





With the fastest control in industry







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VMX 42 HSRTi







VMX 60 SRTi

VC 500 i





VTX Ui



VMX 30 i VMX 30 HSi



VMX 42 i VMX 42 HSi



VMX 60 i



VMX 64 i



VMX 84 i





HMX 500 i



HMX 630 i



VMX 50 i



HBMX 80 i



HBMX 120 i

Double-Column / Horizontal Machining Centers



TMM 10 i



TMM 12 i



TMX 8i / TMX 10 i



TMX 8 MYi / TMX 10 MYi



TMX 8 MYSi / TMX 10 MYSi



WinMax[®] All in one

Our control. Your expertise.



- > Faster from the drawing to the finished part
- > Shortest learning curve
- > Fastest programming
- > Quick overview
- > Designed ergonomically

- >> Interactive touch screen for conversational and NC programming.
- Program management: user-centric archiving, by attached images and text search.
- Interactive touch screen for graphical representation. The workpiece can be viewed from any angle. Graphical display of tool path and part geometry, representation of all views.
- > Ergonomic data entry. Fewer buttons, easier to operate.
 - Rotating, tilting control panel.
- Graphical program editing. Data block search increases program editing time. Increases accuracy and allows rapid changes to the program.
- Feed and speed override potentiometer. Spindle speed, feed and rapid traverse overrides via potentiometer.
- > Tool probing with tool probe.
- Workpiece offsets: There are 99 work offsets for part programming available.
- 3D simulation before running the program, tool movement can be tracked in real time 3D simulation.
- Fault diagnosis. All programs, tools and program parameter errors are already displayed during simulation.
- >> Tailstock. Using M codes the quill can be driven or retracted within the program.
- Bar feeder or bar puller*. Easy to use conversational cycles are supplied.

*depending on machine and contour

TMi Series

Power and speed – the ideal machine for turning medium sized parts





- » Cast iron frame designed with Finite Element Analysis (FEA).
- >> True 45 degree slant bed.
- >> State-of-the-art brushless AC servos
- >> Double-nut pre-tensioned ball screws.
- >> Linear rails in all axes.
- » Maintenance-free cartridge spindle with permanently greased bearings.
- >> Bidirectional hydraulic turret.
- » Tailstock mounted on heavy-duty box ways supplied with live center.

Contact us for an individual non-binding offer. Phone: +49-(0)89-90 50 94 - 0 | info@hurco.de

STANDARD & OPTIONAL ITEMS	TM 6 i	TM 8 i	TM 10 i	TM 12 i	TM 18 i	TM 18 Li	TMM 8i	TMM 10 i	TMM 12 i
19" color LCD monitor	S	S	S	S	S	S	S	S	S
Adjustable work light	S	S	S	S	S	S	S	S	S
Air gun assembly	S	S	S	S	S	S	S	S	S
Coolant gun assembly	S	S	S	S	S	S	S	S	S
Auto doors	0	0	0	0	0	0	0	0	0
Automatic central lubrication system	S	S	S	S	S	S	S	S	S
Bar feeder	0	0	0	0	-	-	0	0	0
Bar feeder interface	0	0	0	0	-	-	0	0	0
Main spindle hydraulic chuck	S	S	S	S	0	0	S	S	S
Sub-spindle hydraulic chuck	-	-	-	-	-	-	-	-	-
Collet chuck	0	0	0	0	-	-	0	-	0
High pressure coolant (20 bar)	0	0	0	0	0	0	0	0	0
Linear guide ways	S	S	S	S	S	S	S	S	S
Oil mist collector	0	0	0	0	0	0	0	0	0
Oil skimmer	0	0	0	0	0	0	0	0	0
Parts catcher	S	S	S	S	-	-	S	S	S
Parts conveyor	-	-	-	-	-	-	-	-	-
Spindle thermal chiller	-	-	-	S	-	-	-	-	S
Steady rest, hydraulic, self-centering	-	-	-	0	0	0	-	-	0
Tailstock, manual, programmable hydraulic quill	S	S	S	S	S	S	S	S	S
Tailstock, programmable	-	-	-	-	-	-	-	-	-
Tool pre-setter (Renishaw)	S	S	S	S	S	S	S	S	S
Hydraulic turret	S	S	S	S	S	S	S	S	S

O: optional | S: standard



TM 6 i

Tiny footprint for a pow slant-bed lathe

- >> 215 mm maximum turning diameter
- >> 318 mm maximum turning length
- >> 152 mm chuck diameter
- >> 45 mm draw tube diameter



TM 8 i

slant-bed lathe

- >> 256 mm maximum turning diameter
- >> 458 mm maximum turning length
- » 203 mm chuck diameter
- >> 52 mm draw tube diameter



TM 10 i

he perfect combination f size and functionality

- >> 295 mm maximum turning diameter
- >> 694 mm maximum turning length
- » 254 mm chuck diameter
- » 78 mm draw tube diameter



TM 12 i

ecifically created to withstand the lors of heavy cuts

- >> 395 mm maximum turning diameter
- >> 974 mm maximum turning length
- >> 305 mm chuck diameter
- >> 104 mm draw tube diameter





- >> 594 mm maximum turning diameter
- >> 967 mm maximum turning length
- ≫ 456 mm chuck diameter
- » 164 mm draw tube diameter



TM 18 Li

Built tough to handle the stress of heavy duty turning

- >> 594 mm maximum turning diameter
- >> 1,983 mm maximum turning length
- » 457 mm chuck diameter
- >> 164 mm draw tube diameter





TMM 8 i A rigid and relia machine built t

- >> 256 mm maximum turning diameter
- → 455 mm maximum turning length
- » 203 mm chuck diameter
- » 52 mm draw tube diameter

- TMM 10 i Save time on one ma
- >> 295 mm maximum turning diameter
- >> 700 mm maximum turning length
- >> 254 mm chuck diameter
- >> 78 mm draw tube diameter



TMM 12 i Large slant-bec with live tooling

- >> 360 mm maximum turning diameter
- >> 937 mm maximum turning length
- » 305 mm chuck diameter
- >> 104 mm draw tube diameter



TMXi Series

Multi-axis lathes

wer and speed – the ideal machine for machining complete edium-sized parts in one set-up



- » Cast iron frame designed with Finite Element Analysis (FEA).
- » True 30 degree slant bed.
- >> State-of-the-art brushless Yaskawa AC servos.
- >> Double-nut pre-tensioned ball screws.
- >> Linear rails in all axes.
- >> Maintenance-free cartridge spindle with permanently greased bearings.
- » Bidirectional hydraulic turret.
- » Tailstock mounted on heavy-duty box ways supplied with live center (servo driven).
- » High horsepower and torque, fast rapids to support rigorous cycles.



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STANDARD & OPTIONAL ITEMS	TMX 8 i	TMX 10 i	TMX 8 MYi	TMX 10 MYi	TMX 8 MYSi	TMX 10 MYSi
19" color LCD monitor	S	S	S	S	S	S
Adjustable work light	S	S	S	S	S	S
Air gun assembly	S	S	S	S	S	S
Coolant gun assembly	S	S	S	S	S	S
Auto doors	0	0	0	0	0	0
Automatic central lubrication system	S	S	S	S	S	S
Bar feeder	0	0	0	0	0	0
Bar feeder interface	0	0	0	0	0	0
Main spindle hydraulic chuck	0	0	0	0	0	0
Sub-spindle hydraulic chuck	-	-	-	-	0	0
Collet chuck	0	0	0	0	0	0
High pressure coolant (20 bar)	0	0	0	0	0	0
Linear guide ways	S	S	S	S	S	S
Oil mist collector	0	0	0	0	0	0
Oil skimmer	0	0	0	0	0	0
Parts catcher	S	S	S	S	S	S
Parts conveyor	0	0	0	0	0	0
Spindle thermal chiller	S	S	S	S	S	S
Steady rest, hydraulic, self-centering	-	-	-	-	-	-
Tailstock, manual, programmable hydraulic quill	-	-	-	-	-	-
Tailstock, programmable	S	S	S	S	-	-
Tool probe (Renishaw)	0	0	0	0	0	0
Hydraulic turret	S	S	S	S	S	S

O: optional | S: standard



TMX 8 i

ilt to withstand the stress of gh performance turning

- >> 355 mm maximum turning diameter
- >> 535 mm maximum turning length
- >> 203 mm chuck diameter
- >> 64 mm draw tube diameter



TMX 10 i High perform

- >> 415 mm maximum turning diameter
- » 635 mm maximum turning length
- » 254 mm chuck diameter
- >> 78 mm draw tube diameter



TMX 8 MYi

Powerful productivity in a live cooling turning center

- >> 336 mm maximum turning diameter
- >> 527 mm maximum turning length
- » Y-axis +/- 55 mm
- » 203 mm chuck diameter
- » 64 mm draw tube diameter



TMX 10 MYi

ill turn machining ith live tools

- >> 375 mm maximum turning diameter
- >> 627 mm maximum turning length
- >> Y-axis +/- 55 mm
- >> 254 mm chuck diameter
- » 78 mm draw tube diameter



TMX 8 MYSi Complete mach with sub spindle

- >> 336 mm maximum turning diameter
- >> 527 mm maximum turning length
- >> Y-axis +/- 55 mm
- » 203 mm chuck diameter
- >> 64 mm draw tube diameter



TMX 10 MYSi

Built for speed and repeatability

- >> 375 mm maximum turning diameter
- >> 627 mm maximum turning length
- >> Y-axis +/- 55 mm
- >> 254 mm chuck diameter
- >> 78 mm draw tube diameter

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	TM 6 i	TM 8 i	TM 10 i	TM 12 i	TM 18 i	TM 18 Li	TMM 8 i	TMM 10 i
Capacity								
Distance between centers (mm)	403	588	695	1.006	1.116	2.132	588	695
Swing over bed diameter (mm)	405	525	582	680	850	850	525	582
Swing over cross slide diameter (mm)	240	300	402	510	650	650	300	402
Maximum turning diameter (mm)	215	256	295	395	594	594	256	295
Maximum turning length (mm)	318	458	694	974	967	1,983	455	700
Draw tube diameter (mm)	45	52	78	104	164	164	52	78
Travels								
X-axis (mm)	170	203	250	305	432	432	198	250
Z-axis (mm)	356	508	750	1,016	1,016	2,032	508	750
Y-axis (mm)	-	-	-	-	-	-	-	-
W-axis (mm)	-	-	-	-	1,016	2,032	-	-
Main Spindle								
Maximum speed (1st gear range) (rpm)	-	-	-	-	600	600	-	-
Maximum speed (2nd gear range) (rpm)	6,000	4,800	3,000	2,800	1,600	1,600	4,800	3,000
Maximum torque (1st gear range) (Nm @ rpm)	-	-	-	-	2,415 @ 217	2,415 @ 217	-	-
Maximum torque (2nd gear range) (Nm @ rpm)	113 @ 1,090	180 @ 870	352 @ 600	606 @ 870	604 @ 870	604 @ 870	350 @ 359	474 @ 360
Spindle power (kW @ rpm)	13 @ 1,090	16 @ 870	22 @ 600	55 @ 870	55 @ 870	55 @ 870	13 @ 359	18 @ 360
Spindle nose	A2-5	A2-6	A2-8	A2-11	A2-15	A2-15	A2-6	A2-8
Chuck diameter (mm)	152	203	254	305	456	457	203	254
Turret	1							
Tool type	VDI 20	VDI 30	VDI 40	VDI 40	VDI 50	VDI 50	VDI 30	VDI 40
							DIN 1809	DIN 1809
Stations	12	12	12	12	12	12	12	12
Tool shank (mm)	16 x 16	20 x 20	25 x 25	25 x 25	32 x 32	32 x 32	20 x 20	25 x 25
Maximum boring bar diameter (mm)	25	32	40	40	50	50	32	40
Sub-Spindle								
Maximum speed (rpm)	-	-	-	-	-	-	-	-
Maximum torque (Nm @ rpm)	-	-	-	-	-	-	-	-
Spindle power (kW @ rpm)	-	-	_	-	-	-	-	-

	TM 6 i	TM 8 i	TM 10 i	TM 12 i	TM 18 i	TM 18 Li	TMM 8 i	TMM 10 i
Live Tools								
Maximum speed (rpm)			-	-			5,000	4,000
Maximum torque (Nm)	-	-	-	-	-	-	28 @ 1,500	42 @ 1,500
Spindle power (kW @ rpm)	-	-	-	-	-	-	4.4 @ 1,500	6.6 @ 1,500
Feeds								
Rapid traverse X (m/min)	19	19	19	19	20	20	19	19
Rapid traverse Z (m/min)	24	24	24	24	20	20	24	24
Rapid traverse Y (m/min)	-	-	-	-	-	-	-	-
Rapid traverse W (m/min)	-	-	-	-	2.4	2.4	-	-
Parts Catcher								
Maximum part size on catcher (mm)	135 x 106 x 65	150 x 99 x 73	210 x 126 x 88	250 x 160 x 123	-	-	150 x 99 x 73	210 x 126 x 88
Dimensions								
Machine height (mm)	2,135	2,127	2,169	2,239	2,525	2,527	2,127	2,169
Floor space required (width x depth in mm),	4,043 x 2,507	4,977 x 2,686	5,310 x 3,187	6,129 x 3,367	6,969 x 3,381	8,014 x 3,332	4,977 x 2,827	5,311 x 3,180
doors open, incl. control unit and chip conveyor)								
Machine weight (approx kg)	3,180	3,950	5,002	6,700	11,475	13,670	4,000	5,000

	TMM 12 i	TMX 8 i	TMX 10 i	TMX 8 MYi	TMX 10 MYi	TMX 8 MSYi	TMX 10 MYSi
Capacity							
Distance between centers (mm)	1,006	754	854	754	854	724	825
Swing over bed diameter (mm)	680	640	640	508	560	508	560
Swing over cross slide diameter (mm)	510	415	415	508	560	508	560
Maximum turning diameter (mm)	360	355	415	336	375	336	375
Maximum turning length (mm)	937	535	635	527	627	527	627
Draw tube diameter (mm)	104	64	78	64	78	64	78
Travels							
X-axis (mm)	305	203	232	203	222	290	222
Z-axis (mm)	1,016	560	660	560	670	560	670
Y-axis (mm)	-	-	-	+/- 55	+/- 55	+/- 55	+/- 55
W-axis (mm)	-	640	740	640	740	640	740
Main Spindle							
Maximum speed (1st gear range) (rpm)	-	-	-	-	-	-	-
Maximum speed (2nd gear range) (rpm)	2,800	4,500	3,500	4,500	3,500	4,500	3,500
Maximum torque (1st gear range) (Nm @ rpm)	-	-	-	-	-	-	-
Maximum torque (2nd gear range) (Nm @ rpm)	709 @ 241	241 @ 1,100	350 @ 758.8	239 @ 1,000	267 @ 1,000	239 @ 1,000	267 @ 1,000
Spindle power (kW @ rpm)	18 @ 241	27 @ 1,100	27 @ 758.8	25 @ 1,000	28 @ 1,000	25 @ 1,100	28 @ 1,000
Spindle nose	A2-11	A2-6	A2-8	A2-6	A2-8	A2-6	A2-8
Chuck diameter (mm)	305	203	254	203	254	203	254
Turret							
Tool type	VDI 50	Direct tool	Direct tool	VDI 40	VDI 40	VDI 40	VDI 40
	DIN 1809	clamping	clamping	DIN 1809	DIN 1809	DIN 1809	DIN 1809
Stations	12	12	12	12	12	12	12
Tool shank (mm)	32 x 32	25 x 25					
Maximum boring bar diameter (mm)	50	40	40	40	40	40	40
Sub-Spindle							
Maximum speed (rpm)	-	-	-	-	-	6,000	6,000
Maximum torque (Nm @ rpm)	-	-	-	-	-	102 @ 1,390	102 @ 1,390
Spindle power (kW @ rpm)	-	-	-	-	-	15 @ 1,390	15 @ 1,390

	TMM 12 i	TMX 8 i	TMX 10 i	TMX 8 MYi	TMX 10 MYi	TMX 8 MSYi	TMX 10 MYSi
Live Tools							
Maximum speed (rpm)	4,000		-	4,000	4,000	4,000	4,000
Maximum torque (Nm @ rpm)	42 @ 1,500	-	-	27 @ 2,190	27 @ 2,190	27 @ 2,190	27 @ 2,190
Spindle power (kW @ rpm)	6.6 @ 1,500	-	-	6.3@2.190	6.3 @ 2,190	6.3 @ 2,190	6.3 @ 2,190
Feeds							
Rapid traverse X (m/min)	19	24	24	24	24	24	24
Rapid traverse Z (m/min)	24	30	30	30	30	30	30
Rapid traverse Y (m/min)	-	-	-	12	12	12	12
Rapid traverse W (m/min)	-	30	30	30	30	30	30
Parts Catcher							
Maximum part size on catcher (mm)	250 x 160 x 123	146 x 96 x 80					
Dimensions							
Machine height (mm)	2,239	2,187	2,187	2,552	2,577	2,552	2,577
Floor space required (width x depth in mm),	6,120 x 3,367	5,434 x 3,161	5,434 x 3,158	5,510 x 3,086	5,510 x 3,086	5,510 x 3,086	5,510 x 3,086
doors open, incl. control unit and chip conveyor)							
Machine weight (approx kg)	7,600	5,900	6,100	7,500	7,700	7,500	7,700

HURCO Conversational Programming

- >> NC/Conversational Merge
- >> DXF transfer (also for end face machining with live tools)
- >> Context Sensitive Help
- >> Program Manager Function
- >> Inch-Metric Toggle
- >> Program Review with Cut/Copy/Paste
- ightarrow Mill Cycles (with AutoCalc Function)
 - >> Profile Turning
 - >> Grooving
 - >> Cutoff
 - >> Threading
 - >> Thread Repair
- >> Drill Cycles
 - >> Drilling (Tool Retract / Chip Breaker)
 - >> Rigid Tapping with Pecking (TMX Series only)
 - >> Deep Hole Drilling
 - >> Decreasing Depth (Tool Retract / Chip Breaker)
 - >> Center Drill
- » Dwell Drilling
- >> Program Parameters
 - >> Programmable Tool Change Position
 - >> Speed Limits
 - >> Rapid Traverse Limits
 - >> Override Lockout

NC Programming

- >> NC Editor
- >> 99 Work Offsets (G-Code)
- >> Fanuc Series 0 Compatability
- >> G Codes
- >> M Codes

Live Tooling

- >> Axial & Radial Milling Cycles (End Face & Peripheral Milling)
- >> Lines & Arcs
- >> Circles
- >> Frames
- >> Grooves
- >> Lettering
- >> Flats (axial only)
- >> Axial & Radial Drilling Cycles (End Face & Peripheral Milling)
 - >> Drilling (Tool Retract / Chip Breaker)
 - >> Rigid Tapping with Pecking
 - » Deep Hole Drilling
 - >> Decreasing Depth (Tool Retract / Chip Breaker)
 - >> Center Drill
 - >> Dwell Drilling

Tool Management

>> Tool Probing with Touch Probe*

Review and Verification Graphics

- » Remote Maintenance
- >> Automatic Error Check
- >> Fast Draw Graphics Engine
- Sraphics Display (Tool Path, Solids, Projection in 3 Planes, Isometric)
- >> Graphical Code Search
- >> Tool Simulation

Automatic Mode

- >> Auto Interrupt Cycle
- » Cycle Start / Feed Hold
- >> Control and Machine Diagnostics
- » Coolant Select (Dual)
- >> Distance To Go
- >> Feed Rate, Rapid Traverse and RPM Override
- >> Spindle Load Monitor

The points marked with a * are optional

HURCO Conversational Programming

Graphically verify programs on the control and

easily see which codes are being processed.

in Detail

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Conversational Programming

HURCO's WinMax[®] conversational programming method gets you from print to part quickly by stepping you through the process visually. It's as easy as 1,2,3 — Setup. Program. Verify.

1,2,3 — Setup. Program. Verify.		
	Print to Part Faster No matter which type of programming you choose, the HURCO control is the most flexible – and fastest – from print to part in the industry.	
Sketch Input dimensions and specs from a rough sketch.		On-Control Editor Program or modify at the control with our advanced editor. Use copy, paste and other features that make editing easy.
Part Print Input exact dimensions and specs from a part print to start machining with ease.		CAD / CAM Post code from your CAD/CAM system and store to our control.
DXF File Our control automatically generates tool paths from a DXF file to allow machining almost instantly.		Industry Standard NC Upload your existing programs, including Fanuc® and Siemens®, and run them with little or no editing.
WINMAX-Desktop Our WinMax control allows you to program remotely.	NC/Conversational Merge The control allows you to combine both conversational and NC into one program for maximum efficiency.	intie of no editing.
	Machined Part HURCO customers combine their expertise with the HURCO WinMax control to produce quality parts.	

Accessories

HURCO offers a variety of optional accessories for turning centers.





>> Sub-spindle tool setter.

- » Bar feed interface: Automates advancing the bar between parts.
- » Oil skimmer: Increases coolant life by removing unwanted tramp oil.
- » Oil mist collector: Provides a safe, clean environment while also reclaiming evaporated coolant mist.

TMX series:

- >> Auto doors
- >> Chuck air blast (main & sub-spindle)
- >> Chuck coolant blast (main & sub-spindle)
- » Parts ejector
- >> Sub-spindle tool setter

Premium Components

- » HURCO uses double-nut ball screws that are anchored at both ends which applies pressure in opposite directions to the ball screw, keeps the nut under tension, and prevents backlash which produces less heat than a single nut system.
- » HURCO linear motion guides (LMG) provide excellent rigidity during heavy cutting with very low friction characteristics even with very high feed rates. HURCO castings are machined with a slot and shoulder for the rail. The rail is then wedge-locked with heavy duty fasteners to ensure straightness and rigidity, instead of just bolting the rail to the top of the casting with no shoulder.
- » Finite Element Analysis (FEA) is used to evaluate structural rigidity, torsional stiffness, thermal characteristics, and natural frequency to achieve the best frame design.

- » Fast servo turret with 12-driven tool stations is designed to provide faster and more accurate tool indexes (TMM Series and higher). Any combination of ID and OD live/static tool holders can be used.
- » The spindles have a larger diameter for rigidity, are made of chrome-moly alloy, come permanently grease packed and precision balanced for long life.
- The ITX design of the HURCO control module has eliminated a large number of plug-in connections and board level parts which results in very high reliability. The modular design minimizes downtime as the one-piece control module can quickly and easily be swapped out in the field. The machine configuration files automatically back up to a flash drive for easy recovery.



