



ADVANCED MANUFACTURING SOLUTIONS

Make anything



About Autodesk Advanced Manufacturing

For nearly 40 years, Autodesk® has pushed the possibilities of what it means to design and manufacture. Covering additive, subtractive, simulation, materials and electronics, products such as Moldflow®, PowerMill®, Netfabb® and FeatureCAM® provide customers globally with solutions across all advanced manufacturing processes and needs.

Now, with Fusion 360 we're ushering in an era of advanced manufacturing that will change everything. Empowering product design and manufacturing innovators to achieve the new possible – in the way businesses can imagine, collaborate, and create.

Your advanced manufacturing innovation partner

With more than 600 manufacturing professionals dedicated to software development, and over \$1B investment

in advanced manufacturing technology, we are committed to helping you stay ahead of the competition. Our expert technical specialists, consulting teams and specialized local Partner Network are available globally to optimize your manufacturing processes.

We recognize it's difficult to test, learn, and implement new manufacturing processes when you face pressures every day to deliver parts. Our global network of technology centers help expand your R&D capabilities to drive manufacturing innovation, using Autodesk software to push the limits of the latest hardware available today.

Converging design and manufacturing
We are here to help you connect your design and manufacturing workflows, automate your processes, and network with your entire supply chain.



600

software
developers



>\$1bn

invested by
Autodesk



6

manufacturing
innovation
centers

Choose from a range of digital manufacturing software focused on processes including CAM, additive manufacturing, plastics simulation, and inspection to best fit your business needs:

CAM



PowerMill

Expert high speed and multi-axis CAM software



FeatureCAM

Automated CNC programming software



PartMaker

Precision programming for Swiss-type lathes

Additive



Netfabb

Connected software for additive manufacturing, design, and simulation



PowerMill

Program, control, and simulate high-rate additive manufacturing processes

Simulation



Moldflow

Plastic injection and compression mold simulation software



CFD

Computational fluid dynamics simulation software

Metrology



PowerInspect

Multi-device 3D inspection software

Modeling for Manufacturing



PowerShape

Prepare complex models for manufacture

Integrated CAD/CAM/CAE



Fusion 360

Integrated CAD/CAM/CAE software

Included with all our specialist tools is access to Fusion 360 – our next generation, data-centric platform seamlessly connecting design, engineering and manufacturing. Differentiate your business by:

- Accessing all the technology you need, on demand
- Collaborating with all stakeholders from design to manufacture
- Connecting to suppliers and services providers
- Communicating throughout the development timeline.



AUTODESK® FUSION 360™



“I've used various softwares in the past, like CATIA, or NX or Mastercam, but none of those really put together designing and manufacturing as well as Fusion 360

Jeff Hooper,
Backhand Bikes

Integrated CAD, CAM, and CAE software

Fusion 360™ solves the bottlenecks created by traditional CAD, CAM, data management, and simulation solutions by eliminating the disconnected development process that you encounter every day. Unifying our most potent technologies under the power of a single platform, Fusion 360 provides a cohesive experience across design, engineering, and manufacturing with your data at the center – on any device, anytime, anywhere.

Three reasons to use Autodesk Fusion 360



Simplify your entire workflow with one platform

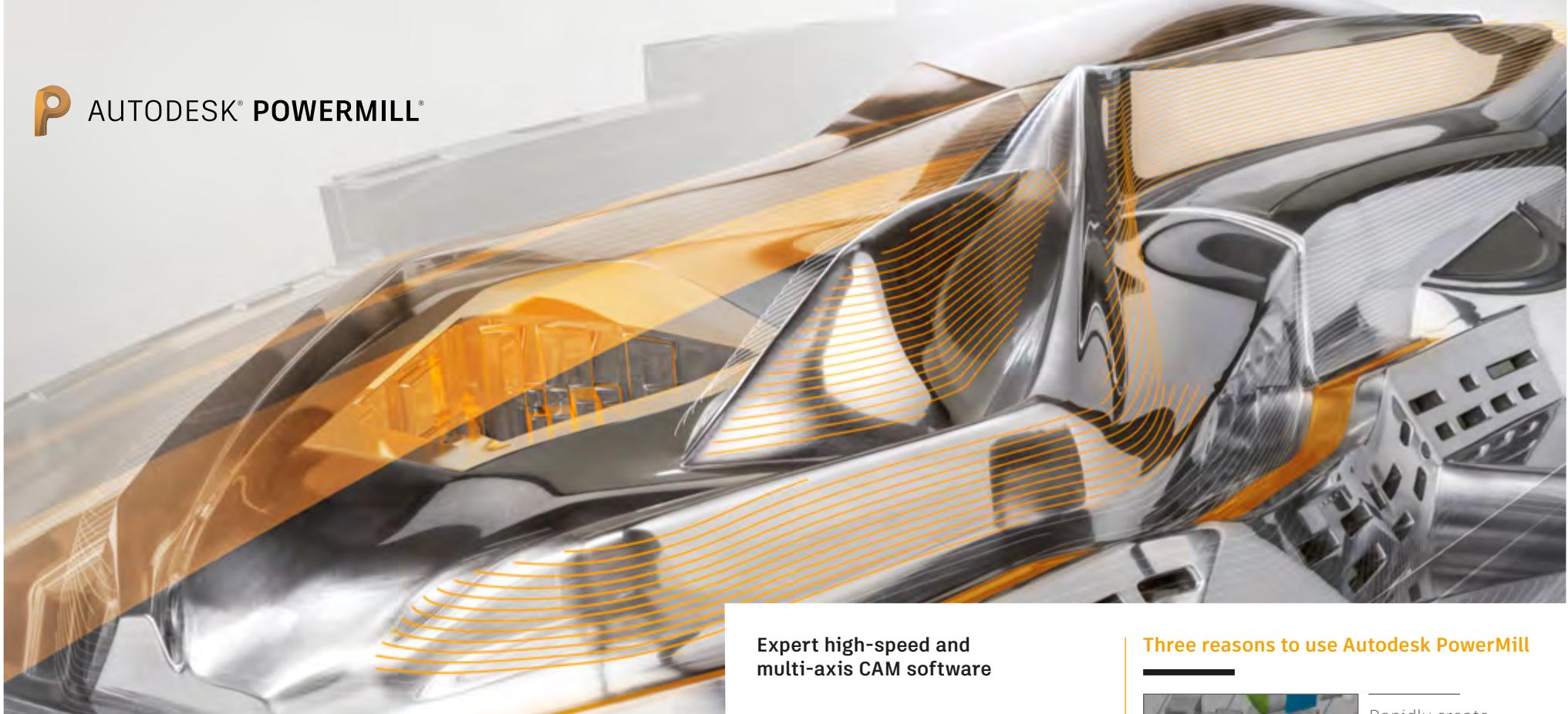


Collaborate seamlessly in the cloud



Use generative design to realize previously impossible outcomes

Learn more at www.autodesk.com/fusion-360



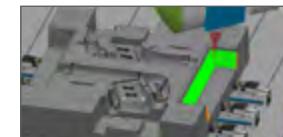
“With PowerMill, we’re seeing jobs come in weeks ahead of schedule. Builds that would traditionally take 10 weeks, we’re doing in 4 to 5

Brian Kerkstra,
Manufacturing Engineer,
Paragon D&E

Expert high-speed and multi-axis CAM software

Autodesk® PowerMill® is expert CAM software for programming molds, dies and highly complex components requiring maximum quality, control, and efficiency of your CNC machines. Access a vast library of toolpath strategies and combine with advanced optimization tools to generate the NC code needed to produce exceptional quality parts. Use powerful simulation tools to validate and enhance the motion of 5-axis machines and industrial robots.

Three reasons to use Autodesk PowerMill



Rapidly create high efficiency toolpaths for large, complex parts

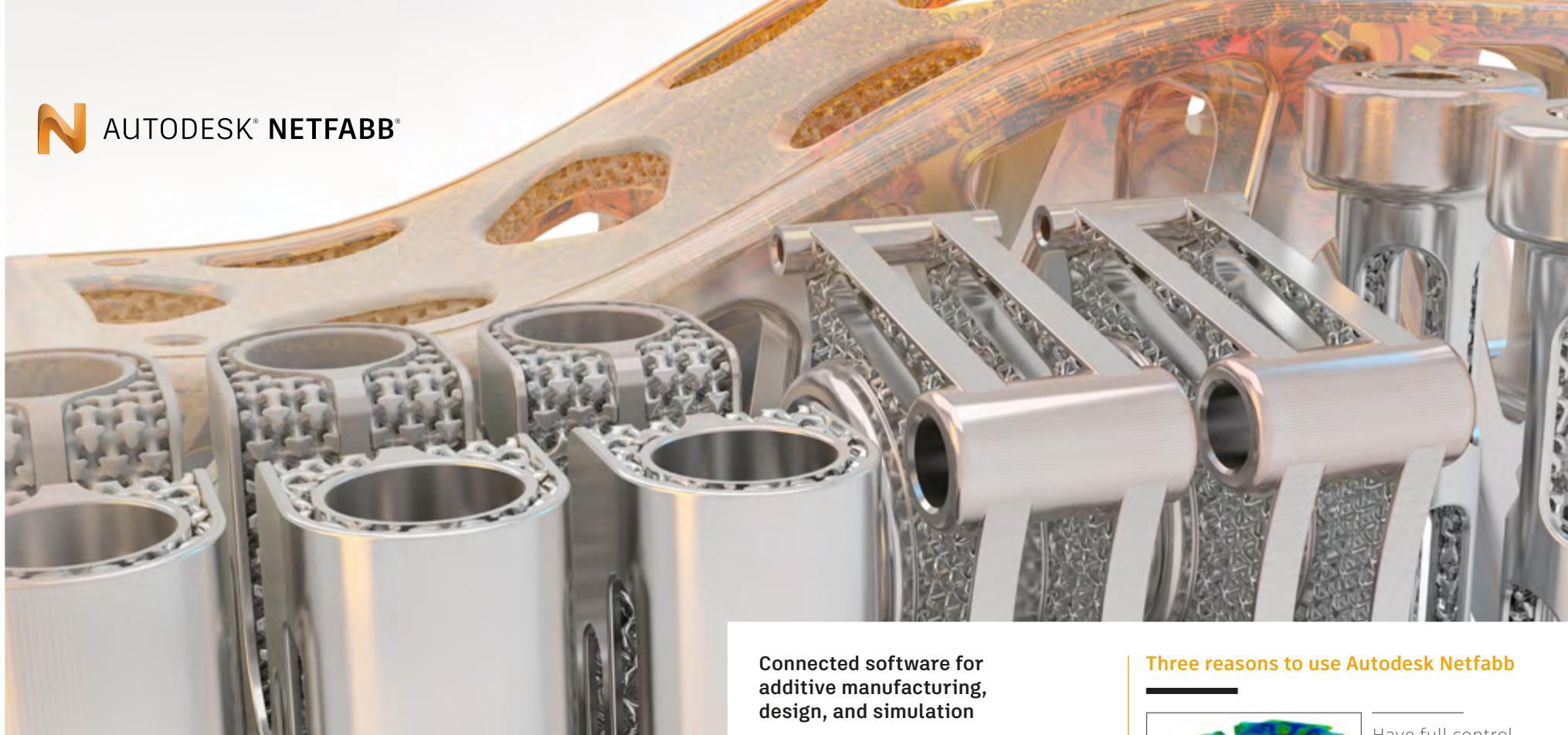


Extensive toolpath editing and optimization



Automatic 5-axis collision avoidance for demanding applications

Learn more at www.autodesk.com/powermill



“**Designs are becoming more complex and computer modelling is essential to master the complexity. Autodesk software proved this can be done**

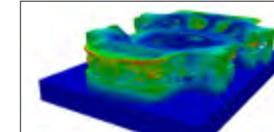
Marko Bosman,
Chief Technologist AM,
GKN Aerospace

Connected software for additive manufacturing, design, and simulation

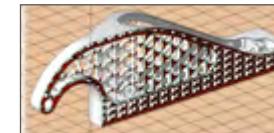
Designed for production environments, Autodesk® Netfabb® provides efficient build preparation capabilities alongside tools for optimizing designs for additive manufacturing and simulating metal additive processes, to help you reduce costs, increase efficiency, and improve part performance. Quickly get from a 3D model to successfully printed parts using a complete additive manufacturing toolset that streamlines workflows and reduce build errors.

Learn more at www.autodesk.com/netfabb

Three reasons to use Autodesk Netfabb



Have full control over your toolpath and simulate metal additive processes



Create models that take advantage of additive manufacturing



Maximize the numbers of parts you can fit into each build



“ FeatureCAM has been a blessing. It takes our design, gets the G-code made, and goes into the machine in lightning time

Don Binkley,
CEO,
D&D Engineering

Automated CNC programming software

Fusion 360 with FeatureCAM automates CAM programming with automatic and interactive feature recognition technology for faster part production. Knowledge-based programming helps you intelligently program a comprehensive range of CNC applications, including mills, multi-tasking turning centers, Swiss-type lathes, and wire EDMs. Fusion 360, PartMaker, Fusion Team, and HSMWorks are included as complementary solutions to FeatureCAM.

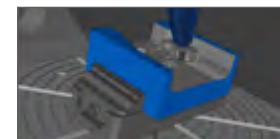
Three reasons to use Autodesk FeatureCAM



Automate your workflow from design to NC code

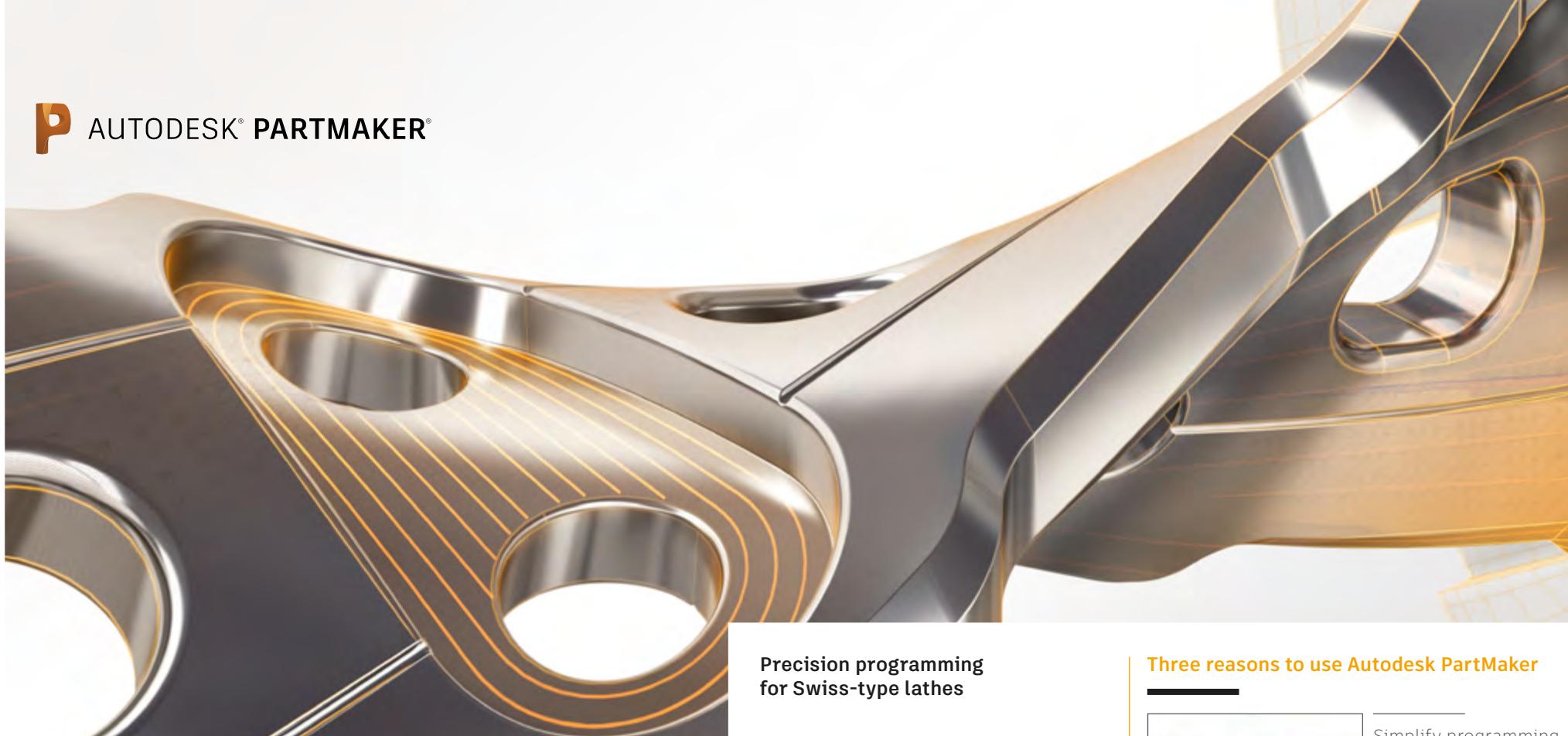


Single interface for all your CNC applications



Produce consistent results with built-in manufacturing knowledge

Learn more at www.autodesk.com/featurecam



“We make a tremendous amount of medical components. PartMaker was the logical choice – it has allowed us to take highly complex parts and program them in one operation

Lee Dwyer,
General Manager,
Astro Medical Devices

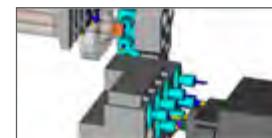
Precision programming for Swiss-type lathes

PartMaker enables high precision programming for Swiss-type lathes. Machine parts complete with efficient cycle times and achieve high quality, burr-free finishes. Specifically developed for Swiss lathes, PartMaker supports the CNC techniques commonly used by Swiss programmers. Our globally established relationships with many machine tool manufacturers helps to ensure PartMaker post-processors generate accurate NC code for your lathe.

Three reasons to use Autodesk PartMaker

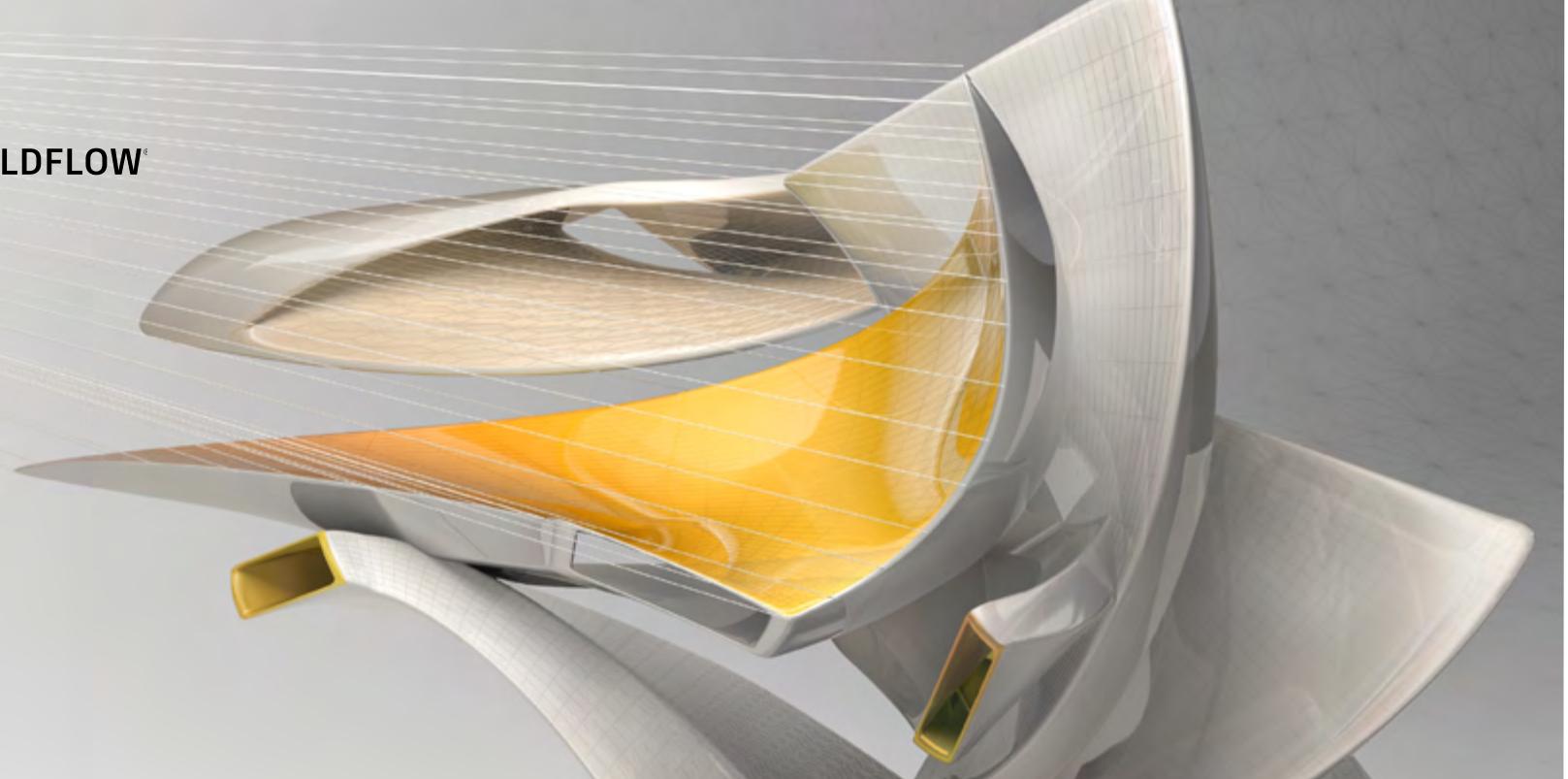


Simplify programming of precision turning machines with live tooling



Specific functionality for Swiss style machining

Operations	Workpiece	Tool	Time	Depth	Feedrate	Spindle Speed
A1	Part 1	Tool 1	00:00:00.000	0.000	100.000	10000.000
A2	Part 1	Tool 2	00:00:00.000	0.000	100.000	10000.000
A3	Part 1	Tool 3	00:00:00.000	0.000	100.000	10000.000
A4	Part 1	Tool 4	00:00:00.000	0.000	100.000	10000.000
A5	Part 1	Tool 5	00:00:00.000	0.000	100.000	10000.000
A6	Part 1	Tool 6	00:00:00.000	0.000	100.000	10000.000
A7	Part 1	Tool 7	00:00:00.000	0.000	100.000	10000.000
A8	Part 1	Tool 8	00:00:00.000	0.000	100.000	10000.000
A9	Part 1	Tool 9	00:00:00.000	0.000	100.000	10000.000
A10	Part 1	Tool 10	00:00:00.000	0.000	100.000	10000.000
A11	Part 1	Tool 11	00:00:00.000	0.000	100.000	10000.000
A12	Part 1	Tool 12	00:00:00.000	0.000	100.000	10000.000
A13	Part 1	Tool 13	00:00:00.000	0.000	100.000	10000.000
A14	Part 1	Tool 14	00:00:00.000	0.000	100.000	10000.000
A15	Part 1	Tool 15	00:00:00.000	0.000	100.000	10000.000
A16	Part 1	Tool 16	00:00:00.000	0.000	100.000	10000.000
A17	Part 1	Tool 17	00:00:00.000	0.000	100.000	10000.000
A18	Part 1	Tool 18	00:00:00.000	0.000	100.000	10000.000
A19	Part 1	Tool 19	00:00:00.000	0.000	100.000	10000.000
A20	Part 1	Tool 20	00:00:00.000	0.000	100.000	10000.000
A21	Part 1	Tool 21	00:00:00.000	0.000	100.000	10000.000
A22	Part 1	Tool 23	00:00:00.000	0.000	100.000	10000.000
A23	Part 1	Tool 24	00:00:00.000	0.000	100.000	10000.000
A24	Part 1	Tool 25	00:00:00.000	0.000	100.000	10000.000
A25	Part 1	Tool 26	00:00:00.000	0.000	100.000	10000.000
A26	Part 1	Tool 27	00:00:00.000	0.000	100.000	10000.000
A27	Part 1	Tool 28	00:00:00.000	0.000	100.000	10000.000
A28	Part 1	Tool 29	00:00:00.000	0.000	100.000	10000.000
A29	Part 1	Tool 30	00:00:00.000	0.000	100.000	10000.000
A30	Part 1	Tool 31	00:00:00.000	0.000	100.000	10000.000
A31	Part 1	Tool 32	00:00:00.000	0.000	100.000	10000.000
A32	Part 1	Tool 33	00:00:00.000	0.000	100.000	10000.000
A33	Part 1	Tool 34	00:00:00.000	0.000	100.000	10000.000
A34	Part 1	Tool 35	00:00:00.000	0.000	100.000	10000.000
A35	Part 1	Tool 36	00:00:00.000	0.000	100.000	10000.000
A36	Part 1	Tool 37	00:00:00.000	0.000	100.000	10000.000
A37	Part 1	Tool 38	00:00:00.000	0.000	100.000	10000.000
A38	Part 1	Tool 39	00:00:00.000	0.000	100.000	10000.000
A39	Part 1	Tool 40	00:00:00.000	0.000	100.000	10000.000
A40	Part 1	Tool 41	00:00:00.000	0.000	100.000	10000.000
A41	Part 1	Tool 42	00:00:00.000	0.000	100.000	10000.000
A42	Part 1	Tool 43	00:00:00.000	0.000	100.000	10000.000
A43	Part 1	Tool 44	00:00:00.000	0.000	100.000	10000.000
A44	Part 1	Tool 45	00:00:00.000	0.000	100.000	10000.000
A45	Part 1	Tool 46	00:00:00.000	0.000	100.000	10000.000
A46	Part 1	Tool 47	00:00:00.000	0.000	100.000	10000.000
A47	Part 1	Tool 48	00:00:00.000	0.000	100.000	10000.000
A48	Part 1	Tool 49	00:00:00.000	0.000	100.000	10000.000
A49	Part 1	Tool 50	00:00:00.000	0.000	100.000	10000.000
A50	Part 1	Tool 51	00:00:00.000	0.000	100.000	10000.000
A51	Part 1	Tool 52	00:00:00.000	0.000	100.000	10000.000
A52	Part 1	Tool 53	00:00:00.000	0.000	100.000	10000.000
A53	Part 1	Tool 54	00:00:00.000	0.000	100.000	10000.000
A54	Part 1	Tool 55	00:00:00.000	0.000	100.000	10000.000
A55	Part 1	Tool 56	00:00:00.000	0.000	100.000	10000.000
A56	Part 1	Tool 57	00:00:00.000	0.000	100.000	10000.000
A57	Part 1	Tool 58	00:00:00.000	0.000	100.000	10000.000
A58	Part 1	Tool 59	00:00:00.000	0.000	100.000	10000.000
A59	Part 1	Tool 60	00:00:00.000	0.000	100.000	10000.000
A60	Part 1	Tool 61	00:00:00.000	0.000	100.000	10000.000
A61	Part 1	Tool 62	00:00:00.000	0.000	100.000	10000.000
A62	Part 1	Tool 63	00:00:00.000	0.000	100.000	10000.000
A63	Part 1	Tool 64	00:00:00.000	0.000	100.000	10000.000
A64	Part 1	Tool 65	00:00:00.000	0.000	100.000	10000.000
A65	Part 1	Tool 66	00:00:00.000	0.000	100.000	10000.000
A66	Part 1	Tool 67	00:00:00.000	0.000	100.000	10000.000
A67	Part 1	Tool 68	00:00:00.000	0.000	100.000	10000.000
A68	Part 1	Tool 69	00:00:00.000	0.000	100.000	10000.000
A69	Part 1	Tool 70	00:00:00.000	0.000	100.000	10000.000
A70	Part 1	Tool 71	00:00:00.000	0.000	100.000	10000.000
A71	Part 1	Tool 72	00:00:00.000	0.000	100.000	10000.000
A72	Part 1	Tool 73	00:00:00.000	0.000	100.000	10000.000
A73	Part 1	Tool 74	00:00:00.000	0.000	100.000	10000.000
A74	Part 1	Tool 75	00:00:00.000	0.000	100.000	10000.000
A75	Part 1	Tool 76	00:00:00.000	0.000	100.000	10000.000
A76	Part 1	Tool 77	00:00:00.000	0.000	100.000	10000.000
A77	Part 1	Tool 78	00:00:00.000	0.000	100.000	10000.000
A78	Part 1	Tool 79	00:00:00.000	0.000	100.000	10000.000
A79	Part 1	Tool 80	00:00:00.000	0.000	100.000	10000.000
A80	Part 1	Tool 81	00:00:00.000	0.000	100.000	10000.000
A81	Part 1	Tool 82	00:00:00.000	0.000	100.000	10000.000
A82	Part 1	Tool 83	00:00:00.000	0.000	100.000	10000.000
A83	Part 1	Tool 84	00:00:00.000	0.000	100.000	10000.000
A84	Part 1	Tool 85	00:00:00.000	0.000	100.000	10000.000
A85	Part 1	Tool 86	00:00:00.000	0.000	100.000	10000.000
A86	Part 1	Tool 87	00:00:00.000	0.000	100.000	10000.000
A87	Part 1	Tool 88	00:00:00.000	0.000	100.000	10000.000
A88	Part 1	Tool 89	00:00:00.000	0.000	100.000	10000.000
A89	Part 1	Tool 90	00:00:00.000	0.000	100.000	10000.000
A90	Part 1	Tool 91	00:00:00.000	0.000	100.000	10000.000
A91	Part 1	Tool 92	00:00:00.000	0.000	100.000	10000.000
A92	Part 1	Tool 93	00:00:00.000	0.000	100.000	10000.000
A93	Part 1	Tool 94	00:00:00.000	0.000	100.000	10000.000
A94	Part 1	Tool 95	00:00:00.000	0.000	100.000	10000.000
A95	Part 1	Tool 96	00:00:00.000	0.000	100.000	10000.000
A96	Part 1	Tool 97	00:00:00.000	0.000	100.000	10000.000
A97	Part 1	Tool 98	00:00:00.000	0.000	100.000	10000.000
A98	Part 1	Tool 99	00:00:00.000	0.000	100.000	10000.000
A99	Part 1	Tool 100	00:00:00.000	0.000	100.000	10000.000
A100	Part 1	Tool 101	00:00:00.000	0.000	100.000	10000.000
A101	Part 1	Tool 102	00:00:00.000	0.000	100.000	10000.000
A102	Part 1	Tool 103	00:00:00.000	0.000	100.000	10000.000
A103	Part 1	Tool 104	00:00:00.000	0.000	100.000	10000.000
A104	Part 1	Tool 105	00:00:00.000	0.000	100.000	10000.000
A105	Part 1	Tool 106	00:00:00.000	0.000	100.000	10000.000
A106	Part 1	Tool 107	00:00:00.000	0.000	100.000	10000.000
A107	Part 1	Tool 108	00:00:00.000	0.000	100.000	10000.000
A108	Part 1	Tool 109	00:00:00.000	0.000	100.000	10000.000
A109	Part 1	Tool 110	00:00:00.000	0.000	100.000	10000.000
A110	Part 1	Tool 111	00:00:00.000	0.000	100.000	10000.000
A111	Part 1	Tool 112	00:00:00.000	0.000	100.000	10000.000
A112	Part 1	Tool 113	00:00:00.000	0.000	100.000	10000.000
A113	Part 1	Tool 114	00:00:00.000	0.000	100.000	10000.000
A114	Part 1	Tool 115	00:00:00.000	0.000	100.000	10000.000
A115	Part 1	Tool 116	00:00:00.000	0.000	100.000	10000.000
A116	Part 1	Tool 117	00:00:00.000	0.000	100.000	10000.000
A117	Part 1	Tool 118	00:00:00.000	0.000	100.000	10000.000
A118	Part 1	Tool 119	00:00:00.000	0.000	100.000	10000.000
A119	Part 1	Tool 120	00:00:00.000	0.000	100.000	10000.000
A120	Part 1	Tool 121	00:00:00.000	0.000	100.000	10000.000
A121	Part 1	Tool 122	00:00:00.000	0.000	100.000	10000.000
A122	Part 1	Tool 123	00:00:00.000	0.000	100.000	10000.000
A123	Part 1	Tool 124	00:00:00.000	0.000	100.000	10000.000
A124	Part 1	Tool 125	00:00:00.000	0.000	100.000	10000.000
A125	Part 1	Tool 126	00:00:00.000	0.000	100.000	10000.000
A126	Part 1	Tool 127	00:00:00.000	0.000	100.000	1



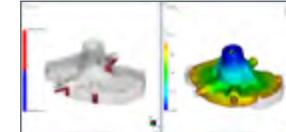
“We have been using Moldflow for about ten years. Back then, it was the only sensible product on the market. Today, it is basically the standard tool for simulations

Beat Schiegg,
Head of R&D,
Forteq Nidau AG

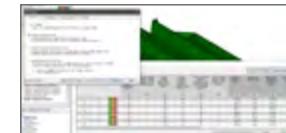
Plastic injection and compression mold simulation software

Optimize part and mold designs, reduce potential manufacturing defects, and get innovative products to market faster. Autodesk Moldflow provides tools based on a comprehensive materials database to help CAE analysts, engineers, and designers evaluate different designs, mold configurations, and injection molding processes, reducing the need for costly physical prototypes to plan ahead for manufacturing.

Three reasons to use Autodesk Moldflow



Reduce delays and gain insights with plastics part simulation

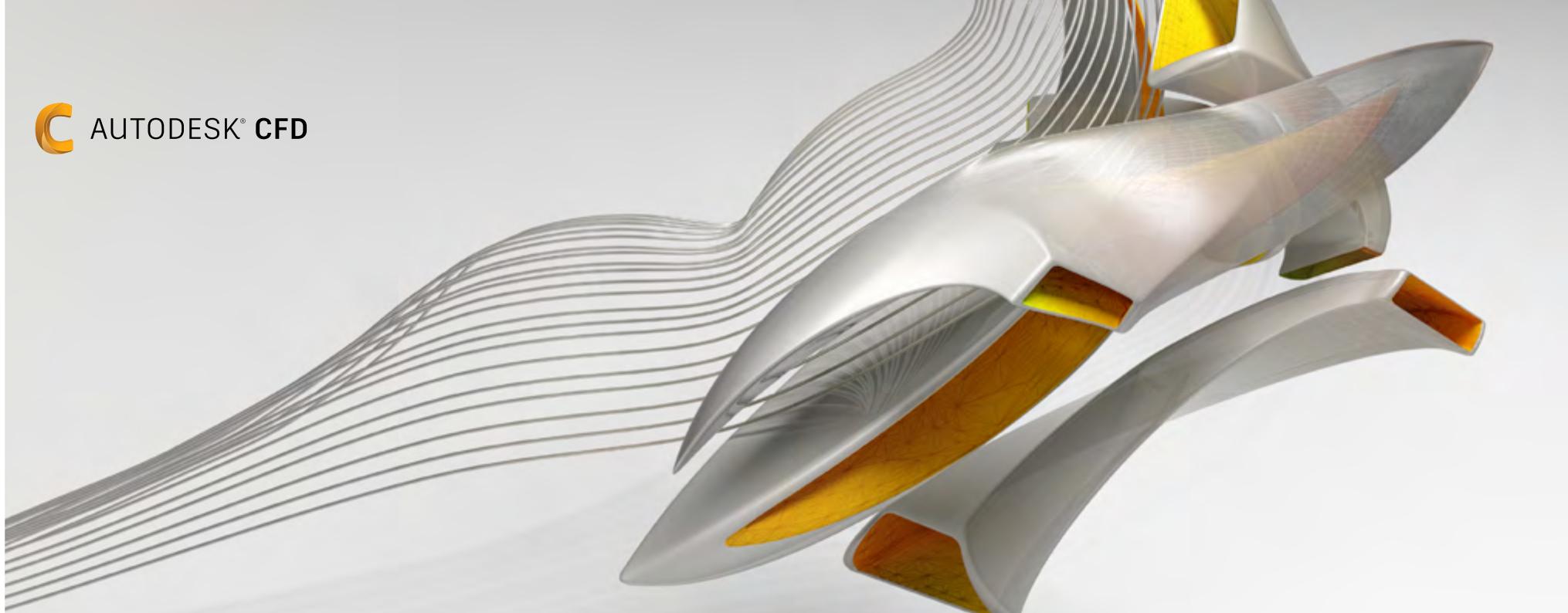


Optimize part, mold, and manufacturing processes in one interface



Simulate with flexible meshing and solving options

Learn more at www.autodesk.com/moldflow



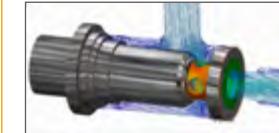
“ Autodesk has a fantastic suite of software where we can design, analyze, build and see how the data center behaves

Sam Wicks,
Data Center Design Engineer,
Sudlows

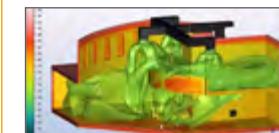
Computational fluid dynamics simulation software

Autodesk® CFD software provides fast, accurate, and flexible fluid flow and thermal simulation tools to help predict product performance, optimize designs, and validate product behavior before manufacturing – minimizing reliance on costly physical prototypes and helping you get innovative products to market faster. Accurately predict behavior, optimize and validate designs with a wide range of simulation capabilities before manufacturing.

Three reasons to use Autodesk CFD



Intelligently predict fluid flow and thermal conditions



Optimize a range of CFD tools for various industry applications

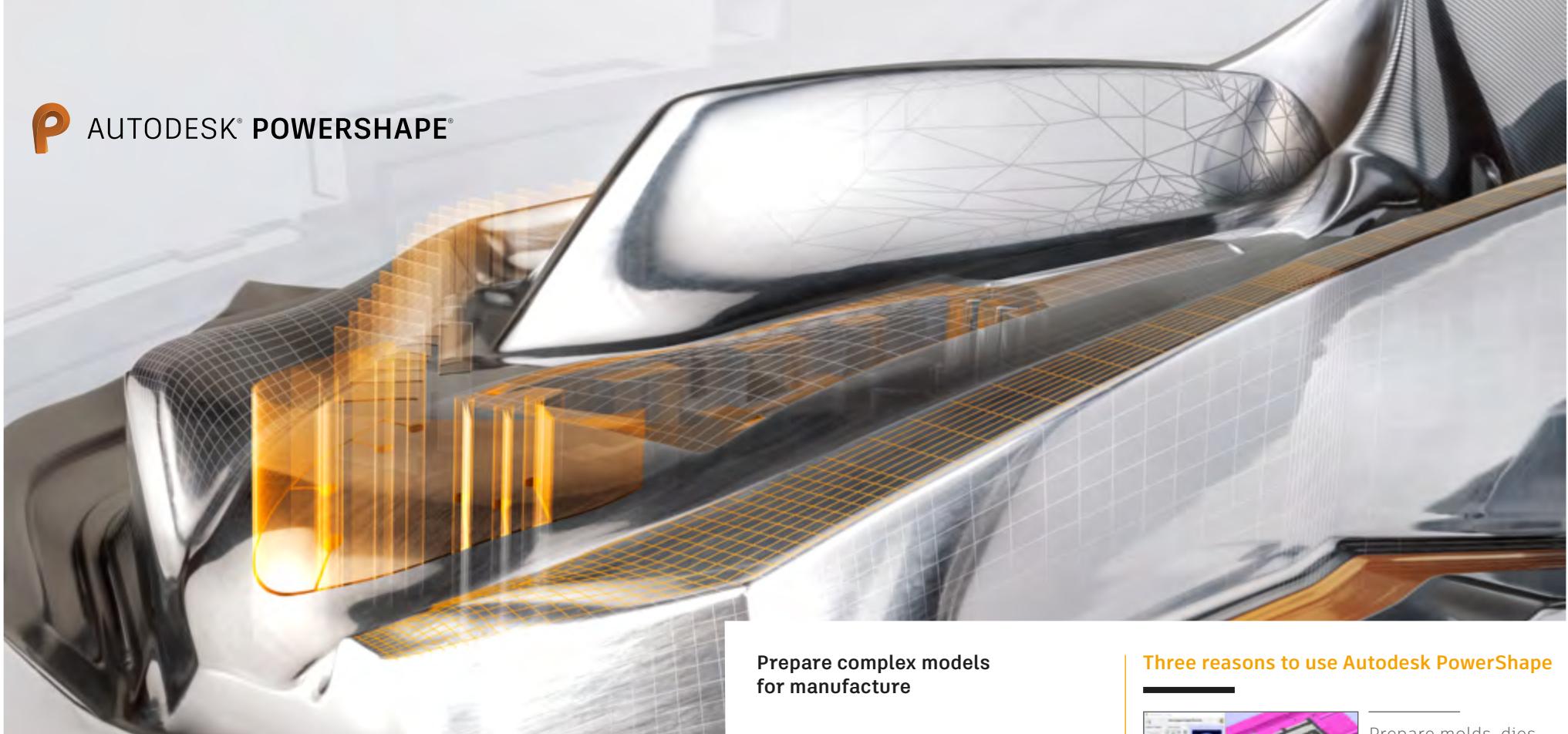


Flexible simulation capabilities to run locally or on remote servers

Learn more at www.autodesk.com/cfd



AUTODESK® POWERSHAPE®



“The interaction between PowerMill and PowerShape has definitely streamlined our ability to manufacture molds. We can start making chips right away

Shawn McNamara,
Designer,
Chicago Mold Engineering

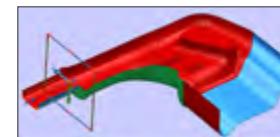
Prepare complex models for manufacture

The ideal modeling companion to use alongside PowerMill® and FeatureCAM®. Create additional geometry to help with CAM programming. Sketch wireframe boundaries to control the extents of machining. Automatically produce capping surfaces that smoothly cover ribs and other features produced with other manufacturing processes. Construct curves and surfaces to more precisely control the motion of 5-axis machines and industrial robots.

Three reasons to use Autodesk PowerShape



Prepare molds, dies, and complex parts for manufacture

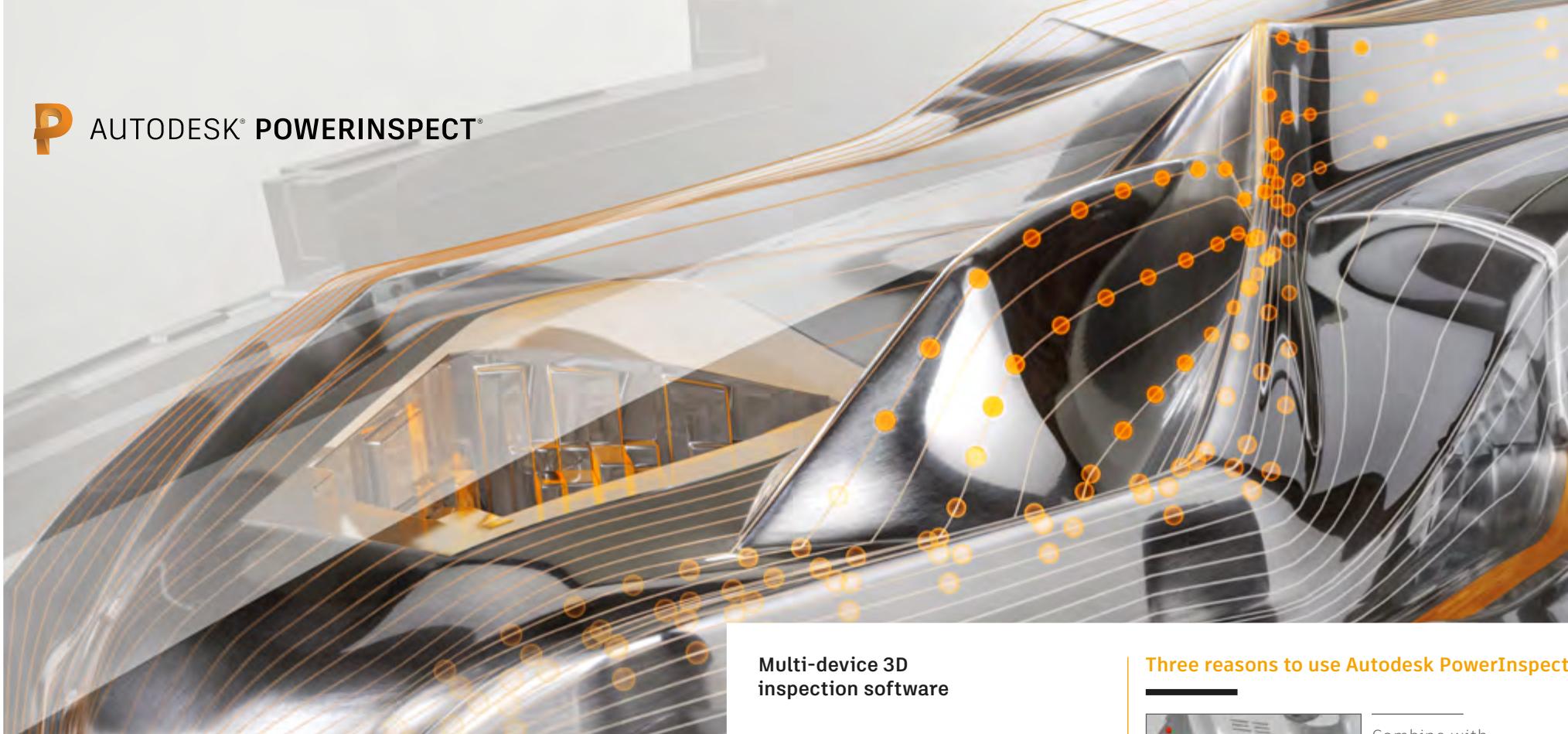


Create geometry to help with CAM programming



Find and repair critical faults to simplify downstream processes

Learn more at www.autodesk.com/powershape



“Our main target was to have one established inspection software on all our different hardware platforms

Hr Dr. Gohmann,
Head of QM and QA,
bielomatik Leuze GmbH + Co. KG

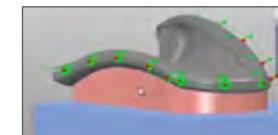
Multi-device 3D inspection software

Make inspecting complex freeform surfaces simple with a wide range of measuring devices. Autodesk® PowerInspect® offers a powerful way to inspect, validate, and quality control for all measurement equipment. Inspect parts during machining using On Machine Verification (OMV) to reduce scrap and avoid expensive rework. Minimize long setup times that compromise machine productivity and overall plant capacity.

Three reasons to use Autodesk PowerInspect



Combine with PowerMill to maintain quality and accuracy



Save money by identifying defects early in the manufacturing process



Easily inspect large, complex, and layered parts

Learn more at www.autodesk.com/powerinspect



Learn more or purchase

Access specialists worldwide who can provide product expertise, a deep understanding of your industry, and value that extends beyond your software. Locate a reseller near you at www.autodesk.com/reseller

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