

# Benefits of Mastercam for SolidWorks

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**The below are the “traditional” benefits of using Mastercam for SolidWorks. These benefits could also be said about any CAM system that is integrated with SolidWorks:**

- One environment, one interface to learn.
- Design changes are handled with ease.
- Capable of applying toolpaths in the Part or Assembly environments. (Note: Some other integrated CAM products only program in the Assembly level) This means that parts which are controlled by assembly features or other parts can be programmed in either their own part environment or within the assembly.
- Not limited to native SW files. Imported files are also machineable. This is also true with FBM (you just need a solid.)
- The most popular CAM system integrated into most popular CAD system gives you the greatest chance at hiring someone with existing skillsets, as well as accessing widely used support and user forums, etc.

**Here are the more Mastercam-specific benefits of using Mastercam for SolidWorks:**

- Familiar toolpath interface for those that know Mastercam but are just starting out with Mastercam for SolidWorks
- One CAD file that contains toolpath data. Toolpath data is stored with the CAD file, so if the file gets accessed by someone without MCfSW, that underlying toolpath data still exists and just “goes along for the ride.” Once someone with MCfSW opens the file, they will have access to the data.
- Enhancements to existing toolpaths in Mastercam get included in MC4SW
- Opening MCfSW files in standalone Mastercam will bring in the existing toolpath data. This is very useful for when you need to access toolpath capabilities that are not in the MCfSW product, or when you only have access to standalone Mastercam (say for example, the MCfSW license is being used)
- Chaining is much more powerful compared to standard Mastercam.
- Ability to import in operations from a MCX file. This is important for customers that have both standard Mastercam and MCfSW. If one part was programmed in Mastercam and a similar part is now being programmed in MCfSW, they can import the toolpaths from the MCX file into MCfSW and re-associate the geometry.

- We support toolpathing multiple configurations in both parts and assemblies. - Each configuration can be independently toolpathed and is fully associative to its own configuration feature tree.
- Existing toolpaths can be automatically imported into new configurations. What does this mean? If a customer has a design that has toolpaths, and then they realize that they need multiple versions of the part with small differences, creating configurations will ask you if you want to copy the existing toolpaths over to the new configurations. This is very powerful and is a huge time savings.
- Existing toolpath can also be automatically imported into new configurations spawn from design tables.
- Toolpaths can also be manually copied and pasted in-between Part files, assembly files, and configuration. No limitations
- Toolpaths can also be imported from existing SolidWorks part and assembly files as well as all the standard Mastercam files all the way back to v9 and including .operations files.
- The toolpaths in assembly parts support the SolidWorks replace component function. The way that works is:
  - I have "Part A rev 1" toolpathed in assembly.
  - Another user or my customer sends be a modified version of that same part "Part A rev 2".
  - In SW you simply right click on the part in the feature tree and select "Replace component" then select the new modified part.
  - SW then swaps "Part A rev 1" with "Part A rev 2". Mastercam toolpaths are then marked dirty due to the change and a simply regen reapplies the toolpaths to the new part.

Quotes from Mastercam for SolidWorks users:

*"I did several tooling operations on a big project at work yesterday and the results were good... I have designed my tooling and fixtures in SolidWorks for years and it was a real joy to toolpath them without all the file transfer hassles. MCfSW is looking pretty good these days... and its going to be sweet have a permanent seat at work"*

*"Any design change that we experience is handled quickly with Mastercam for SolidWorks. We have seen a 50% bump in productivity from our traditional machining methods."*

And finally, here is a link to a MCfSW article.

<http://www.onlinetmd.com/tmd1211-CAD-CAM-software.aspx>