



# Hurco puts you in control with WinMax.<sup>®</sup>

**Increase productivity. Improve surface finish. Invest in the future.**

## WinMax Top 25 NEW Features (\* denotes optional features)

1	<b>Advanced Verification Graphics</b>	Solid 3D Rendering with dynamic rotation significantly reduces scrap and programming time. View rendered part from any angle without the need to redraw it.
2	<b>Tool &amp; Material Library*</b>	Tool and stock data are stored with the machine, not each individual part program. Eliminates redundancy. Saves time. Simplifies programming. Prevents common tool crash conditions.
3	<b>Swept Surface*</b>	Simplifies programming of 3D contours. Reduces programming time by 80%. Use fewer data blocks to program. Design contours as pockets or islands with draft angles. Control step over or cusp height. Constant Z level or Z spiral roughing or finishing.
4	<b>NC/Conversational Merge*</b>	Combines the best of both programming methods. Existing G-Code programs can be incorporated into current conversational features, such as tool probing, part probing, pattern operations, and scaling. Conversational users can call an NC program by using a simple calling sequence (NC Macro).
5	<b>SelectSurface Finish Quality</b>	You control surface finish and run time in one easy step. Use on-screen slider bar to select desired surface finish quality and the software automatically programs throughput accordingly.
6	<b>Tool Center Point Management</b>	Saves time programming and reduces errors. The coordinate transformation and machine geometry are configured automatically at run time. No need to specify the part zero location of the stock. Position stock anywhere on the table. Reduces errors when posting from a CAM system.
7	<b>4th Axis Rotary Wrap</b>	Simplifies wrap and unwrap of 2D contours around Rotary A Axis.
8	<b>Surface Finish Improvement</b>	Advanced smoothing algorithm (patent pending) and improved motion system yield superb surface finish.
9	<b>Enhanced DXF</b>	A great feature made even better. Save more time than ever before. More editing capabilities at the machine without the need to send file back to CAD system.
10	<b>Part Program Preview with graphics and comments</b>	Eliminates need to open each file from the hard drive when you're searching files for the program you need. Extended file naming.
11	<b>Program Review with Fast Cut/Copy/Paste</b>	Save steps. Save time.
12	<b>Context Sensitive Help</b>	The right help at the right time. No searching.
13	<b>Internationally Standardized Tap Selections</b>	Tap selection is easier to match to specs.
14	<b>True Type Lettering</b>	More flexibility. More fonts.
15	<b>Personalized Program Default Settings</b>	Switch between metric and inches.
16	<b>Real Time Tool Simulation</b>	Graphically shows you where the tool is within the part program.
17	<b>Tool Review</b>	Shows you data blocks where the tool is used.
18	<b>Tool Type Checking</b>	Filter tool selection list to include tools that apply to feature being used.
19	<b>Concurrent G-code Programming</b>	Edit one program while another program is running.
20	<b>More Tool Descriptions</b>	27 new tool types.
21	<b>Write Protect Program Files</b>	Prevent accidental overwriting of part programs.
22	<b>NC probing canned cycles</b>	Part Zero-Corner, Hole, Rectangle Skew-Edge, Hole, Cylinder, Rectangle Pocket.
23	<b>NC Display</b>	See 11 lines of NC data and current modal states during run time.
24	<b>Live Tooling for TMM line (lathe only)</b>	Axial and radial mill and drill operations. Ridged tap.
25	<b>Swivel head 5-Axis features (VMX42SR Only)</b>	Interrupt diagonal retraction (M Code M140 retracts tool along its axis).



## 2006 Machine Demonstrations

*Blue text denotes Top 25 New WinMax Features*

Machine	Demo Name	Material	Benefits/Features Demonstrated
TM6	Decorative Threaded Cap	Brass	<ul style="list-style-type: none"> <li>■ High rpm with small diameter work</li> <li>■ Hurco Bar Feed/Automatic Operation</li> <li>■ Ease of conversational programming</li> <li>■ Value of programming at the machine</li> </ul>
TM8	“Tap” Handle	Aluminum	<ul style="list-style-type: none"> <li>■ Contouring, threading, tapping, grooves</li> <li>■ Advanced Verification Graphics with 3D Solid Rendering (Prove out part before running it. Eliminate costly “trial runs.”)</li> <li>■ Math Assist for a complex contour—no trig!</li> <li>■ Tailstock support makes working with long parts manageable</li> </ul>
TM10	Turned Blank	Steel	<ul style="list-style-type: none"> <li>■ Steel turning, large bores, threading, roughing of undercuts</li> <li>■ Ease of conversational programming (conversational turning)</li> <li>■ Value of programming at the machine</li> </ul>
TMM8 <b>NEW Machine</b>	Military Connector	Aluminum	<ul style="list-style-type: none"> <li>■ Turning/grooving, axial drill/mill, radial drill/mill</li> <li>■ Live Tooling—4,500 rpm/7.5 hp/ larger work piece</li> <li>■ Advanced Verification Graphics with 3D Solid Rendering—check all moves before cutting</li> <li>■ Ease of conversational programming</li> <li>■ Value of programming at the machine</li> </ul>
VM1	Enhanced DXF	Aluminum	<ul style="list-style-type: none"> <li>■ Save time. Eliminate programming errors</li> <li>■ Import CAD image directly into the control with Enhanced DXF feature</li> <li>■ More editing capabilities of dxf file at the machine than before</li> <li>■ Value of programming at the machine</li> </ul>
VM2	“Tap” Handle Rotary	Aluminum	<ul style="list-style-type: none"> <li>■ Hurco H160 Rotary Table</li> <li>■ 4th Axis Wrap—simplifies wrap/unwrap of 2D contours</li> </ul>
VM3	Part and Tool Probing Restrictor Plate	Steel	<ul style="list-style-type: none"> <li>■ NC/Conversational Merge</li> <li>■ Skew and zero setting with tool touch probe/simplified fixturing</li> <li>■ Tool length setting and breakage detection</li> </ul>
VM1 Graphite	3D Electrodes	Graphite	<ul style="list-style-type: none"> <li>■ NC/Conversational Merge</li> <li>■ 3R Robotic Pallet Changer</li> <li>■ Look ahead/motion control</li> </ul>
VMX24	NC Mold	Mold Steel	<ul style="list-style-type: none"> <li>■ SelectSurface Finish Quality</li> <li>■ Offline NC only programming/direct downloading from post</li> </ul>
VMX30	Mold Insert	1215 Steel	<ul style="list-style-type: none"> <li>■ Swept Surface</li> <li>■ Enhanced DXF</li> <li>■ SelectSurface Finish Quality</li> <li>■ VMX Power<sup>2</sup> Package</li> </ul>
VMX42/40 Tool	Cam Gear Shaft	Aluminum	<ul style="list-style-type: none"> <li>■ NC/Conversational Merge</li> <li>■ Hurco H200 Rotary Table</li> <li>■ VMX Power<sup>2</sup> Package</li> </ul>
VMX50/50 Tool	Impeller	1018 Steel	<ul style="list-style-type: none"> <li>■ CTS/CoolJet</li> <li>■ Power cuts</li> <li>■ VMX Power<sup>2</sup> Package</li> </ul>
VMX60 <b>NEW Machine</b>	Probing Quick Setup	Steel Beam	<ul style="list-style-type: none"> <li>■ Rigid Tapping</li> <li>■ Skew with touch probe</li> <li>■ Laser tool probe (set tool lengths/check breakage)</li> <li>■ VMX Power<sup>2</sup> Package</li> </ul>
VMX42SR <b>NEW Machine</b>	5-Axis Part	Aluminum	<ul style="list-style-type: none"> <li>■ Compact 5-Axis machining</li> <li>■ Swivel head with horizontal rotary table</li> <li>■ Tool Center Point Management</li> </ul>
VTXU	5-Sided Cylinder Head	Aluminum	<ul style="list-style-type: none"> <li>■ Multi-sided conversational programming</li> </ul>
HTX500	F-15 Jet Model	Aluminum	<ul style="list-style-type: none"> <li>■ Tool and Material Library</li> <li>■ NC/Conversational Merge (work offsets)</li> </ul>