

MASTERCAM SWISS SAVES YOU TIME BY EFFICIENTLY CONTROLLING ALL TORNOS MACHINES

Mastercam Swiss enables the bar-turner to easily and precisely generate points for contouring or complex geometries, guaranteeing increased productivity. Mastercam Swiss also allows workpiece programming to be switched quickly from one machine to another, whether controlled by TB-Deco, ISO or TISIS, taking into account the machine's kinematics and tools.



Manage all your Tornos turning machines with Mastercam Swiss.

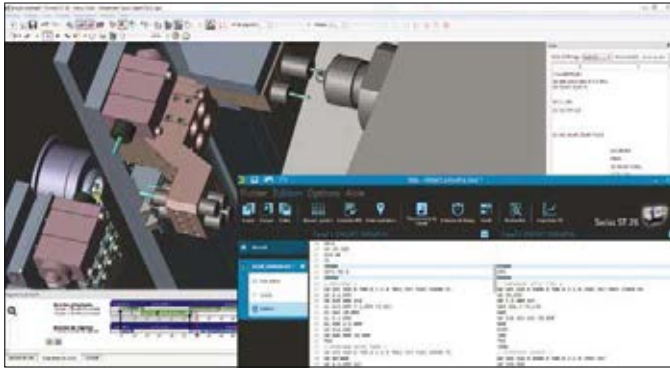
The 2015 version of Mastercam Swiss is available

Since the recent 2015 version, Mastercam Swiss Expert has been rechristened Mastercam Swiss. This change was made in the interest of consistency with the various modules of the Mastercam family, which includes:

- Mastercam Design;
- Mastercam Mill;
- Mastercam Lathe;
- Mastercam Wire;
- Mastercam Swiss.

The 2015 version includes the following new features:

- support for nearly 100 machine environments, plus an interface with the TISIS software;
- better integration with Mastercam Design, the Mastercam CAD tool;
- the option to customise workshop documentation for the commissioning engineer;
- easier customisation of post-processors;
- new machining algorithms with 5 simultaneous axes.



Exporting a Mastercam Swiss program to TISIS with tools, as in TB-DECO.

Mastercam Swiss lets you efficiently manage your turning machine inventory

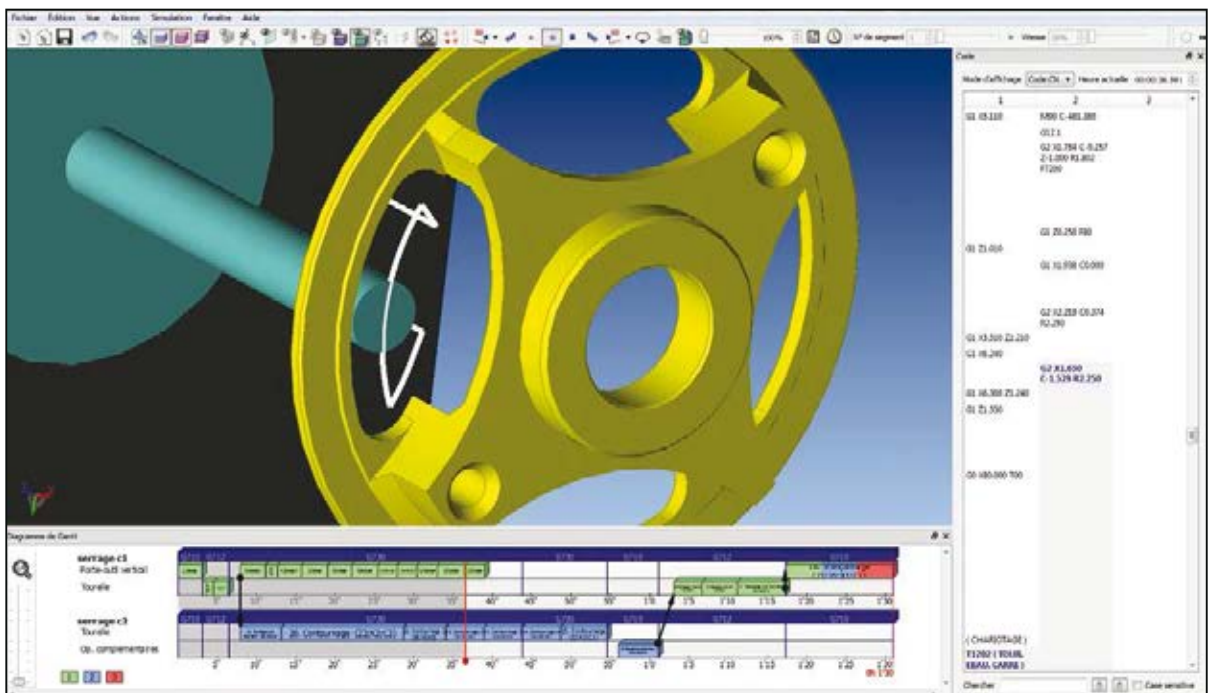
Mastercam Swiss provides bar-turners with an efficient tool for managing their turning machine inventory. Almost 100 multi-channel turning machines and machine-tools are now controlled with their complete kinematics, also including management of off-strokes and special tools. TISIS, the new ISO code programming and communication solution for recent Tornos machines, is now interfaced with the Mastercam Swiss, just like the PTO operating mode on EvoDeco machines.

Mastercam Swiss increases productivity by enabling simple generation of an exact program

With Mastercam Swiss, the bar-turner stands in front of his computer as he would his machine, enabling him to optimise the machining times for workpieces ranging from the simplest to the most complex. The machine's complete kinematics are controlled with all types of tool. All specific operations such as thread whirling, polygon operation, stamping, broaching, gear hobbing and flange milling are preconfigured. This working method allows programs to be generated automatically with no risk of errors, using the exact words and codes for TB-Deco or ISO, or exported to TISIS.

Users do not need to determine whether G02 or G03 machining is required, nor whether the values are positive or negative. This automation is possible because, when generating the code, the software takes into account the position of the tool on the plattens or turrets, as well as whether machining is taking place on the main or counter spindle.

Moreover, one of the major benefits of Mastercam Swiss is its ability to create multi-channel programs. Using the Gantt chart, the operation sequence can be optimised via the graphic interface. Synchronisations and constraints are fully managed.



By selecting them simply on the 3D model, the contour points are generated in an exact code corresponding to the turning machine and the tool position.

Different variants can be studied and the cycle time is displayed. It is also a useful addition when formulating a tender.

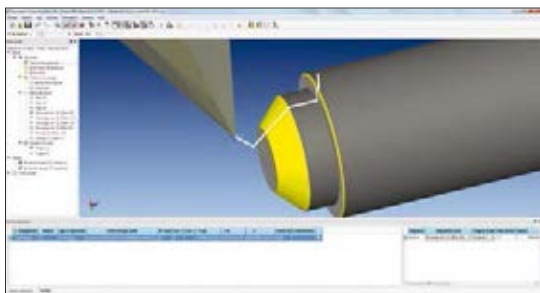
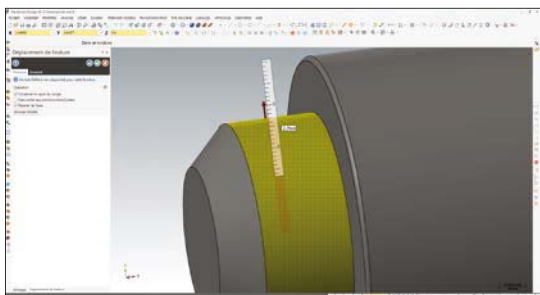
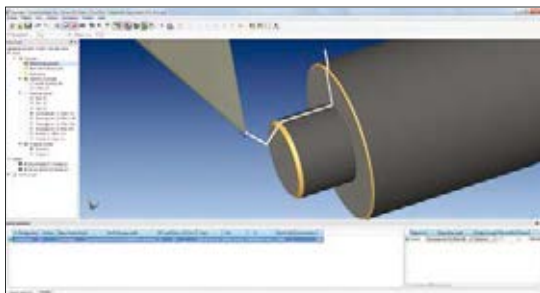
A significant addition: Mastercam Design, CAD software from the same family as Mastercam Swiss

Mastercam Design is a powerful 3D design software based on direct modelling without parameters. The main interfaces integrated as standard are:

IGES, Parasolid®, SAT (ACIS solids), AutoCAD® (DXF, DWG), AutoCAD® Inventor™ (IPT, IAM), SolidWorks® (SLDPRT, SLDASM, SLDDRW), Solid Edge® and STEP.

Its main characteristics are as follows:

- simple direct 3D modelling, continuously modifiable with no restrictions;
- powerful surface modelling functions: limitation, extension, fillets with constant and variable radius;
- 2D and 3D associative dimensions.



Example of a modification to a 3D model with Mastercam Design and updating the program in Mastercam Swiss.

How do you update a program in Mastercam Swiss after the 3D model has been modified in Mastercam Design?

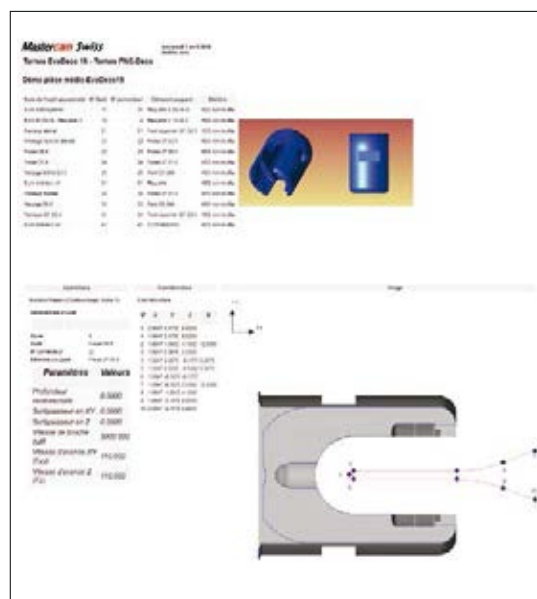
Machining updates are automatic in most cases. When a hole is removed or a radius or fillet modified for a machining operation after programming in Mastercam Swiss, a recalculation is automatically performed for the new trajectory. In the next version of the software, an integrated function will make the exchange of data between CAD and CAM software even simpler.

Shorter setup times thanks to customised workshop documents and phase plan

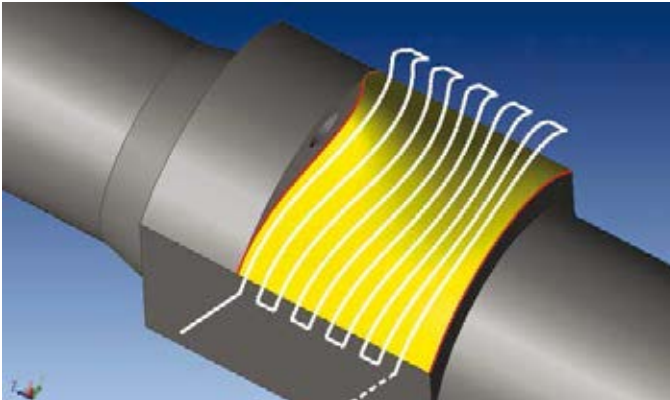
A phase plan can be created automatically to facilitate setups by clearly presenting the generated tool trajectory. The first page of this document summarises the tools used, then one page per operation is generated with the ISO code data and an image of the tool trajectory.



Example of a tool list generated automatically.



Example of a phase plan to facilitate setup.



Machining in 5 simultaneous axes possible on new turning machines with a B axis.

In the new 2015 version, this documentation can be customised according to the customer's specifications and depending on the information required. It is possible to create several different documents, including phase plans, tool lists and the tool positions on the machine.

Customised post-processors and training

A major innovation on the 2015 version involved modifying the core of the Mastercam Swiss software to enable simpler customisation of the post-processors. Now, if a user requests a modification to a post-processor, the update is much quicker.

As with the post-processors, the training is tailored to each user. It depends on the type of machine used, the types of workpiece and the IT expertise of future users. Mastercam Swiss training takes place on a turning machine chosen by the customer. Documents tailored to each machine family are supplied to the user. Lines of preconfigured models and specific tools are also provided. Programming examples are installed on the customer's machine. The last day of training is dedicated to programming a part chosen by the customer. After training, bar-turners may execute their subsequent programs with the help of their personal database.

New machining algorithms with 5 simultaneous axes

Two new machining algorithms with 5 simultaneous axes have been added to the new version of Mastercam Swiss. These relate to the following types of machining:

- surface parallel;
- shaped between two curves.

These 2 new machining types open up new possibilities for working in 5 simultaneous axes on turning machines with a B axis. Furthermore, machining in 5 simultaneous axes has been improved for several machine environments. As planned, these functions available in Mastercam are integrated in the bar-turner's software, thereby offering all the milling power of the world's most popular CAM software.

Mastercam Swiss Expert

published by

cnc software, inc.

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