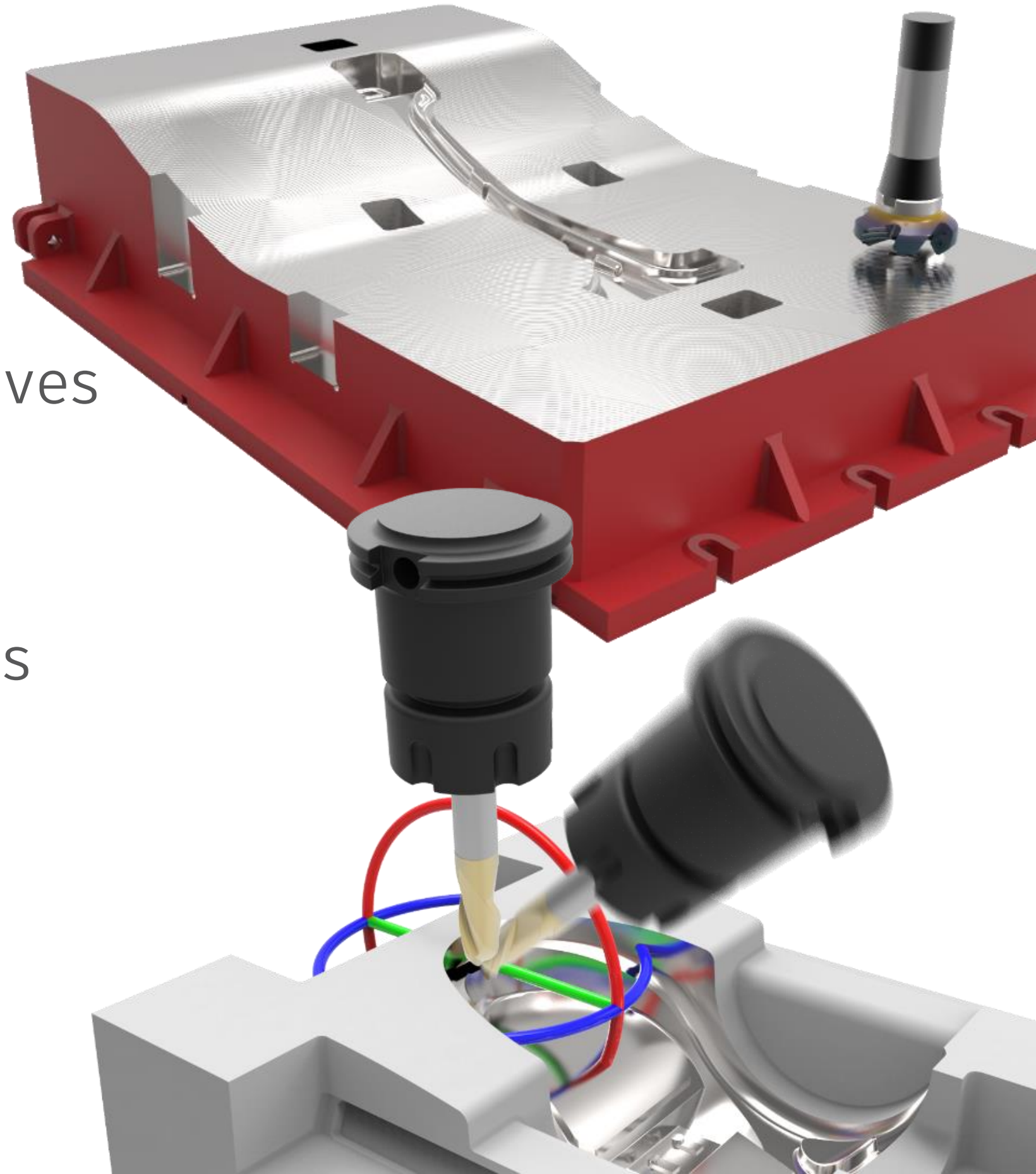
Robert Walker

Autodesk Technical Marketing Manager – BSM D&M

Join the conversation [#AULondon](#)

Agenda

- Introduction
 - Class Summary, Learning Objectives & About Me
- Where to Start?
- Autodesk Subtractive CAM Products
- Autodesk HSM & Demonstration
- FeatureCAM & Demonstration
- PowerMill & Demonstration
- Summary



Class Summary

This class will introduce you to the range of Autodesk CAM products. Starting with the HSM products this class will look at product capabilities, and which CAM product to move to next, when your focus changes.

So whether it's the high level of automation and multi-tasking machining centre capability of FeatureCAM, or maybe the high-degree of toolpath and machine control of PowerMill you require, this class will help you make the right decision for your next CAM package.

Key Learning Objectives

- At the end of the class, you will:
 - Learn about the range of subtractive CAM products Autodesk offers
 - Learn where each CAM product overlaps, and more importantly specializes, in order to make the right choice
 - Learn more about the types of parts and machines each package caters for
 - Learn more specifically about the automation within FeatureCAM and the level of toolpath control within PowerMill



About Me

About Me



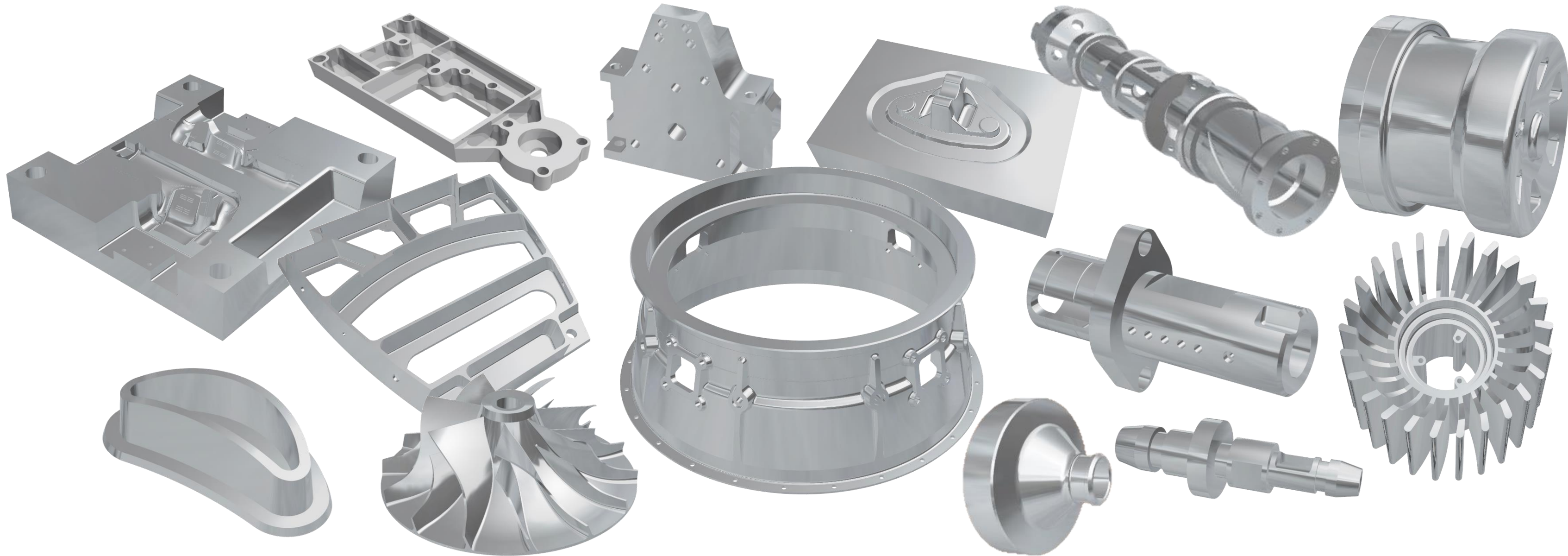
- Came to Autodesk through the Delcam acquisition
- Started with Delcam in 2004
 - Initially in the UK department as an Applications Engineer
 - Training & supporting UK customers
 - Moved to International Support
 - Assisted the global Delcam reseller network in both pre & post-sales activities
- Autodesk Technical Marketing Manager
 - Business, Strategy & Marketing (Design & Manufacturing)

The background of the slide features a complex, abstract wireframe pattern. This pattern consists of numerous interconnected lines that form a mesh of irregular polygons, creating a three-dimensional, organic structure that resembles a tangled web or a series of flowing, interconnected tubes. The lines are thin and light gray, set against a plain white background. A solid blue horizontal bar spans the width of the slide, positioned in the lower half. The text is centered within this bar.

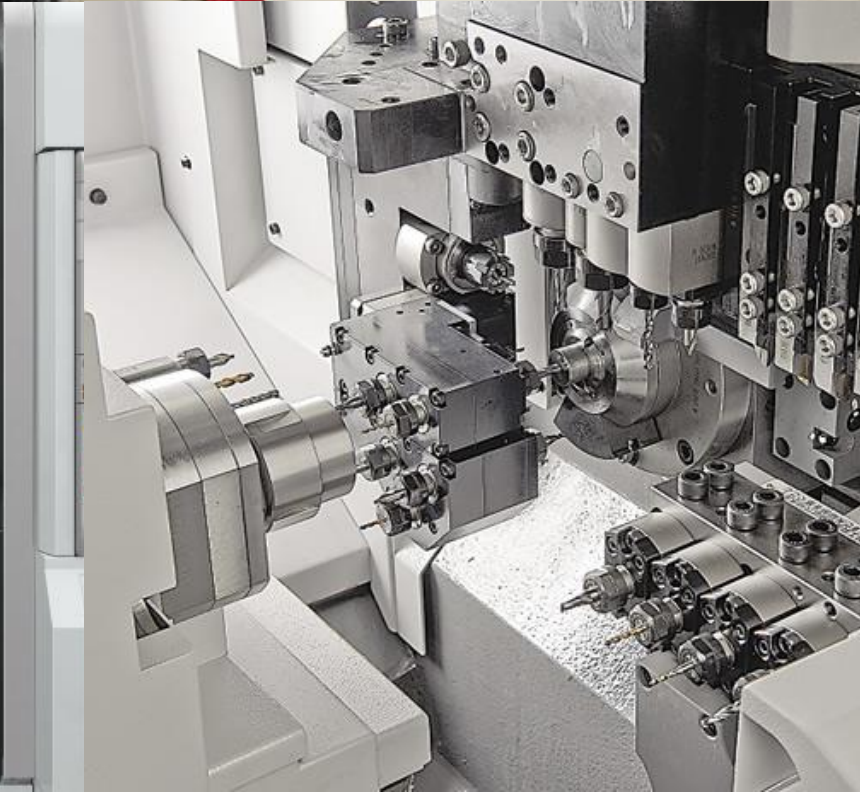
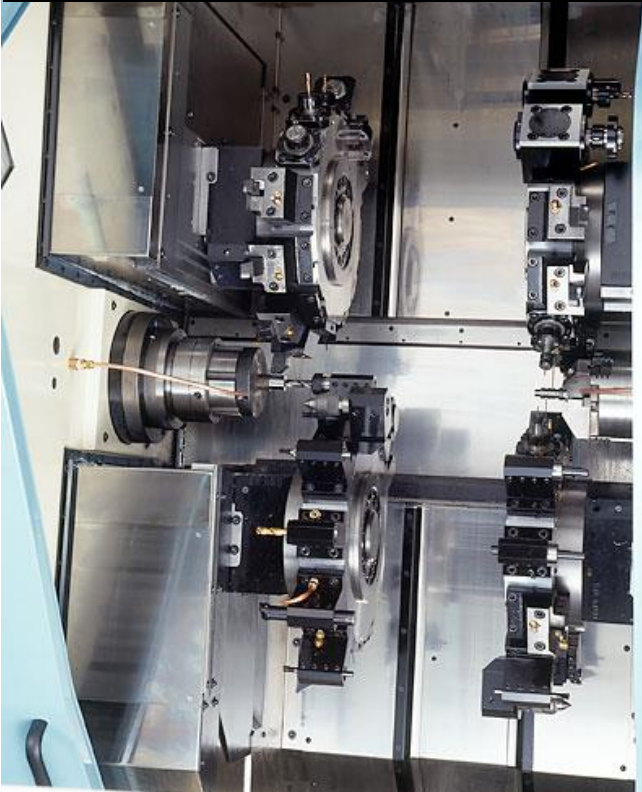
Choosing The Right CAM Package – Where to Start?

Type and Quantity of Parts To Be Produced?

- Part type and the level of difficulty will have a strong influence on the choice of CAM package



Machine Types Owned or to be Purchased?

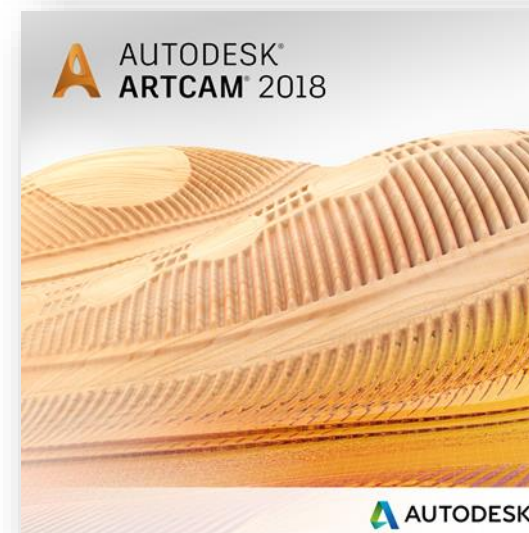


The background of the slide is a complex, abstract wireframe mesh. It consists of a dense network of thin, grey lines that form a series of interconnected, flowing, and undulating shapes. These shapes resemble organic, cellular structures or perhaps a stylized representation of a complex mechanical part. The mesh is more densely packed in some areas, creating a sense of depth and volume, while other areas are more sparse. The overall effect is one of intricate, modern design.

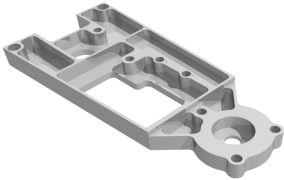



Autodesk Subtractive CAM Products

Autodesk Manufacturing Products

- Autodesk offers a broad range of products for manufacturing covering Composites, Inspection, Design for Manufacture, Additive & Subtractive processing
- This session focusses on Subtractive
 - In this case we'll focus on Autodesk HSM, FeatureCAM and PowerMill



Product Overlaps – Milling Capability

2D/2.5D Milling	3-Axis Milling	3+2-Axis Milling	Simple Multi-Axis Milling
			

Product Overlaps – Multi-Tasking Capabilities

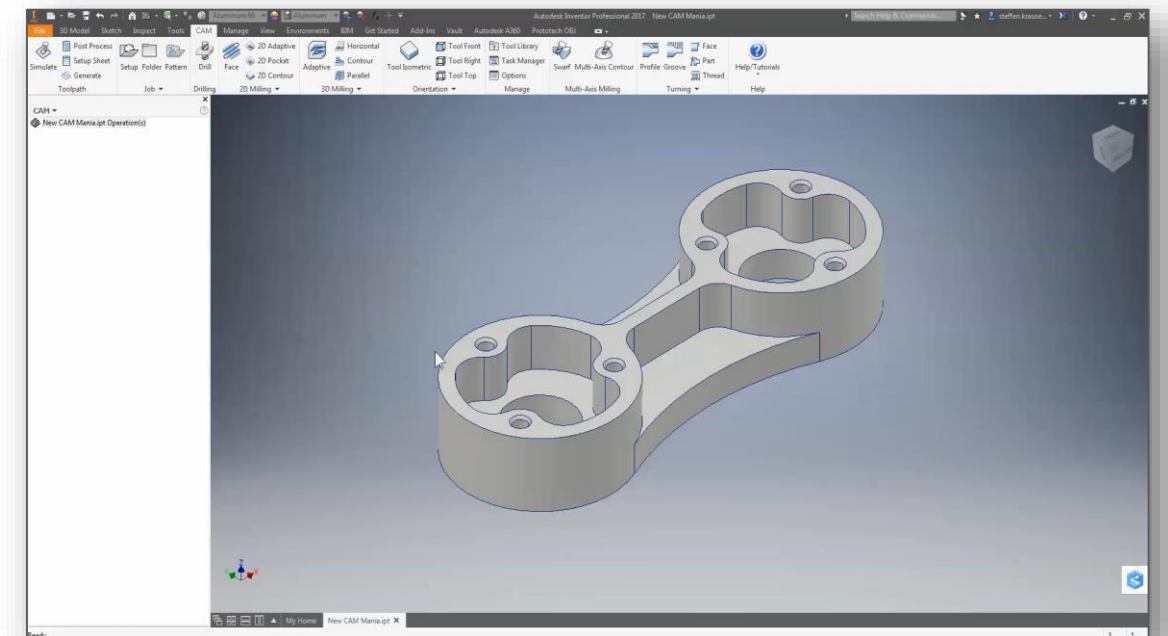
Product Overlaps – Multi-Tasking Capabilities	
Basic 2-Axis Turning	Mill-Turn & Turn-Mill
	

The background of the slide is a complex, abstract wireframe mesh. It consists of a dense network of thin, grey lines that form a series of interconnected, flowing, and undulating shapes. These shapes resemble organic, cellular structures or perhaps a stylized representation of a complex mechanical part. The mesh is more densely packed in some areas, creating a sense of depth and volume, while other areas are more sparse. The overall effect is one of intricate, organic complexity.

Autodesk Subtractive CAM Products – In Depth

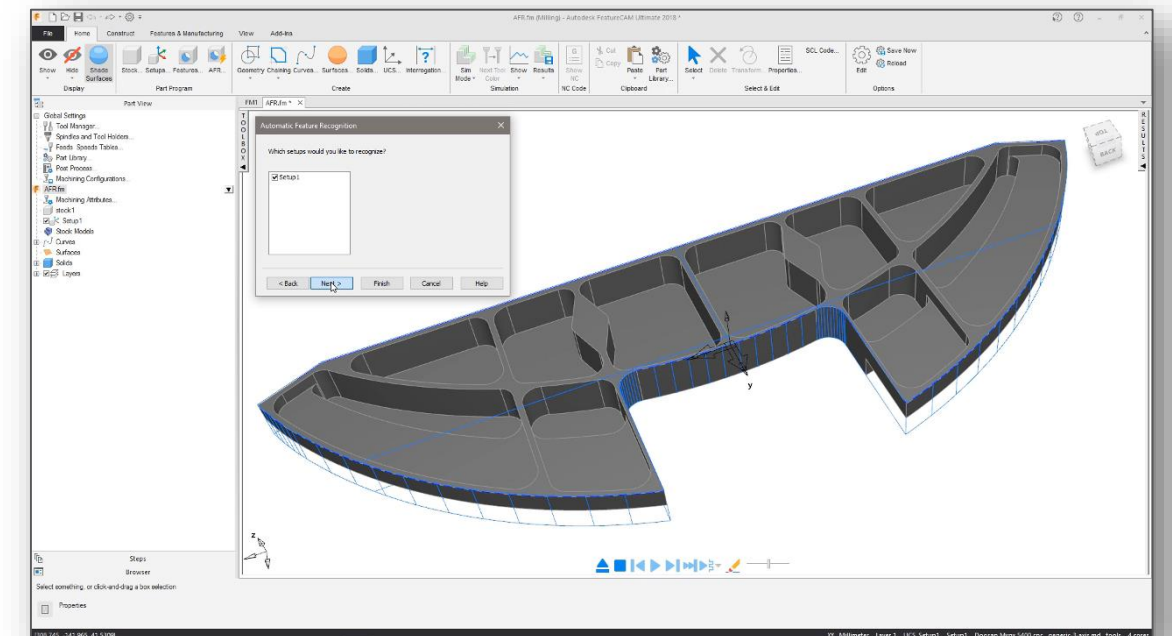
Autodesk HSM

- An **Integrated** 2.5- to 5-axis CAD/CAM programming solution for Inventor, SOLIDWORKS and Fusion 360
- High-**Performance**, yet entry-level system
- Because you work within your existing, familiar CAD environment, its **Easy to Use**
- Ideal for:
 - New to CAM
 - Face many design revisions



Autodesk FeatureCAM

- CAM software that automates the workflow from design to NC code, to reduce programming time and produce consistent results for a range of CNC machines
- Ease of use comes from automation, allowing parts to be programmed **Faster**, helping to meet delivery schedules and reduce time to market and cost
- Built-in **Intelligence** maintains part quality
 - Standardize practices
 - Promotes repeatability, minimizing risk
- Most **Comprehensive** Machining Solution



Autodesk PowerMill

- **Expert** CAM software for manufacturers of moulds, dies and highly complex components wanting to achieve the maximum quality, control and efficiency from their 3- and 5-axis CNC machines
- **Dedicated** to producing exceptional precision & quality
 - Remove the need for manual polishing
 - More higher value business can be won
- High degree of control & flexibility
- **Trusted** to deliver
 - Confidence to run machines unattended

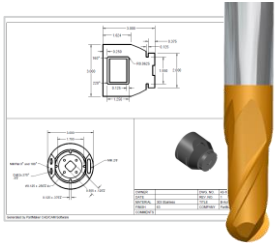
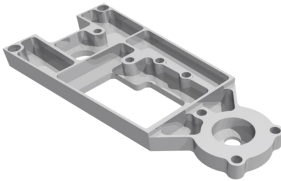











Product Specializations

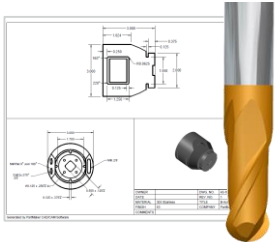








Product Specializations

Milling Capabilities

Integrated Advanced CAD	2D/2.5D Milling	3-Axis Milling	3+2-Axis Milling	Simple Multi-Axis Milling	Complex Multi-Axis Milling	Tool Axis Editing	Toolpath Editing	Specialist Strategies & Robotics
								

Product Specializations

Multi-Tasking Capabilities

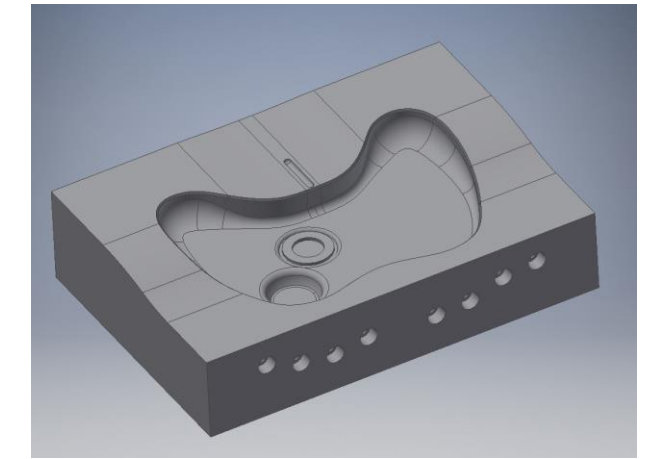
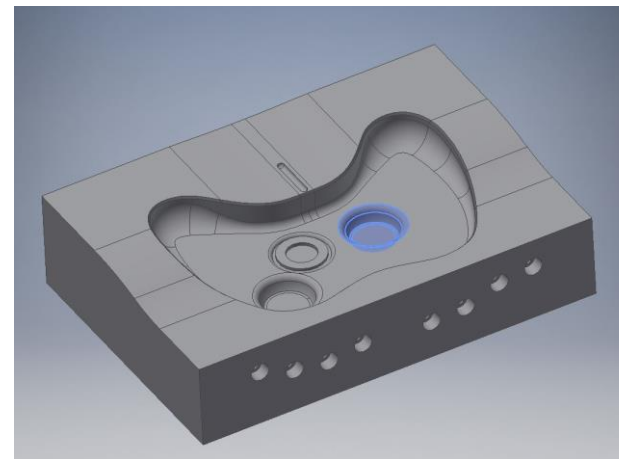
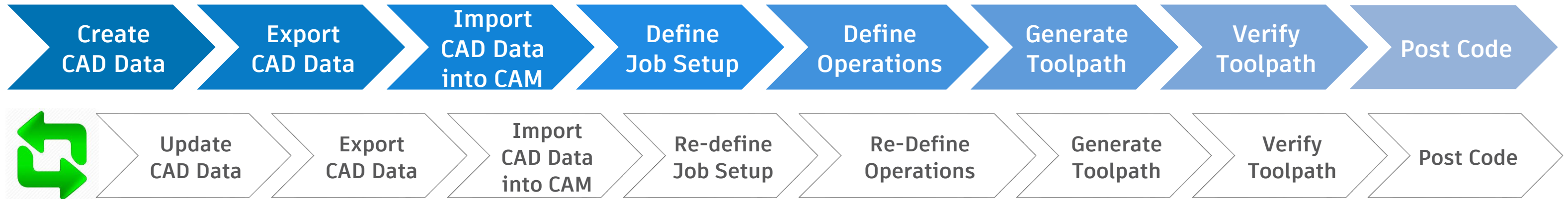
Integrated Advanced CAD	Probing	Basic 2-Axis Turning	Mill-Turn & Turn-Mill	Multi- Spindle Turning	Multi- Turret Turning	Swiss Machining	Sim. Multi- Axis Turning	Wire EDM
								

The background of the image is a complex, abstract wireframe mesh. The mesh is composed of numerous interconnected lines forming a series of organic, flowing shapes that resemble a stylized, interconnected network or a series of overlapping, curved planes. The lines are thin and grey, set against a white background. A solid blue horizontal bar spans the bottom portion of the image, providing a contrasting background for the text.

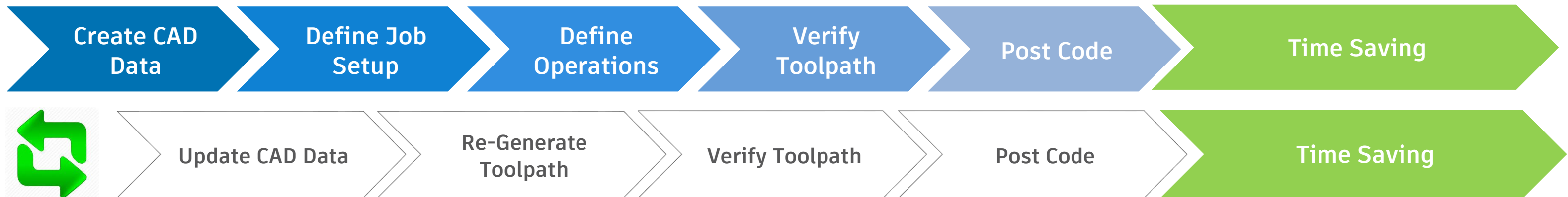
Autodesk HSM

Why choose an Integrated CAM Solution?

Standalone CAM Workflow



Integrated CAM Workflow



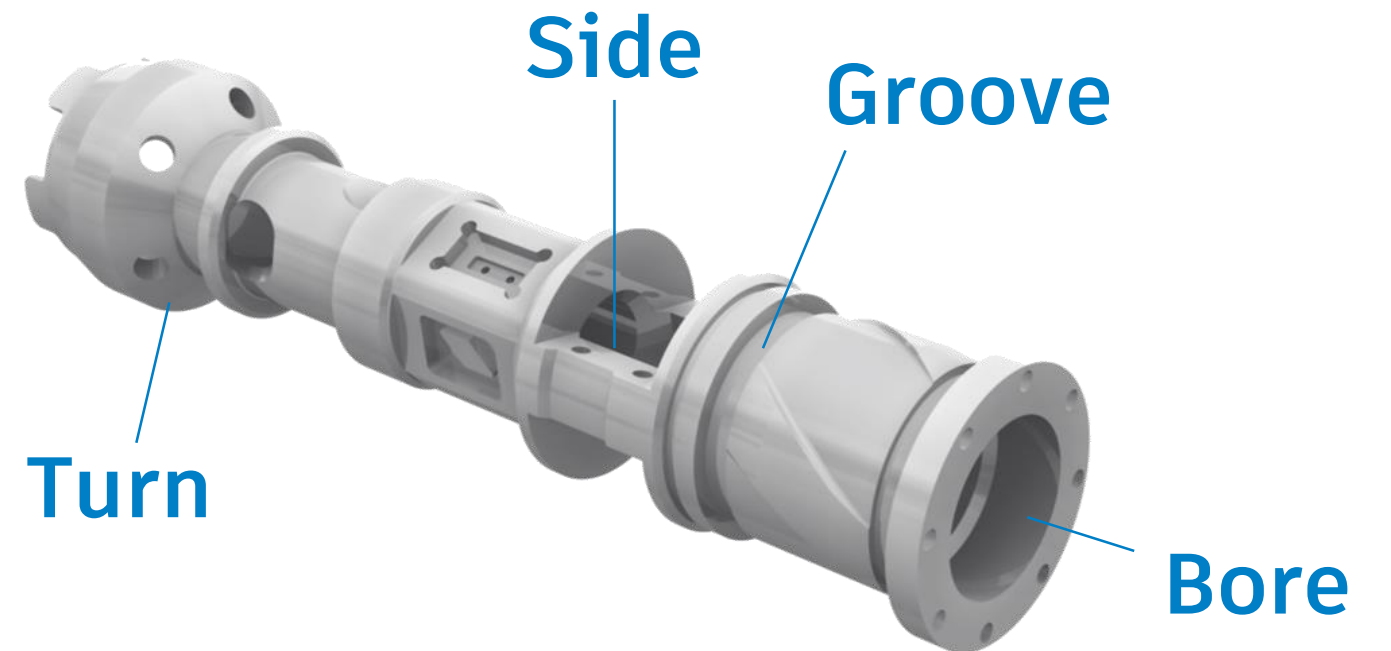
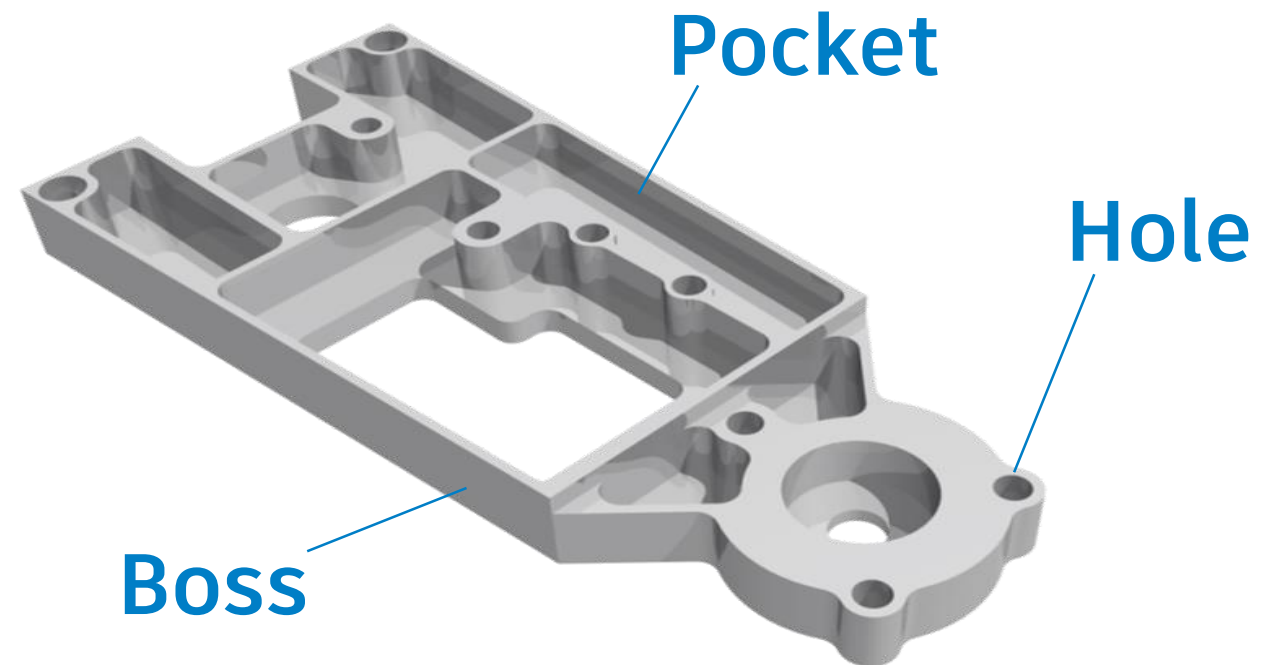
Technical Demonstration

The background of the image is a complex, abstract wireframe mesh. It consists of a dense network of thin, grey lines that form a series of interconnected, flowing, and undulating shapes. These shapes resemble organic, cellular structures or perhaps a stylized representation of a complex surface. The mesh is more densely packed in some areas and more sparse in others, creating a sense of depth and movement. The overall color palette is a mix of light greys and a solid blue at the bottom.

Autodesk FeatureCAM

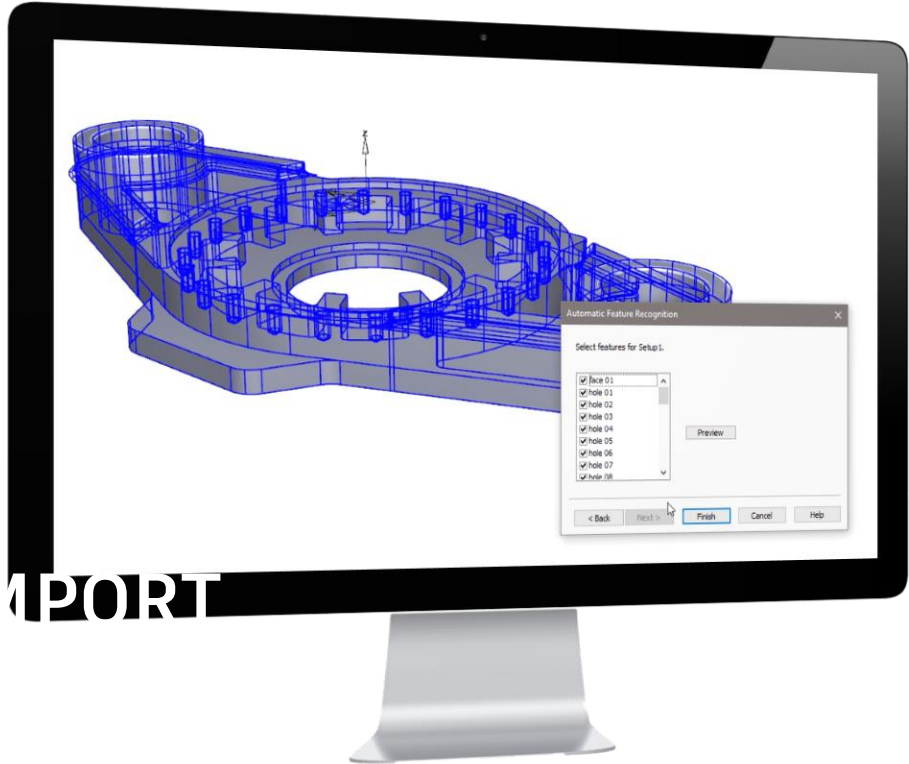
What is a Feature?

- Instead of programming parts one operation at a time, FeatureCAM defines parts with ***features***

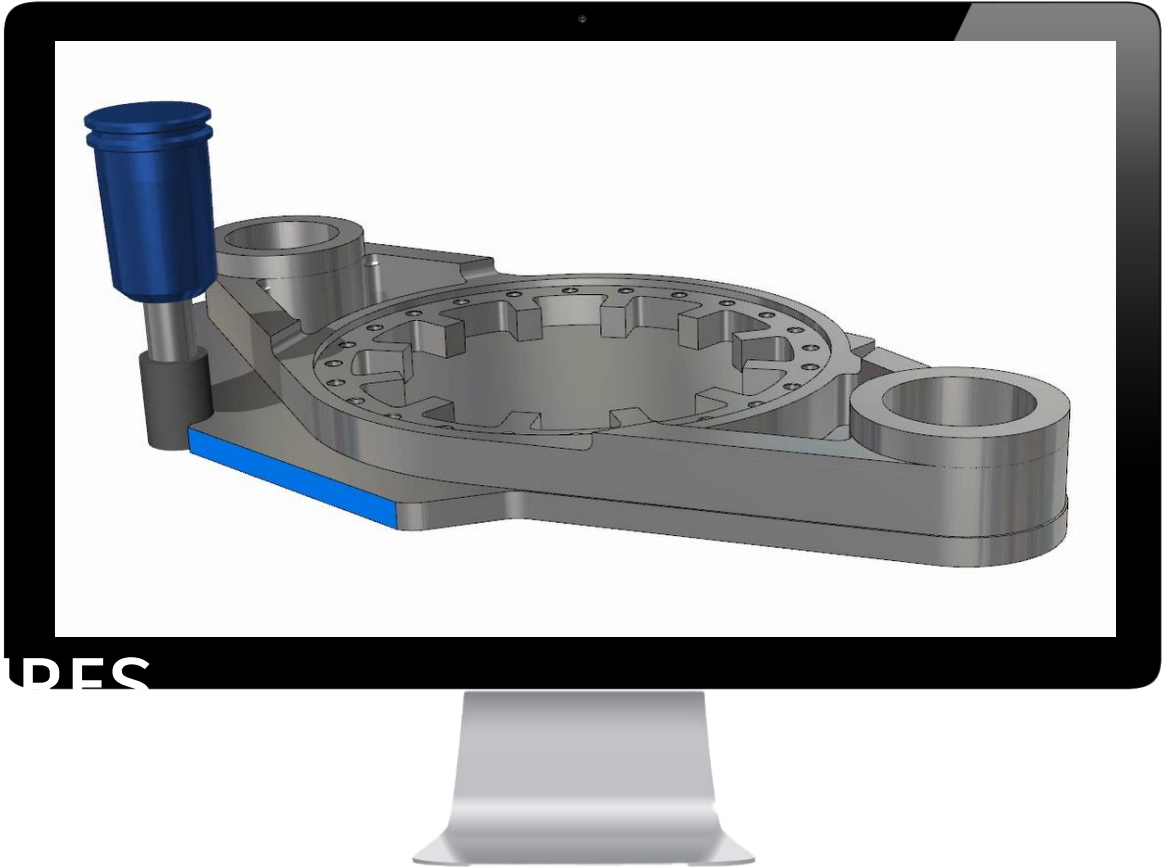


- A feature is made up of ***one or more associative operations***

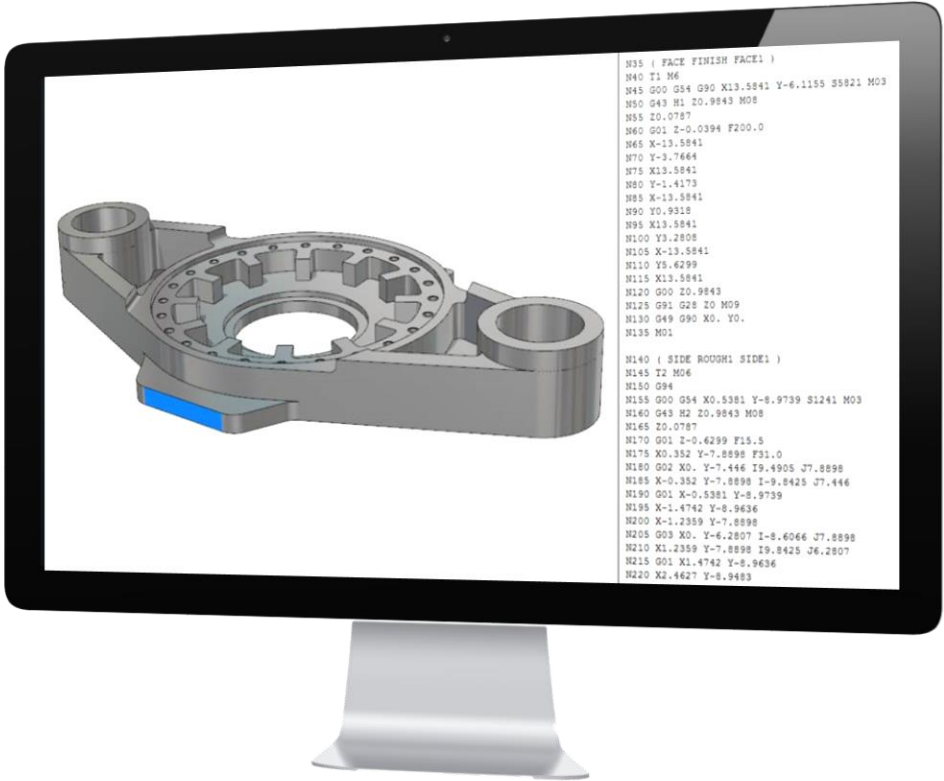
Program Parts Faster



IMPORT



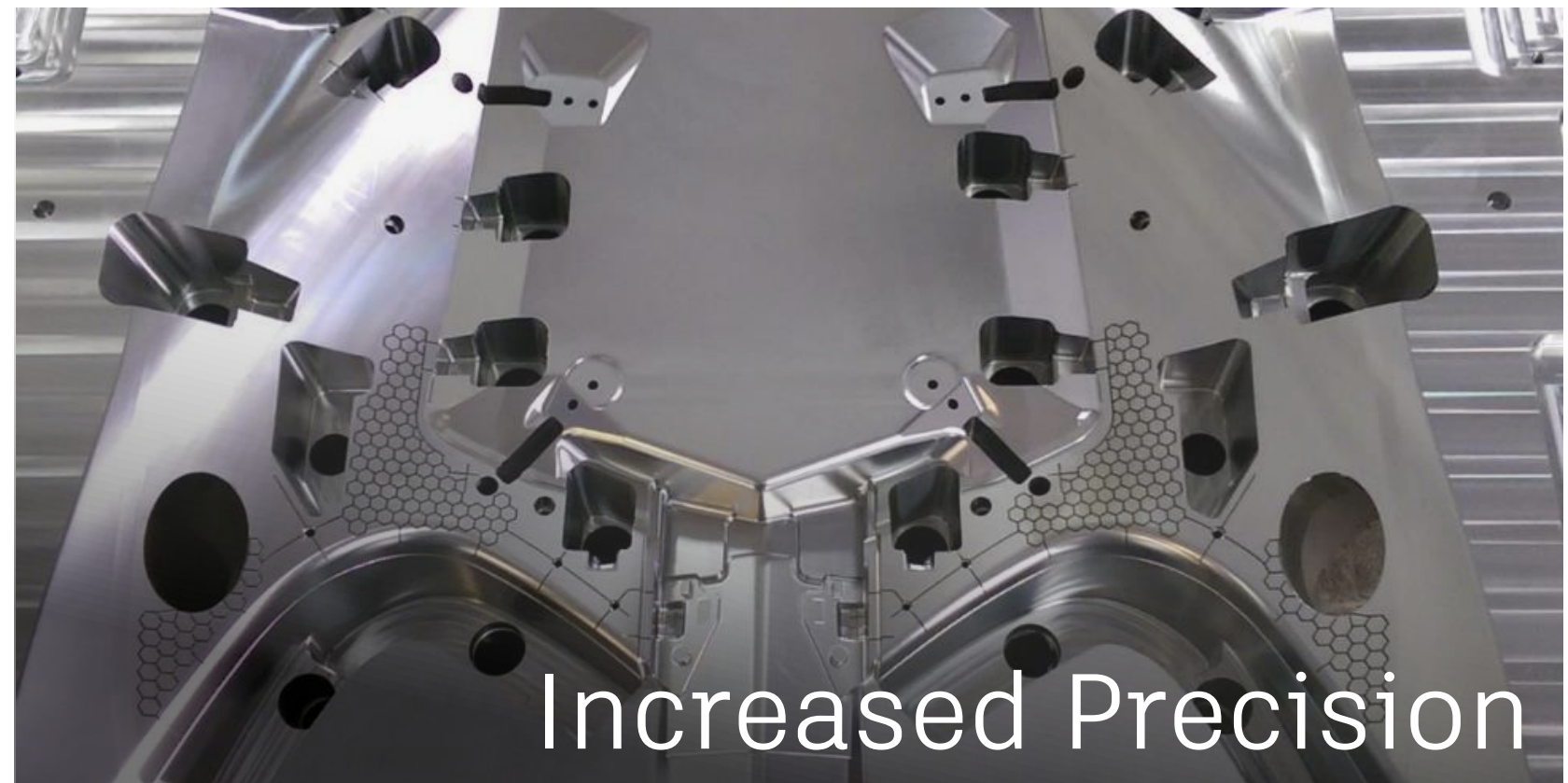
DES



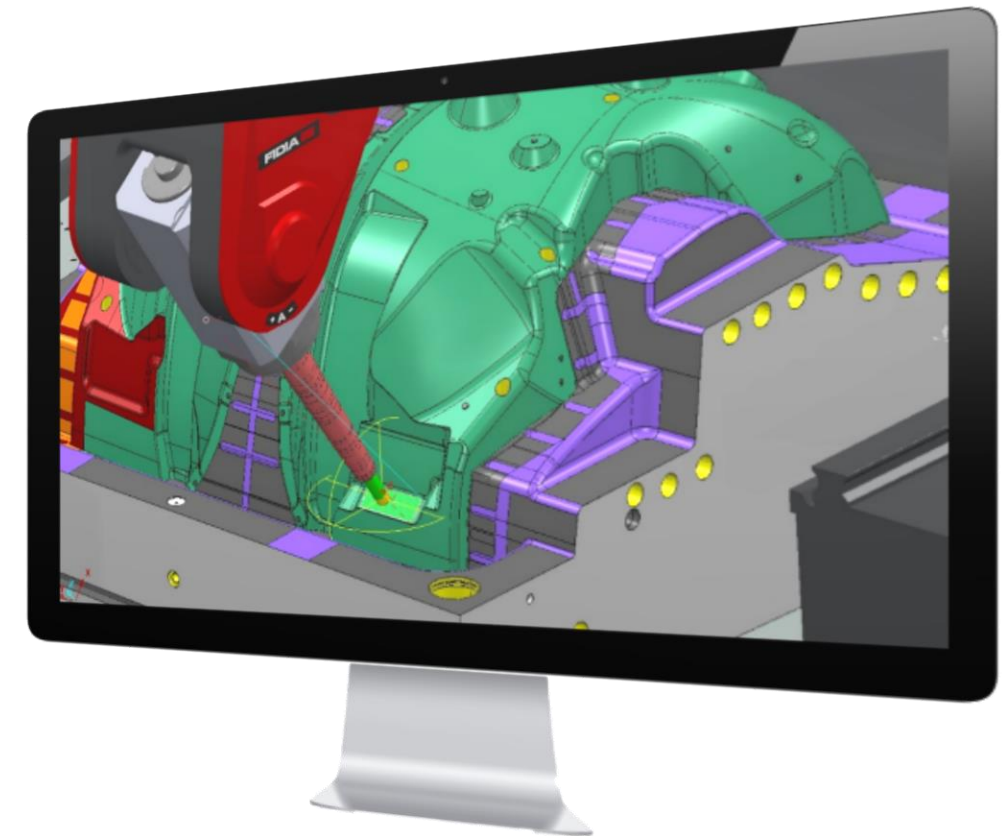
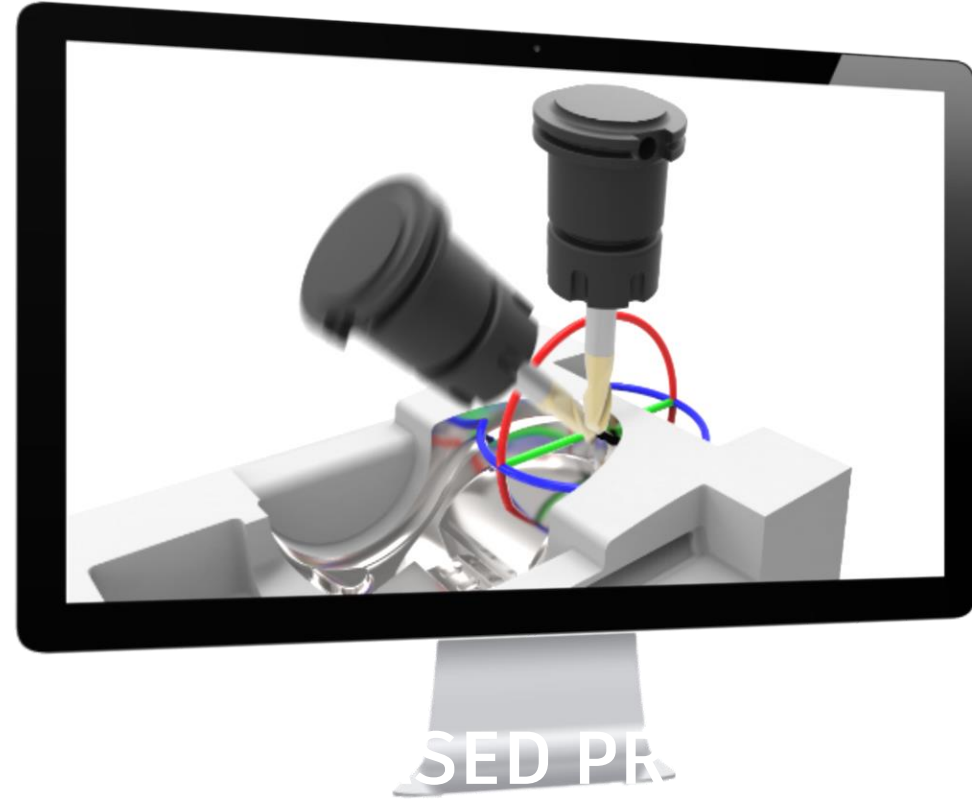
Technical Demonstration

The background of the image is a complex, abstract wireframe mesh. It consists of a dense network of thin, grey lines that form a series of interconnected, flowing shapes. These shapes resemble organic, cellular structures or perhaps a stylized representation of a molecular lattice. The mesh is more concentrated in some areas, creating thicker, more defined forms, while in other areas, it is more sparse, allowing the white background to show through. The overall effect is one of dynamic, organic complexity.

Autodesk PowerMill



Expert levels of control and optimization



Technical Demonstration



Summary

Summary

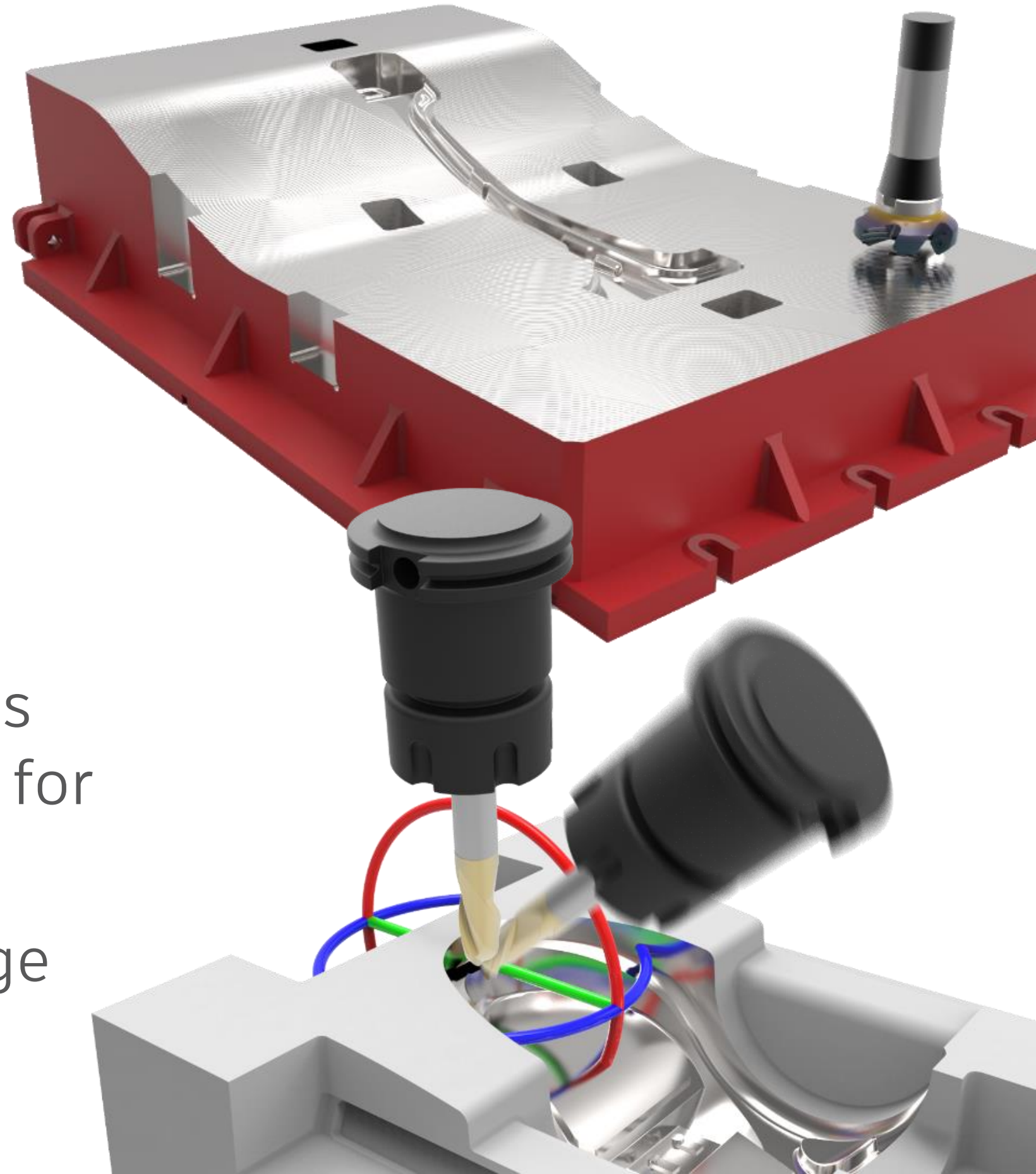
- Choosing the right CAM package will ultimately come down to...





Summary

- Know more about Autodesk Subtractive CAM Products
- Know where each CAM product overlaps and more importantly specializes
- Know more about the types of parts and machines each package caters for
- Know that whatever your choice Autodesk has the right CAM package for you



Questions?

Thank You

