System Recommendations for use with Mastercam

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See the table below for minimum and recommended system configurations for Mastercam.

	Minimum	Recommended	
OS	Windows 7 or 8/8.1 64-bit Professional	Windows 7 or 8/8.1 64-bit Professional	
Processor	Intel or AMD 64-bit processor	Intel i7 processor	
Memory	4 GB	16 GB	
Video	OpenGL 3.2 support with 512 MB memory. No onboard graphics	NVIDIA Quadro graphics card with 2 GB dedicated memory	
Monitor	1280 * 1024 resolution	1920 * 1080 resolution, dual monitors	
Storage	250 GB drive with 20 GB free DVD/USB drive (depending on installation media)	250 GB Solid State Drive (SSD) with 20 GB free DVD/USB drive	
Mouse	3-button Microsoft compatible mouse	3-button wireless Microsoft or Logitech mouse	
3D Mouse		3DConnexion 3D mouse	

Connection to internet and e-mail is recommended for installation, support and updates.

The rule of thumb is to get as much power (processor, video card and memory) for your systems as you can afford.

OPERATING SYSTEMS

CNC Software continues to review the operating system (OS) requirements for Mastercam with a view to providing the best possible user experience for our customers. *Mastercam X7 MU2 was the last release to support Windows 7 32-bit OS.*

Supported operating systems for different versions of Mastercam are shown in the table below:

Operating System	Mastercam X7	Mastercam X8	Mastercam X9 (available 2015)
Windows 8/8.1 64-bit	~	~	~
Windows 7 64-bit	~	~	~
Windows 7 32-bit	~	×	×
Windows Vista	×	×	×
Windows XP	×	×	×

We recommend using Windows 7 or Windows 8 Professional editions. While Mastercam may run on other Windows versions (such as Home Edition) or virtual environments (such as Parallels for Mac), it has not been tested on these configurations and is therefore not supported.

PROCESSOR

The processor speed will impact how fast the software will calculate and complete tasks. More and more aspects of Mastercam are becoming multi-core processor aware with each release. Toolpath calculation and Simulation will generally run faster with a multi-core processor. We typically see a 50% reduction in toolpath calculation time with the Intel i7 processor.

MEMORY

When Mastercam uses all available RAM it switches to using virtual memory space, which is stored on the hard drive, and will dramatically slow the system down. For large toolpath generation and simulation we recommend 16 GB or even 32 GB of RAM.

VIDEO

When purchasing a new computer for Mastercam, one of the most important areas is the video card.

We recommend an NVIDIA Quadro card with 2 GB or more of memory. Other graphics cards can be used, but they must offer full OpenGL 3.2 support (typically manufactured by AMD/ATI). We have seen some issues using AMD/ATI Radeon graphics cards.

We do not recommend or support the use of onboard graphics found with some PC configurations. These do not generally have the capability to drive graphics intensive applications such as Mastercam.

Make sure you are using up to date drivers from your card manufacturer. We often see issues that are resolved with updated video drivers and the driver version can have a great impact on how the card performs.

The latest drivers for <u>NVIDIA</u> and <u>ATI/AMD</u> can be found at the inline links. We recommend using the automatic detect feature to detect which video card is installed.

MONITOR

The majority of our internal systems utilize dual monitors and we find this to be more productive. A second monitor allows applications such as Mastercam Simulator, Code Expert, Tool Manager and other applications to run on the secondary monitor while Mastercam utilizes the primary monitor.

STORAGE

We have found that one of the biggest upgrades to be made is to invest in a Solid State Drive (SSD). These are now priced at a point which makes them a good investment. Many of our test systems employ a smaller primary SSD for the OS and installed application with a second large capacity conventional drive for data.

MOUSE

A three-button mouse is recommended. Mastercam has special functions that can be performed with the middle mouse button. We would recommend using a major brand name like <u>Microsoft</u> or <u>Logitech</u>.

3D MOUSE

A 3D mouse improves the way you interact with your 3D application. It is designed to be used by your non-dominant hand in tandem with a standard mouse for a balanced and cooperative work style. You gently manipulate the 3D mouse's controller cap to simultaneously pan, zoom and rotate 3D content while your standard mouse is free to select menu items or parts of the model. More technical and purchase information can be found on the <u>3Dconnexion</u> website.

ANTI-VIRUS SOFTWARE

Most computers today have some kind of anti-virus software to protect from unwanted malware. In some cases these have been found to interfere with applications such as Mastercam which are running on the PC. CNC Software does not recommend particular products but if you see unexpected issues, it may be a clash with anti-virus software. Try temporarily disabling the anti-virus software or setting an exception for Mastercam.