PartMaker – Surface Machining Wizard

PartMaker’s Surface Machining Wizard (SMW) lets you perform complex 3D surfacing with a variety of powerful 3, 4 and 5-axis machining strategies that can be used across the spectrum of PartMaker’s application modules including PartMaker Mill, PartMaker Turn-Mill and PartMaker SwissCAM. PartMaker’s SMW gives you what you’ve been looking for, the power you need to tackle your toughest jobs with the ease of use you demand to get productive quickly. Whether you’re making molds on a 3-axis mill, highly complex parts on a multi-tasking Turn-Mill or Swiss-type lathe or just looking for more sophisticated machining strategies to perform deburring operations to drop parts complete, PartMaker’s SMW will be a cost effective solution to get the job done.

PartMaker’s powerful SMW module allows you to easily machine complex 3D surfaces with a variety of machining strategies including Roughing, Finishing, Remachining and Toolpath Projection. PartMaker’s SMW software employs algorithms that measurably cut down the time required for manufacturing complex parts.

Inputs required by PartMaker’s SMW can be provided as an imported Solid Model. Additionally, you can define basic solids such as a cone, sphere, cylinder or torus in PartMaker SMW or marry up SMW with PartMaker’s PowerSHAPE Companion to create 3D solid models to machine. PartMaker SMW is loaded with intelligent defaults for such areas as step over and leads and links to assure you achieve high quality, gauge free surfaces in a matter of minutes.

PartMaker SMW for Mill

SMW for PartMaker Mill will allow you to make an array of complex parts for vertical and horizontal machining centers. This module provides you all the tools you need to get the most from your machining center. Whether you are making molds or just needing 3D surfaced features on prismatic production machined parts, PartMaker SMW will get the job done with the right blend of power, ease of use and calculation time.

PartMaker SMW for Turn-Mill and Swiss

PartMaker SMW has been uniquely tuned to the needs of programming surface machining on a multi-axis Turn-Mill Center or Swiss-type lathe. Performing surfacing on a multi-axis lathe often requires a different approach to the one conventional 3D Milling CAM systems take. PartMaker SMW for Turn-Mill and Swiss applications is unique because it includes a number of unique rotary 3D machining strategies to optimize surfacing on a multi-axis lathe. The combination of these unique strategies and PartMaker’s Patented ‘Divide and Conquer’ programming strategy makes PartMaker SMW a truly incredible tool for performing surface machining on your Turn-Mill Center or Swiss-type lathe. SMW for Turn-Mill and Swiss supports 3 and 4 axis milling as well as 4 and 5-axis swarf machining for machines capable of such multi-axis motion.

System Requirements

PartMaker runs optimally on virtually any Windows 7, Windows Vista or Windows XP based PC. Specific system requirements are: Windows 7, Windows Vista or Windows XP, Pentium 4 3ghz or higher processor, 40 GB Hard Drive or larger, 2 GB of RAM or more and 512 MB Independent Video Card or better.
Unlimited Power for Programming the Most Complex Parts on Your Multi-Axis Turn-Mill Center or Swiss-type Lathe

The PowerMILL Companion for PartMaker is the solution for users programming ultra-complicated parts requiring a wide variety of 5-axis simultaneous machining strategies as well as highly sophisticated 3 and 4-axis milling strategies only found in PowerMILL, Delcam’s world leading CAM system for the programming of complex shapes. This module integrates the unparalleled processing power of PowerMILL with unique flexibility, ease of use, simulation and post processing capability of PartMaker. The combination of these two leading technologies gives you the most powerful CAM solution on the market today for automating the programming of complex parts involving turning, 5-axis milling and synchronous machining operations.

Who Needs the PowerMILL Companion for PartMaker?

The PowerMILL Companion for PartMaker is ideal for users of “B-Axis” Turn-Mill Centers like the Mori-Seiki NT, Mazak Integrex, Doosan MX, Nakamura NTMX, Okuma Multus and other such machines. This module has been developed for those users programming complex 5-axis parts such as turbine blades or cutting-edge medical devices. This functionality is also uniquely suited to users of “Bar Fed Mills” from such builders as Willemin-Macodel, Bumotec, Chiron and others. The PowerMILL Companion for PartMaker can also be a very cost effective solution for users of Swiss-type lathes, making complex parts, such as angulated abutments for the dental industry, in small lot sizes or for prototype.

How Does the PowerMILL Companion for PartMaker Work?

For all complex 5-axis machining strategies currently supported by PowerMILL, including blade and blisk machining, as well as for highly sophisticated 3-axis strategies, PartMaker users have the option for a direct interface to PowerMILL. PowerMILL tool paths can be imported directly into PartMaker, manipulated and synchronized on PartMaker’s Process Table, simulated and post processed directly from the PartMaker working environment. The PowerMILL Companion for PartMaker is priced competitively relative to the capability it provides.