PowerMILL

PowerMILL

Developer(s)	Autodesk Inc.
Initial release	1995
Stable release	2018
Operating system	Microsoft Windows
<u>Type</u>	<u>CAM</u>
Website	[1]

PowerMILL is a 3D <u>CAM</u> (Computer-aided manufacturing) solution that runs on <u>Microsoft</u> <u>Windows</u> for the programming of tool paths for 2 to 5 axis <u>CNC</u> (Computer Numerical Control) Milling machines developed by <u>Autodesk</u> Inc. The software is used in a range of different engineering industries to determine optimal tool paths to reduce time and manufacturing costs as well as reduce tool loads and produce smooth surface finishes. More than 15,000 organisations use PowerMILL worldwide for 2,3 and 5-axis machining.^{[1][2]}

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History



Toolpath strategies using PowerMILL

The code of PowerMILL originates from the software DUCT which was developed in 1973 by <u>Donald Welbourn</u> and Ed Lambourne along with the help of Delta Metal Group, whose funding aided the transferral of the system into industry. DUCT was initially developed with the sponsorship of Control Data in Germany in the form of access to their <u>time-sharing</u> computing resources. The advancement of mini computers from 1982 meant that it became economically viable to design complex 3D shapes using a computer.^[3]

From 1995 to 1998 DUCT was gradually replaced with a new range of products, which covered the full manufacturing cycle from conceptual design through to manufacture. Delcam's Power Solution range of products that built upon the functionality of the DUCT suite, incorporated the latest user interface technology and offered users many new benefits.^[4]

Release History



Robot machining part programmed using PowerMILL Robot Interface

Release Versio	n Date
PowerMILL 2.0	1995
PowerMILL 3.0	2000
PowerMILL 4.0	2002
PowerMILL 5.0	2003
PowerMILL 6.0	2005
PowerMILL 7.0	2006
PowerMILL 8.0	2007
PowerMILL 9.0	2008
PowerMILL 10.0	2009
PowerMILL 2010	15/03/2010
PowerMILL 2011	22/11/2010
PowerMILL 2012	(R1) 01/09/2011

PowerMILL 2012 (R2)19/03/2012PowerMILL 201302/01/2013PowerMILL 2014 (R1)06/09/2013PowerMILL 2014 (R2)20/02/2014PowerMILL 2015 (R1)25/06/2014PowerMILL 2015 (R2)02/01/2015PowerMILL 2016 (R1)16/07/2015PowerMill 20172016PowerMill 20182017

Ad-ons

PowerMILL Pro includes PS-Exchange a CAD data translator for all neutral import and export (IGES and VDA and STEP)

PowerMILL 3+2 Machining where a 3 axis milling program is executed with the cutting tool locked in a tilted position

PowerMILL 4&5 axis machining for 4 and 5 axis machines

PowerMILL Rotary Axis for machines using a rotary axis

PowerMILL Training Seat/IGES Viewer

PowerMILL Port Machining for the machining of tubular apertures

PowerMILL Blade, Blisk & Impeller Machining

PowerMILL Robot Interface for programming of robotic arms

See also

- <u>Autodesk</u>
- <u>Delcam</u>
- <u>PowerSHAPE</u>
- <u>PowerINSPECT</u>