

MAX[®] 5

**A CNC CONTROL EQUAL
TO EVERY OCCASION**

*THE FASTEST
CONTROL IN
THE INDUSTRY*



**THE
AGILE
ASSISTANT
FOR
MULTI-
FACETED
MILLING**

PARTNERS FOR DOERS. WITH A CONTROL SYSTEM THAT GETS IT DONE.

For more than 50 years, we at HURCO® have been developing and producing CNC machining centers to serve every requirement – ranging from a 3-axis entry-level model combining minimal expenditure with modest space requirements all the way to a 5-axis machine for highly complex workpieces.

As a manufacturer, we have a precise appreciation of the industry our customers do business in and know the unique nature of production and manufacturing scenarios. We are not satisfied with standard solutions. That is why we created the MAX®5, our proprietary CNC control, which is perfectly matched to your HURCO® machine tool and gets the best out of your production.



WHAT THE DOERS ARE SAYING

EASY PROGRAMMING, PRECISION MILLING

At CNC contract manufacturer Schley Maschinenbau, the MAX® 5 control system provides automation as well as shortened machining times for greater employee satisfaction and productivity.

“

At HURCO® everything builds on each other: the control system, the machine, even the logic of the programs develops step by step. This enables our employees to immediately find their way around a machine. This union of machining center and intuitive control system is worth its weight in gold.”

Schley Maschinenbau



WORTH ITS
WEIGHT IN GOLD

IN PERFECT
HARMONY

FLEXIBILITY TO MASTER ANY WORKLOAD

Engineering firm Ingenieurbüro Martin Braun produces CNC parts for a wide range of industries. Thanks to the intuitive MAX[®] 5 control system, operation of all HURCO[®] machines in the plant is no problem, even for new personnel.



The control system is ideal for us ... when we have larger recesses or a specific material thickness, we exploit the entire range of features that combine with the easy programming to form synergistic perfection."

Ingenieurbüro Martin Braun



**AN UNCOMPLICATED
AND UNBEATABLE
COMBINATION**



HURCO MAX®5 CNC control system with electronic handwheel.

THE SMART CONTROL SYSTEM

for customized use

HURCO® CNC control combines powerful MAX®5 hardware with user-friendly WinMax software and optional features such as Solid Model Import, which gives you the flexibility to adapt your unit made up of the HURCO® machine and control system to the conditions on your shop floor.



YOUR BENEFITS AT A GLANCE

- **User-friendly operation.** Perfection can be this easy – intuitive plain-text dialog programming lets you easily set up the control system according to your requirements.
- **Minimal time required.** The control system can be learned quickly without any programming knowledge at all and supports your employees optimally in reaching faster processing times with short, clearly arranged programs.
- **Individual configuration.** Choose from a variety of features (e.g. Solid Model Import) specific to your needs to ensure your HURCO® control system is the right fit for you.
- **High profitability.** Even the production of highly complex parts and a higher capacity utilization of your operation can be mastered in no time.
- **Measurable productivity.** The functions of the control system and numerous automation features demonstrably increase your capacities..
- **Greater employee satisfaction.** Automate processes and give your employees more time for more complex activities.

Technical data

- 2 USB ports
- Pull-out keyboard with trackball
- 2 touchscreen monitors with multitouch on the right-hand screen ¹
- Network interface
- Windows 10 embedded operating system
- SSD 128GB
- RAM 4GB
- Detachable electronic handwheel including LCD display and touchscreen ¹
- Three potentiometers each for feed, rapid traverse and spindle speed, including individually adjustable push function
- Fourth potentiometer on handwheel, optionally also for feed, rapid traverse and speed, ideal for running in components

¹ not for VMi series or lathes



The versatility of the HURCO® control system makes complex work a cinch. The ability to quickly import data meshes with the multitude of machine options.

Gröbner Fertigungs GmbH



Your entry into the MAX® 5 world

Take advantage of the HURCO® training courses at our locations in Pliening (near Munich) and Ratingen for an introduction in just five days of training.

TRAINING

A DREAM FOR USERS FROM DESIGN TO RESULT



MAX® 5 Single



MAX® 5 Dual-Display

MAX® 5 CONTROL SYSTEM

Functions that get the job done

- Processing sketches and drawings
- Importing solid models for program creation ¹
- CAD/CAM support
- Compatible with 3D DXF and DXF files ¹
- Ergonomic design
- Pull-out keyboard with adjustable inclination
- Height-adjustable and retractable console for minimum footprint ²
- Rugged quality
- Solvent-resistant keyboard constructed in ABS polycarbonate
- Rotary override knobs in brushed stainless steel
- Practical handling
- Two USB ports
- Removable electronic handwheel with LCD display ²
- Programming directly at the machine without an additional programming station
- NC dialog mix: Optional integration of NC programs into dialog programs and addition of dialog data sets to CAM programs ¹
- Context-sensitive help: Help button for immediate help display in the WinMax software Remote maintenance and troubleshooting
- Optional remote maintenance (consent required)

¹ optional ² model-dependent ³ Dual-screen available as an option

WHICH MACHINE IS RIGHT FOR YOUR MAX[®] 5 SYSTEM REQUIREMENTS?

MAX[®] 5 dual screen - compatible with these HURCO[®] machine models:

- **3-axis machining centers:** VMXi | VMX Di | VMX HSi | VMi Plus
- **5-axis machining centers:** VMX Ui/UDi | VCi | VCXi | VMX SWi | VMX SRTi
- **Bridge-type and horizontal machining centers:** Bxi | DCXi | HBMXi



3-axis machining centers



Bridge-type and horizontal centers



5-axis machining centers

MAX[®] 5 single screen - compatible with these HURCO[®] machine models:

- **3-axis machining centers:** VMi³
- **Lathes:** TMi | TM Mi | TMXi³



Lathes



3-axis machining centers

Automated programming

Take your CNC manufacturing to the next level of production! With DXF support and Solid Model Import as optional features for automatic geometry data acquisition and time savings.

UPGRADE

MAXIMUM SIMPLICITY. MAXIMUM FLEXIBILITY.

IDEAL SUPPORT WITH THE WINMAX[®] 5 SOFTWARE

For maximum performance of your HURCO[®] machine, we have developed WinMax[®]5, a software program that is aligned exactly with the performance data of our machine tools and the needs of you, the user.

Spotlight on WinMax[®] 5

- **Self-explanatory.** A manageable number of buttons and comprehensive graphics options make the control interface particularly user-friendly.
- **Results-oriented.** The automatic residual material detection optimizes tool contact.
- **Versatile.** The software enables adaptive trochoidal-milling for shorter cycles, longer-lasting tools and higher metal removal rates.
- **Efficient.** The tool and material library ¹ makes it necessary to set up each tool only once and allow it to be retrieved for each subsequent job in just a few clicks.
- **Supportive.** The software independently creates machining data sets based on automatically recognized contours and drilling patterns. ²
- **Clearly displayed.** Perform solid-model programming directly on the graphic display screen with simultaneous simulation of the machining. ³
- **Practical.** Recess and drill hole depths are automatically detected and stored in the created data set. ³
- **Trendsetting.** Machine 3D surfaces on solid bodies. ³

¹ optional with the VMi series ² only with Solid Model Import or DXF ³ only with Solid Model Import



In principle, this control system is so straightforward that WinMax serves as an intercultural production tool for us. We don't have to explain a bunch of German technical jargon to our staff in other languages. A basic understanding of German is all they need."

Abelco GmbH

AN INVESTMENT THAT PAYS OFF

Get even more out of your control system with these paid features.

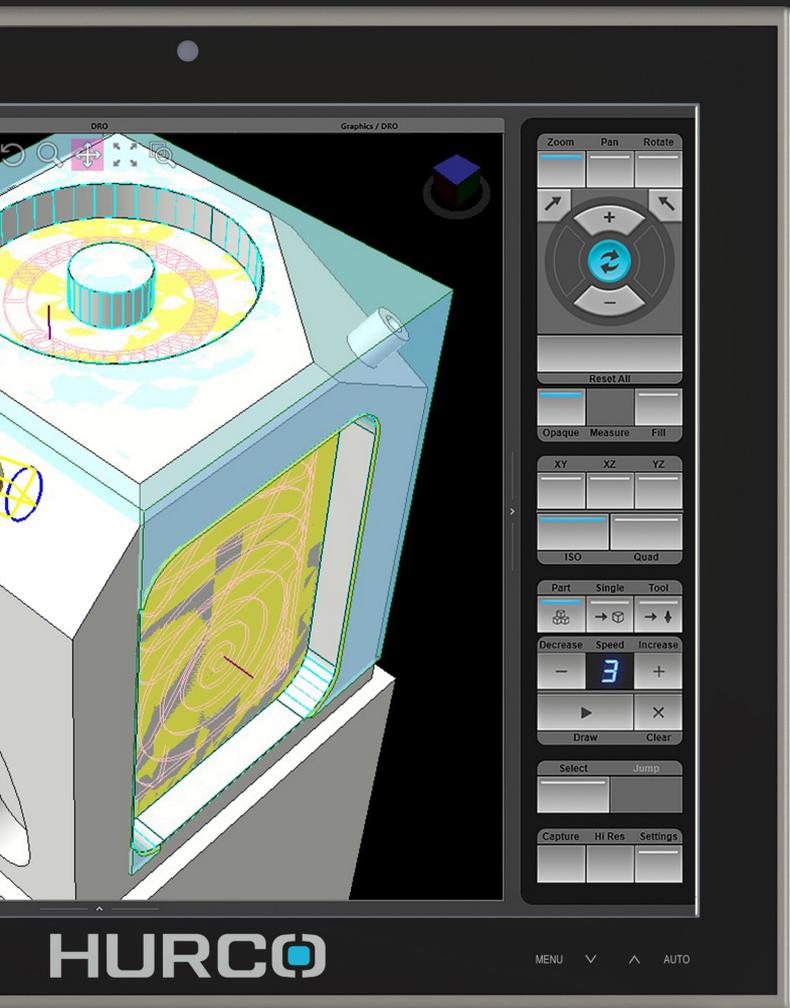
- **Solid Model Import.** Fast and easy programming on the machine with the help of the solid model.
- **Conversational and NC programming.** Including industry standard software NCPP, FANUC compatibility ISNC (FANUC 0), parameter and macro programming and subroutine technology for NC mode.
- **3D Plus conversational contour profiling.** For creating 3D surfaces based on a guide contour and up to 10 profile contours. Enables machining strategies for spiral, Z-constant and surface roughness.
- **UltiMotion.** For a dynamic block preview with up to 10,000 blocks, improved surface quality thanks to grinding or Motion Control Technology and up to 30% shorter cycle times.
- **MT Connect interface.** For connecting the machine to third-party applications (e.g. ERP and manufacturing execution systems)
- **3D-DXF software.** For importing DXF files. Also supports spline and 3D DXF data, as well as automatic creation of multiple contour data sets through multiple selection.
- **CAD functions.** For creating lines, radii, circles and points as well as trimming, chamfering, rounding, deleting etc. including snap functions and layer change options.
- **Job list.** For automatic loading and execution of programs or files (executable individually or as a whole).
- **In addition:** 5-axis simultaneous machining, manual magazine slot assignment, tool change optimization and much more.



Many possibilities, one contact person: Request your individual consultation with our HURCO® service team now – personalized and oriented towards your needs.

COMPLEXITY
MADE SIMPLE

SOLID M MORE TH



Your HURCO® machine control has countless features for configuring your machine tool precisely for the requirements in your shop – among these is the **Solid Model Import.**

*SIMPLY
AMAZING*



ODEL IMPORT: CAN JUST SOLID



Conversational programming has been a real hit at our company. It doesn't require long hours of programming and input anymore. We basically import DXF data and we're good to go – it's quick and reliable.”

Stöber Antriebstechnik GmbH



How does the feature benefit you?

With the advanced Solid Model Import, you can import 3D models in DXF or STEP format directly and can automatically import contours up to and including free-form surfaces as conversational data sets so that they can be produced on the machine without further ado.

- **Fast 3-axis, 4-axis and 5-axis machining.** Using the Solid Model Import, you can perform programming right at the control system – simply using the solid model.
- **Time-saving.** Import solid models right at the control system – without the hassle of creating 2D drawings with dimensions or DXF files.
- **Better overview.** You can switch between the solid model for programming and the simulation of the generated machining in the graphic view or display both overlapping.
- **Smart support.** Using the Solid Model Import, your control system automatically saves detected recess and drill hole depths in the created data set. Machining data sets are also created independently for recess and island contours or drilled hole patterns.
- **Added value.** Where necessary, the function generates transform plane and swivel blocks independently.

Technical functions

- Import STEP files
- Import 2D and 3D DXF files
- Draft contour data sets from solids
- Automatic generation of recesses with closed contours and islands
- Automatic swivel plane detection
- Coordinate system offsets (freehand or with manual entries)
- MultiTouch Technology

PROGRAMMING FREE-FORM SURFACES

with the advanced Solid Model Import function



IT'S THIS EASY:



1 The area to be machined is marked. Then select the "Surface" data set – meaning the data set for surfaces – in the left-hand menu field.



2 The surface can be machined with the applied tool – exactly as required for the machining process.



3 The control system generates a data set for the selected surface. Then all you have to do is enter the tool and technology data. Then simply specify the optimal strategies for roughing and finishing. Finishing operations, including the required allowances, can be repeated as often as needed until the desired surface is produced.

Calculate orders better and process them more efficiently

The simulation overlays the finished part. This provides even more safety in programming. If your company has its own CAD/CAM workstation, this is freed up for machining other 3D parts.

3D-CAPABLE



Experience the Solid Model Import in action with our free YouTube tutorials.

THE AGILE ASSISTANT CLOSE TO YOU

Are you already using HURCO® solutions in your company, or are you interested in them and have questions? You will find the right answers and services from a single source.

HURCO® SERVICES

Personal contact for your region

Our regional contact persons are at your service to provide advice and assistance regarding your HURCO® machine or general questions – even long after the successful installation of your machining center. Simply reach out to us by email or phone.

Phone +49 89 905094 - 0 | info@hurco.de
Mon – Fri 7:30 a.m. – 4:00 p.m.

Application technology

There is a dedicated hotline especially for your user questions, as well as additional services (e.g. time calculation, programming services)

Phone +49 89 905094 - 66 | awt@hurco.de
Mon – Fri 8:00 a.m. – 4:00 p.m.

Spare parts services & next day delivery

High spare parts availability at our Munich central warehouse and fast delivery means that your operation gets back up and running quickly from repair-related downtime. On request, we can also replace your old spindle with either a reconditioned or new spare part.

Phone +49 89 905094 - 55 | ersatzteile@hurco.de
Mon – Thurs 8:00 a.m. – 5:00 p.m. | Fri 8:00 a.m. – 4:00 p.m.

Service

Our experienced service technicians will support you on site or via remote maintenance in the maintenance, care or repair of your HURCO® machine tools.

Phone +49 89 905094 - 44 | service@hurco.de
Mon – Thurs 7:00 a.m. – 5:00 p.m. | Fri 7:00 a.m. – 4:00 p.m.

Training courses & free tutorials

We give you the knowledge to get the most out of your HURCO® machine and MAX®5 control system – with customized on-site training for every user level and our free instructional videos on YouTube.



HURCO® on YouTube:
@hurco-cnc-tooling-machines

HURCO® Refurbished

You can regularly score real bargains from us with demo and used machines under attractive conditions – including a manufacturer's warranty and maintenance history.

**BE ONE OF
THE DOERS**

TAKE THE CONTROL IN YOUR HANDS

*PARTNERS
FOR DOERS*

HURCO Werkzeugmaschinen GmbH
Gewerbestraße 5a | 85652 Pliening | Germany
Phone +49 89 905094 0 | Fax +49 89 905094 90
info@hurco.de | www.hurco.eu