MAKE IT RAIN

SOLIDWORKS CAM Packaging
INTERACTIVE

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### Milling

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### Turning
SOLIDWORKS CAM is an integrated 2.5-axis milling and 2-axis lathe programming solution by SOLIDWORKS. By utilizing the emerging technologies of Model Based Definition and Knowledge Based Machining, SOLIDWORKS CAM can rapidly transform your Design to Manufacturing process by improving communication, reducing errors, reducing cycle times, and increasing your product quality.
Automatic Feature Recognition (Mill Machine)

- Standard and Professional
- Mill machine
- Works on SOLIDWORKS native or IMPORTED geometry

AFR quickly extracts features, saving time over mouse-picking geometry

Recognizes over 20 manufacturing feature types

Automatic Feature Recognition removes the drudgery of day-to-day programming
Automatic Feature Recognition (Turn Machine)

- Professional
- Turn machine
- Works on SOLIDWORKS native or imported geometry

Automatic Feature Recognition removes the drudgery of day-to-day programming

AFR quickly extracts features, saving time over mouse-picking geometry

Recognizes OD, ID, Groove, Face and Cutoff features
Indexing of the 4th & 5th axes including Tombstone

- Professional
- Mill machine
- Cutter retracts and then waits for the fixture and part to rotate, before resuming.

Indexing saves time and money by reducing the number of setups
Volumill 2.5 axis

- Professional
- Mill machine
- High Speed Machining reduces cycle times by 70% and increases tool life by 2x-3x

Deeper cutter engagement dissipates heat over a larger area, improving tool life.

IN AS LITTLE AS 3 DAYS
YOU COULD DOUBLE YOUR MACHINE CAPACITY

- Increased capacity
- Reduced consumables costs
- Increased productivity
- Increased performance with existing equipment
- Simple adoption
- Simple download
- Easy to learn

Constant Tool Pressure tool-paths extend the tool and machine life

Works with any tooling and any mill machine

50% to 80% reductions in machining cycle times

2x Faster
Turning 2-axis

- Professional package only.
- for Turning machines (Lathes)
- 2-axis multi-turret Lathe capability with single spindle

Work-In-Process Stock automatically prevents air-cutting

Easily extend or shorten toolpath with Start/End Length Control
KBM – Knowledge Based Machining

- Standard & Professional
- Mill machine and Turn machine
- Recognized features use your rules to select your machining strategies, tools & feeds/speeds

Tech DB contains your rules
Machinist in a box
Your machining best practices
Post-Processing

- Standard & Professional packages
- Post-Processors for popular controllers
- Universal Post Generator allows users to create custom post-processors

The UPG is a separate download from the SOLIDWORKS Cam installation

Your reseller can assist you with custom post-processor services and quotes
NC-Editor

- Standard & Professional packages
- Mill and Turn machine
- G-Code file editing and back-plotting

Distributed Numerical Control can drip-feed older controls

Global adjustable Spindle speeds

Global adjustable Feed Rates

G-Code specialized Editor

Back-Plotting in wireframe or solid mode

Runs on machines licensed for SW

Compare G-Code Files
Assembly Machining

- Professional package
- Multiple Part programming
- Program using SOLIDWORKS assemblies

Compete more effectively by machining multiple parts in a single setup.

Multi-Part programming reduces the # of tool changes needed, thus lowering cycle times and machining costs.

Reduced # of setups result in greater machine utilization.
Configurations

- Professional package only.
- For Milling machine and Turning machine
- Read and machine SOLIDWORKS part configurations

Identify SW Configs for different operations in multi-vise or fixture layouts.

Automatically apply toolpaths to families of parts with the click of a button
Automatic Recognition of Multiple Setups

- Standard and Professional
- For Milling machine and Turning machine
- Automatically creates the setups for cnc programming

Reduces programming time

Can additionally be used for Cost estimating
3-axis Features – Area Clearance, Z-Level, Flat Area

- Standard & Professional packages
- Flat nose and Ball nose tooling support
- Rough milling for 2 & 3-axis features

Z-level scallop height calculates Z-step down amount.

Flat areas detected and machined.
Tolerance Based Machining

- Standard & Professional packages
- Automatically adjusts asymmetric tolerances to mean tolerances
- Uses tolerances in MBD model to automatically create CNC Programs

Machining strategies automatically update when tolerances tighten in the master model.