A CONTROL FOR EVERY GENERATION.

MACHINING CENTERS TECHNICAL CATALOG / 5-AXIS

A CONTROL FOR EVERY GENERATION.
For over 50 years, Hurco has been empowering machinists of every generation with cutting-edge control technology that’s easy to learn and easy to use. See which one of our 65+ models of CNC machines is right for you—rigid and reliable CNC machines equipped with the control that makes shops more productive and more profitable.
Did you know? All Hurco 5-Axis machines are equipped with UltiMotion technology (invented by Hurco), which simultaneously reduces cycle time (by up to 30% or more) and improves surface finish quality. Exclusive motion control only available from Hurco. To learn more, visit Hurco.com/UltiMotion.

**Machine Overview**

- Extremely rigid and thermally stable double-column design
- Ladder design of bridge provides maximum support to the head casting
- Close proximity of spindle to bridge casting reduces overhang
- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +110° / -110° B-axis motion delivers better undercut capability
- Direct drive ballscrews
- High speed tool changer
- Integral motorized spindle equipped with ABEC-7 ceramic hybrid bearings
- 37.4" x 21.6" x 19.7" travels
- 18,000 RPM HSK 63 spindle
- Fast 1,417 ipm Rapid Traverse Rates (X, Y, Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 30-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19" LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

**Machine specifications can be found on Pages 46-49.**

For more information about the Hurco Control, go to page 38. Machines shown with options. Specifications and information may change without notice.
**VC500i**

5-axis cantilever design supports a wide range of parts.

**Did you know?** Hurco engineers have invented 3D Import, which includes 3D DXF technology that displays all geometry that the CAD system outputs, including splines. With 3D DXF, simply select the bottom of a contour, and the Z-axis depths will also be automatically input into the conversational block. Visit Hurco.com/3DImport to learn more.

**Machine Overview**

- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +110° / -110° B-axis motion delivers better undercut capability
- 20.5” x 17.7” x 15.8” travels
- 12,000 RPM spindle motor
- Fast 945 ipm Rapid Traverse Rates (X, Y, Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 30-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with 19” LCD screen
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 14GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

**Machine specifications can be found on Pages 46-49**

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
Did you know? The 3D Import feature on the Hurco control creates Transform Planes automatically for easy 5-sided conversational programming. No need to enter feature dimensions—simply click and cut. Plus, integrated CAD/CAM and tool path simulation.

Find out more at Hurco.com/3DImport.

Machine Overview

- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +110° / -110° B-axis motion delivers better undercut capability
- 24” x 20.5” x 19” travels
- 12,000 RPM dual-wound spindle motor
- Fast 1,417 ipm Rapid Traverse Rates (X, Y, Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Machine specifications can be found on Pages 46–49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VM10Ui
Small footprint. Big work cube.

VM10Ui Small footprint. Big work cube.

Machine Overview
- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +30° / -110° A-axis motion delivers better undercut capability
- 21" x 16" x 19" travels.
- 12,000 RPM spindle motor
- Spindle thermal chiller
- Fast 945 ipm Rapid Traverse Rates (X, Y, Z)
- Larger linear rails: wedge locked and mounted to a machined shoulder for increased rigidity
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 20-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with 19” LCD screen
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Did you know? Hurco’s Tool Center Point Management eliminates the need to account for the machining center’s centerlines of rotation. Instead, you simply use the solid model zero location. Post the program independent of where the stock is fixtured on the table. Find out more at Hurco.com/5Axis.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.
Machines shown with options. Specifications and information may change without notice.
POWER & CAPACITY

VM10Ui

OPERATING DIMENSIONS

TABLE SPECIFICATIONS

INTERIOR CLEARANCES

TABLE TRAVELS

POWER & TORQUE
VM10UHSl

High-speed, compact – ideal for medical, aerospace or other demanding 5-axis applications.

Machine Overview

- High-speed 20,000 RPM motorized spindle
- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +30°/-110° A-axis motion delivers better undercut capability
- 21” x 16” x 19” travels
- Fast 945 ipm Rapid Traverse Rates (X, Y, Z)
- Larger linear rails: wedge locked and mounted to a machined shoulder for increased rigidity
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 20-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with 19” LCD screen
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Did you know? Adopting a 5-sided machining process is the most efficient way to instantly increase the profit margin on existing jobs that you manufacture on a conventional 3-axis machine. Learn more at Hurco.com/5Axis.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX30Ui

Power, speed and unbeatable value – the ideal machine for medium sized 5-axis parts.

» Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
» +30°/-110° A-axis motion delivers better undercut capability
» 30” x 20” x 20.5” travels
» 12,000 RPM dual-wound spindle motor
» Fast 1,496 ipm Rapid Traverse Rates (X + Y) / 1,260 ipm (Z)
» Larger, heavy-duty roller ways on all three axes
» Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
» Yaskawa Sigma V Digital AC Servos
» 2 or 4 passage rotary unions for hydraulics and/or air
» Electric, side-mounted, 40-Station swing-arm ATC
» Full Enclosure with wide front access doors and fully contained tool storage
» Dual LED work lights
» Angular encoders for rotary axes
» Pistol-style coolant and air guns
» WinMax Mill Conversational and NC Programming
» 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
» Ergonomically designed MAX5 console with twin 19” LCD screens
» Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
» Z-axis regenerative brake – no counterbalance

Machine Overview

Machine specifications can be found on Pages 46-49

FINALLY! A book written for machinists by a machinist that covers 5-axis and 5-sided from start to finish. Learn more on page 42 and at Hurco.com/5Axis.
VMX30UHSi

Technology, power and speed provide the ultimate 5-axis solution.

» Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
» Larger, heavy-duty roller ways on all three axes
» +30°/-110° A-axis motion delivers better undercut capability
» 30” x 20” x 20.5” travels
» High-speed 18,000 RPM motorized spindle
» Fast 1,771 ipm Rapid Traverse Rates (X + Y) / 1,575 ipm (Z)
» Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
» Yaskawa Sigma V Digital AC Servos
» 2 or 4 passage rotary unions for hydraulics and/or air
» Electric, side-mounted, 40-Station swing-arm ATC
» Full Enclosure with wide front access doors and fully contained tool storage

Machine Overview

» Dual LED work lights
» Angular encoders for rotary axes
» Pistol-style coolant and air guns
» WinMax Mill Conversational and NC Programming
» S-axis/S-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
» Ergonomically designed MAX5 console with twin 19” LCD screens
» Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
» Z-axis regenerative brake – no counterbalance

Did you know? All Hurco 5-Axis machines are equipped with UltiMotion technology (invented by Hurco), which simultaneously reduces cycle time (by up to 30% or more) and improves surface finish quality. Exclusive motion control only available from Hurco.

To learn more, visit Hurco.com/UltiMotion.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX42Ui

5-axis workhorse packed with industry leading technologies.

» Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
» +30°/-110° A-axis motion delivers better undercut capability
» 42” x 24” x 20.5” travels
» 12,000 RPM dual-wound spindle motor
» Fast 1,496 ipm Rapid Traverse Rates (X + Y) / 1,260 ipm (Z)
» Larger, heavy-duty roller ways on all three axes
» Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
» Yaskawa Sigma V Digital AC Servos
» 2 or 4 passage rotary unions for hydraulics and/or air
» Electric, side-mounted, 40-Station swing-arm ATC
» Full Enclosure with wide front access doors and fully contained tool storage
» Dual LED work lights
» Angular encoders for rotary axes
» Pistol-style coolant and air guns
» WinMax Mill Conversational and NC Programming
» 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
» Ergonomically designed MAX5 console with twin 19” LCD screens
» Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
» Z-axis regenerative brake – no counterbalance

Machine Overview

Did you know? Hurco engineers have invented 3D Import, which includes 3D DXF technology that displays all geometry that the CAD system outputs, including splines. With 3D DXF, simply select the bottom of a contour, and the Z-axis depths will also be automatically input into the conversational block. Visit Hurco.com/3DImport to learn more.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.
Machines shown with options. Specifications and information may change without notice.
POWER & CAPACITY VMX42Ui

OPERATING DIMENSIONS

TABLE SPECIFICATIONS

INTERIOR CLEARANCES

TABLE TRAVELS

POWER & TORQUE
VMX42UHSi

5-axis high speed workhorse packed with industry leading technologies.

Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added

- 47 hp (35kW) Peak Spindle
- 18,000 RPM dual-wound spindle motor
- +30°/-110° A-axis motion delivers better undercut capability
- 42” x 24” x 20.5” travels
- Fast 1,771 ipm Rapid Traverse Rates (X + Y). 1,575 ipm (Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage

Dual LED work lights
Angular encoders for rotary axes
Pistol-style coolant and air guns
WinMax Mill Conversational and NC Programming
5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
Ergonomically designed MAX5 console with twin 19” LCD screens
Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
Z-axis regenerative brake – no counterbalance

Did you know? The 3D Import feature on the Hurco control creates Transform Planes automatically for easy 5-sided conversational programming. No need to enter feature dimensions—simply click and cut. Plus, integrated CAD/CAM and tool path simulation. Find out more at Hurco.com/3DImport.

Machine Overview

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX60Ui

A big 5-axis machine for big 5-axis work – with a surprisingly compact footprint.

Machine Overview

» Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added

» +30°/-110° A-axis motion delivers better undercut capability

» 60” x 26” x 20.5” travels

» 12,000 RPM dual-wound spindle motor

» Fast 1,260 ipm Rapid Traverse Rates (X + Y) / 945 ipm (Z)

» Larger, heavy-duty linear rails on all three axes

» Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)

» Yaskawa Sigma V Digital AC Servos

» 2 or 4 passage rotary unions for hydraulics and/or air

» Electric, side-mounted, 40-Station swing-arm ATC

» Full Enclosure with wide front access doors and fully contained tool storage

» Dual LED work lights

» Angular encoders for rotary axes

» Pistol-style coolant and air guns

» WinMax Mill Conversational and NC Programming

» 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import

» Ergonomically designed MAX5 console with twin 19” LCD screens

» Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive

» Z-axis regenerative brake – no counterbalance

Did you know? Hurco’s Tool Center Point Management eliminates the need to account for the machining center’s centerlines of rotation. Instead, you simply use the solid model zero location. Post the program independent of where the stock is fixtured on the table. Find out more at Hurco.com/5Axis.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VTXUi Traveling column 5-axis machine with integrated trunnion table.

Did you know? Adopting a 5-sided machining process is the most efficient way to instantly increase the profit margin on existing jobs that you manufacture on a conventional 3-axis machine. Learn more at Hurco.com/5Axis.

Machine Overview

- Integrated trunnion table design provides more clearance in Z-axis and ability to machine heavier parts compared to 3-axis mills with trunnion table added
- +30°/-110° A-axis motion delivers better undercut capability
- 31.5" x 27.6" x 20" travels
- 12,000 RPM dual-wound spindle motor
- Fast 1,378 ipm Rapid Traverse Rates (X, Y, Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 48-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Dual LED work lights
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19" LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
POWER & CAPACITY

OPERATING DIMENSIONS

TABLE SPECIFICATIONS

INTERIOR CLEARANCES

TABLE TRAVELS

POWER & TORQUE
VMX42SRTi

Swivel-head/rotary 5-axis machine designed for high-mix manufacturing.

Machine Overview

- Direct drive, embedded, C-axis, rotary torque table
  - Provides additional 3.5 inches in Z-axis to support taller parts
- Embedded rotary table design increases working surface of machine table (50 x 24 inches) to support secondary operations and/or 3-axis work
- Unlimited angular movement: reduces cycle time
- Stout table: supports heavier parts
- Rotary table working surface: 23.6” diameter
- 42” x 24” x 24” travels (X, Y, Z). B-axis swivel head travels: +/- 90°
- 12,000 RPM dual-wound Yaskawa spindle motor provides more horsepower
- Fast 1,496 ipm Rapid Traverse Rates (X + Y) / 1,260 ipm (Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAXS console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Machine specifications can be found on Pages 46-49

FINALLY! A book written for machinists by a machinist that covers 5-axis and 5-sided from start to finish. Learn more on page 42 and at Hurco.com/5Axis.

The Power of FIVE
The Definitive Guide to 5-Axis Machining
by Michael Cope

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX60SRTi  Swivel head on column + rotary integrated into huge table = maximum flexibility.

Did you know? All Hurco 5-Axis machines are equipped with UltiMotion technology (invented by Hurco), which simultaneously reduces cycle time (by up to 30% or more) and improves surface finish quality. Exclusive motion control only available from Hurco.

To learn more, visit Hurco.com/UltiMotion.

Machine Overview

- Direct drive, embedded, C-axis, rotary torque table
  - Provides additional 3.5 inches in Z-axis to support taller parts
  - Embedded rotary table design increases working surface of machine table (66 x 26 inches) to support secondary operations and/or 3-axis work
  - Unlimited angular movement: reduces cycle time
  - Stout table: supports heavier parts
  - Rotary table working surface: 23.6” diameter
- 60” x 26” x 24” travels (X, Y, Z). B-axis swivel head travels: +/- 90°
- 12,000 RPM dual-wound Yaskawa spindle motor provides more horsepower
- 1,260 ipm Rapid Traverse Rates (X + Y) / 945 ipm (Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAXS console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX42HSRTi
5-axis swivel-head torque table design with high speed spindle.

Machine Overview
- Direct drive, embedded, C-axis, rotary torque table
- Provides additional 3.5 inches in Z-axis to support taller parts
- Embedded rotary table design increases working surface of machine table (50 x 24 inches) to support secondary operations and/or 3-axis work
- Unlimited angular movement: reduces cycle time
- Stout table: supports heavier parts
- Rotary table working surface: 23.6" diameter
- 42” x 24” x 24” travels (X, Y, Z), 8-axis swivel head travels: +/- 90°
- High speed 18,000 RPM dual-wound Yaskawa spindle motor
- Fast 1,771 ipm Rapid Traverse Rates (X + Y) / 1,575 ipm (Z)
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders for rotary axes
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Did you know? Hurco engineers have invented 3D Import, which includes 3D DXF technology that displays all geometry that the CAD system outputs, including splines. With 3D DXF, simply select the bottom of a contour, and the Z-axis depths will also be automatically input into the conversational block. Visit Hurco.com/3DImport to learn more.

For more information about the Hurco Control, go to page 38.
Machines shown with options. Specifications and information may change without notice.
VMX42SWi

4-axis swivel head machine with optional rotary A-axis or C-axis available.

Did you know? The 3D Import feature on the Hurco control creates Transform Planes automatically for easy 5-sided conversational programming. No need to enter feature dimensions—simply click and cut. Plus, integrated CAD/CAM and tool path simulation. Find out more at Hurco.com/3DImport.

Machine Overview

- 42” x 24” x 24” travels (X, Y, Z) / B-axis swivel head travels: +/- 90°
- 12,000 RPM dual-wound Yaskawa spindle motor provides more horsepower
- Fast 1,496 ipm Rapid Traverse Rates (X + Y) / 1,260 ipm (Z)
- Large table weight capacity (3,000 lbs with uniform distribution)
- Multiple A-axis table options available
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders (B-axis)
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Machine specifications can be found on Pages 46-49.

For more information about the Hurco Control, go to page 38.
Machines shown with options. Specifications and information may change without notice.
POWER & CAPACITY

VMX42SWi

OPERATING DIMENSIONS

TABLE SPECIFICATIONS

INTERIOR CLEARANCES

TABLE TRAVELS

POWER & TORQUE

T-SLOT DIAGRAM
VMX60SWi

Huge travels and swivel head design with configurable A or C axis flexibility.

- 60" x 26" x 24" travels (X, Y, Z).
- B-axis swivel head travels: +/- 90°
- 12,000 RPM dual-wound Yaskawa spindle motor provides more horsepower
- 1,260 ipm Rapid Traverse Rates (X + Y) / 945 ipm (Z)
- Large table weight capacity (3,000 lbs with uniform distribution)
- Multiple A-axis table options available
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders (8-axis)
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming.
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19" LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- Z-axis regenerative brake – no counterbalance

Did you know? Hurco’s Tool Center Point Management eliminates the need to account for the machining center’s centerlines of rotation. Instead, you simply use the solid model zero location. Post the program independent of where the stock is fixtured on the table. Find out more at Hurco.com/SAxis.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
VMX84SWi

Huge travels and swivel head design with configurable A or C axis flexibility.

Machine Overview

- 84” x 34” x 30” travels (X, Y, Z) / B-axis swivel head travels: +/- 90°
- 12,000 RPM dual-wound Yaskawa spindle motor provides more horsepower
- 709 ipm Rapid Traverse Rates (X + Y) / 530 ipm (Z)
- Large table weight capacity (5,000 lbs with uniform distribution)
- Multiple A-axis table options available
- Larger, heavy-duty roller ways on all three axes
- Solid one-piece cast iron frame optimized with both static and dynamic Finite Element Analysis (FEA)
- Yaskawa Sigma V Digital AC Servos
- 2 or 4 passage rotary unions for hydraulics and/or air
- Electric, side-mounted, 40-Station swing-arm ATC
- Full Enclosure with wide front access doors and fully contained tool storage
- Angular encoders (B-axis)
- Pistol-style coolant and air guns
- WinMax Mill Conversational and NC Programming
- 5-axis/5-sided software features – Tool Path Linearization, Tool Center Point Management, Transform Plane, 3D Tool Compensation, Tool Vector Input & Retract, Shortest Angular Traverse, 3D Import
- Ergonomically designed MAX5 console with twin 19” LCD screens
- Robust control specifications (standard) – 2.7GHz Dual Core Processor, 4GB RAM Memory, 128GB Solid State Hard Drive
- 10,000 block look ahead (standard)
- Z-axis regenerative brake – no counterbalance

Did you know? Adopting a 5-sided machining process is the most efficient way to instantly increase the profit margin on existing jobs that you manufacture on a conventional 3-axis machine. Learn more at Hurco.com/5Axis.

Machine specifications can be found on Pages 46-49

For more information about the Hurco Control, go to page 38.

Machines shown with options. Specifications and information may change without notice.
Designed and built for machinists.

The MAXS Hurco control is the epitome of user-centric design. Based on the feedback from customers who participated in multiple usability tests of the initial MAXS console design, we made more than 80 improvements. The ergonomic design of the MAXS combined with its industry-leading technical specifications maximize productivity, which ultimately helps our customers increase their profit margins.

Industry-Leading Control Specifications (Standard)

- 4GB RAM Memory
- 2.7 GHz Dual Core Processor
- 128GB Solid State Hard drive
- Up to 4,000 bps Processing Speed
- Up to 10,000 block look ahead

Override knobs with convenient one-press presets

Buttons designed with tactile cues for enhanced usability

Adjustable-angle keypad

Adjustable height control arm

Flip-Out hook for hanging air nozzles + other tools

Retractable QWERTY keyboard with trackball
Full graphics screen

Large DRO with mini graphics

Large graphics with mini DRO

19-inch touch screen LCD with customizable view options.

Webcam

Additional coolant + air controls

Dual USB ports

Remote jog with LCD Digital Read Out lets you store data from the pendant

Modes such as part setup + tool setup are available from jog units with LCD option

The Industry’s Most Flexible Control

- Industry Standard NC
- Conversational
- NC/Conversational Merge

WinMax

- Integrated flashlight
- Magnetic feet
- Flashlight toggle button
- Wireless remote jog unit option
**WINMAX® CONTROL**

**Our control. Your expertise.**

The integrated Hurco control powered by WinMax® is the most flexible and intuitive control in the industry. WinMax offers processing power and an intuitive graphical user interface that supports multiple machining strategies. Hurco Conversational Programming is the gold standard in the industry, and NC Programming includes many high-end features.

**Go from print to part faster.**

- **Conversational** programming simplifies complex operations. Easy to learn. Intuitive, user-friendly interface.

- **NC with ISO/EIA support** means you don’t have to change a thing. Our control can do everything you’re doing now and it has the processing speed and memory you need for NC.

- **NC/Conversational Merge** This Hurco feature combines the best of Industry Standard NC and Conversational. NC/Conversational Merge makes it easy to apply conversational features, such as pattern operations, scaling, tool probing, part probing, and unlimited work offsets, to existing NC programs. Patterns include loop rotate, loop translate, loop linear, loop angular, pattern locations, scale, and mirror image.
WINMAX® Software / Features

Latest Features
- 3D Import
- 3D DXF
- AdaptiPath™
- Customizable View Options
- Dynamic Variable Look Ahead capable of up to 10,000 blocks (UltiMotion®)
- DXF Scaling
- Fast Draw Graphics Engine
- Font Magnification
- Job List
- Mill Frame with Enhanced Corner Geometry
- Multiple Options to Store Tool
- NC Work Offsets with Conversational Programming
- Probing Results
- Relative Position DRO
- Roughing Stock Allowance
- Stick Lettering
- Tool Life Management
- TrueType® Fonts Along a Contour
- User Assigned Tool Pockets
- WinMax Desktop Complete

Programming
- 4th Axis Rotary Wrap
- 99 Work Offsets (NC)
- 99 Tool Offsets (NC)
- AutoCalc
- Autosave
- Blend Arcs
- Canned Cycle Blocks
- Chamfers
- Comment Block
- Concurrent Programming
- Context Sensitive Help
- Drill/Dwell Cycles (Chip Break + Peck)
- Drilling and Boring with Inserted Drill
- DXF Transfer
- Frame Mill
- Helical Interpolation
- Hole Operations – Tap, Drill, Center Drill, Dwell and Ream
- Inch/Metric Programming
- Indexer Routine
- Industry Standard NC (ISNC)
- Language Toggle
- Lines & Arcs
- Linear Repeat
- Mirror Image
- M-Code Auxiliary Functions
- NC/Conversational Merge
- NC Editor
- NC Macro Package (NCMP)
- NC Probing Cycles
- NC Productivity Package (NCPP)
- Pattern (Scaling, Rotation, Translation)
- On-screen User Prompt
- Optional Stop
- Parts Counter
- Part Zero Shift
- Peck Mill
- Program Manager Functions
- Program Parameters
- Program Review with Cut/Copy/Paste
- Programmable Safety Zones
- Rectangular Repeat
- Rigid Tap
- Roughing Stock Allowance
- Select Surface Finish Quality (SFQ)
- Serial Number (Letter & Part Serialization)
- Slots
- Speed and Feed Edit while Running
- Swept Surface with 3D Mold
- Thread Milling
- Tool Setup and Review with Graphics
- Tool & Material Library
- Tool Change Optimization
- TrueType® Lettering Package
- UltiPocket with Helical Ramp Entry
- Unlimited Work Offsets (Conversational)

Verification
- 3D Solid Rendering
- Automatic Error Check
- Advanced Verification Graphics with Data Block Search
- Graphics Display (Tool Path, Solids, Projection in 3 Planes, Isometric)
- Graphics Error Verification
- Graphics Scaling
- Graphics Zoom
- Real Time Tool Simulation
- Wire frame graphics of part geometry with zoom. Includes error verification

Operational
- 128GB Solid State Hard Drive
- 2.7 GHz Dual Core Processor
- 4GB RAM Memory
- Auto Interrupt Cycle
- Automatic Tool Home
- Control and Machine Diagnostics
- Coolant Select (Dual)
- Distance To Go
- Estimated Run Time
- Feed Hold Button
- Feedrate Override
- Inch/Metric Toggle
- Programmable Feedrate
- Spindle Load Monitor
- UltiMonitor®
- UltiMotion®

5-Axis
- 3D Tool Compensation
- Automatic Safe Repositioning
- Rotary Axes Centerline Probing
- Shortest Angular Traverse
- Tool Center Point Management
- Tool Path Linearization
- Transform Plane
- Tool Vector Canned Cycles
- Tool Vector Input & Retract
- Universal Rotary

Lathe
- Auto Tool Nose Radius Compensation
- Bar Feed Cycle Blocks
- Bar Puller Data Block
- Constant Surface Speed, Selectable
- Cutoff Cycle Blocks
- Diameter/Radius Programming Modes
- Drill Tip Compensation
- Grooving Cycle- chamfer, radius, or square corners with ability to taper the groove walls from the on-screen menu
- ID/OD Profile Turning with face, turn, taper, arc with blend arcs or chamfers between elements
- Internal/External Chucking
- Lead-in and out angles, multi-start, constant or decreasing depth of cut.
- Thread Cycle Blocks – inside or outside(straight or tapered)
- Thread Repair
- Turret Index Control (Auto/Manual)

New Feature:
3D Import with 3D DXF Technology
Hurco’s 3D import feature includes 3D DXF technology that now displays all CAD geometry, including splines and Z-depths.
- Integrated CAD/CAM and tool path simulation
- No need to enter feature dimensions – simply click and cut
- Transform Planes created automatically for easy 5-sided conversational programming – no data entry required

WINMAX® Software / Features

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- Integrated CAD/CAM and tool path simulation
- No need to enter feature dimensions – simply click and cut
- Transform Planes created automatically for easy 5-sided conversational programming – no data entry required
With the addition of 3D Import to the Hurco control, you can go from “solid to part” seamlessly – eliminating the need for extra steps.

Hurco engineers have invented 3D Import, which includes 3D DXF technology that displays all geometry that the CAD system outputs, including splines. With 3D DXF, simply select the bottom of a contour, and the Z-axis depths will also be automatically input into the conversational block.

While conversational programming is the cornerstone of the Hurco control, it is equally powerful for NC as it is conversational. Additionally, Hurco’s exclusive NC/Conversational Merge feature gives you the best of both programming methods. An often overlooked benefit of the Hurco control is the powerful specifications that come standard. The Hurco control is equipped with the most robust technical specifications of any control on the market. For example, the Hurco MAX5 control comes with 4GB RAM Memory, a 2.7 GHz Dual Core Processor, a 128GB Solid State Hard Drive, up to 4,000 bps processing speed, and up to 10,000 block look ahead due to Hurco’s patented UltiMotion feature.

If you’ve spent any amount of time in manufacturing, you know that efficiency matters. Michael Cope, the author of The Power of FIVE: The Definitive Guide to 5-Axis Machining was co-owner of a job shop before joining Hurco. As a machinist and applications engineer, he always evaluates the most efficient way to approach a part to minimize setup time and reduce cycle time. It’s just part of his DNA. That’s precisely why he is such a proponent of 5-axis CNC. Adopting a 5-sided machining process is the most efficient way to instantly increase the profit margin on existing jobs that you manufacture on a conventional 3-axis machine. In this book, Mike breaks down the information about 5-axis and 5-sided machining from a machinist’s perspective. Whether you’re just learning about 5-axis machining or you’re already adept at 5-axis, you’ll learn something new. A great go-to book written for machinists by a machinist.

UNLEASH YOUR TRUE POTENTIAL WITH HURCO 5-AXIS

HURCO.COM/5AXIS
If you don’t have Hurco conversational probing, this is an example of the NC Macros you will need to navigate. Difficult to look at, not to mention time consuming, since you have to enter all kinds of information to make the macro program useful.

This is the Hurco MAX5 screen that shows all the probing cycles available: Edge, Hole or Circle Pocket, Cylinder, Rectangular Pocket Inside, Rectangular Solid Outside, Plane Intersection, Slot Inside, Web Outside.

This is an example of how easy it is to probe a Rectangular Solid. Simply enter the dimensions of the part in X & Y, add the drop down distance, and press START PROBING CYCLE softkey.

**Machinist’s Favorite: Hurco Skew Probe Cycles**

Part Skew Probe Cycles allow the operator to probe a part for skew, which eliminates the need to indicate large parts straight before running the program. The Skew cycle will “skew” the program to match the skewed angle of the part on the table. List of Skew Cycles: Edge, Hole or Circle Pocket, Cylinder, Rectangular Pocket Inside, Rectangular Solid Outside, Two Point Edge.
Rotary/Tilt Tables

<table>
<thead>
<tr>
<th>Model</th>
<th>Table Dia</th>
<th>Thru Hole Dia</th>
<th>Table Height</th>
<th>Center Height</th>
<th>Accuracy</th>
<th>Repeatability</th>
<th>Clamping Force</th>
<th>Max Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT 100</td>
<td>110 mm</td>
<td>30 mm</td>
<td>207 mm</td>
<td>150 mm</td>
<td>30 sec</td>
<td>±2 sec</td>
<td>235 Nm</td>
<td>160 Kg</td>
</tr>
<tr>
<td>HT 200</td>
<td>200 mm</td>
<td>30 mm</td>
<td>270 mm</td>
<td>210 mm</td>
<td>25 sec</td>
<td>±2 sec</td>
<td>490 Nm</td>
<td>320 Kg</td>
</tr>
<tr>
<td>HT 250</td>
<td>250 mm</td>
<td>70 mm</td>
<td>300 mm</td>
<td>225 mm</td>
<td>15 sec</td>
<td>±2 sec</td>
<td>588 Nm</td>
<td>200 Kg</td>
</tr>
<tr>
<td>HT 320</td>
<td>320 mm</td>
<td>110 mm</td>
<td>350 mm</td>
<td>255 mm</td>
<td>15 sec</td>
<td>±2 sec</td>
<td>1,392 Nm</td>
<td>200 Kg</td>
</tr>
</tbody>
</table>

Rotary Tables

<table>
<thead>
<tr>
<th>Model</th>
<th>Table Dia</th>
<th>Thru Hole Dia</th>
<th>Table Height</th>
<th>Center Height</th>
<th>Accuracy</th>
<th>Repeatability</th>
<th>Clamping Force</th>
<th>Max Load</th>
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<tbody>
<tr>
<td>H 160</td>
<td>165 mm</td>
<td>39.8 mm</td>
<td>185 mm</td>
<td>140 mm</td>
<td>25 sec</td>
<td>±2 sec</td>
<td>245 Nm</td>
<td>160 Kg</td>
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<tr>
<td>H 200</td>
<td>200 mm</td>
<td>39.8 mm</td>
<td>185 mm</td>
<td>140 mm</td>
<td>25 sec</td>
<td>±2 sec</td>
<td>425 Nm</td>
<td>200 Kg</td>
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<tr>
<td>H 250</td>
<td>250 mm</td>
<td>70 mm</td>
<td>220 mm</td>
<td>180 mm</td>
<td>25 sec</td>
<td>±2 sec</td>
<td>441 Nm</td>
<td>300 Kg</td>
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<tr>
<td>H 320</td>
<td>320 mm</td>
<td>70 mm</td>
<td>220 mm</td>
<td>210 mm</td>
<td>25 sec</td>
<td>±2 sec</td>
<td>1,392 Nm</td>
<td>400 Kg</td>
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<tr>
<td>H 400</td>
<td>400 mm</td>
<td>150 mm</td>
<td>250 mm</td>
<td>250 mm</td>
<td>15 sec</td>
<td>±4 sec</td>
<td>902 Nm</td>
<td>500 Kg</td>
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<tr>
<td>H 500</td>
<td>500 mm</td>
<td>180 mm</td>
<td>290 mm</td>
<td>310 mm</td>
<td>15 sec</td>
<td>±4 sec</td>
<td>1,225 Nm</td>
<td>350 Kg</td>
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<tr>
<td>H 630</td>
<td>630 mm</td>
<td>254 mm</td>
<td>320 mm</td>
<td>400 mm</td>
<td>15 sec</td>
<td>±4 sec</td>
<td>3,432 Nm</td>
<td>400 Kg</td>
</tr>
</tbody>
</table>

Rotary Accessories

- Power Tail Supports
- Tail Stocks
- 3-Jaw Scroll Chucks
<table>
<thead>
<tr>
<th>STANDARD &amp; OPTIONAL ITEMS</th>
<th>BX 40Ui</th>
<th>VC 500i</th>
<th>VCX 600i</th>
<th>VM 10Ui</th>
<th>VMX 300Ui</th>
<th>VM 30UIH3i</th>
<th>VMX 420Ui</th>
<th>VMX 42UHSi</th>
<th>VMX 60UHSi</th>
<th>VTXUi</th>
<th>VMX 425SRTi</th>
<th>VMX 605SRTi</th>
<th>VMX 42HSRTi</th>
<th>VMX 60SWi</th>
<th>VMX 605SWi</th>
<th>VMX 845SWi</th>
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<tbody>
<tr>
<td>AC spindle motor</td>
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<td>Dual wound AC spindle motor</td>
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<td>Liquid-cooled integral spindle</td>
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<td>High-speed, liquid-cooled integral spindle</td>
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<td>High-torque package</td>
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<td>High-speed spindle option</td>
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<td>Advanced motion control with AC brushless servos</td>
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<td>Direct drive Z-axis (no counterbalance)</td>
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<td>Spindle thermal chiller</td>
<td>S</td>
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<td>LCD Remote Jog*</td>
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<tr>
<td>Fine grain, all cast frame designed with FEA</td>
<td>S</td>
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<tr>
<td>Heavy duty linear rails with roller bearings</td>
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<td>Chip auger</td>
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</table>

*S = Standard, O = Option, — = Not Applicable

*All VM Series Machines are equipped with the basic remote jog. The LCD Remote Jog available as an option.*
<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>BX40Ui</th>
<th>VC500i</th>
<th>VCX600i</th>
<th>VM10Ui</th>
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<tbody>
<tr>
<td><strong>CAPACITY</strong></td>
<td></td>
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<tr>
<td>Table size</td>
<td>13.7 in / 348 mm diameter</td>
<td>19.7 in / 500 mm diameter</td>
<td>23.6 in / 600 mm diameter</td>
<td>7.8 in / 198 mm diameter</td>
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<tr>
<td>Max. weight on machine table</td>
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<tr>
<td>Max. weight on rotary/ trunnion table</td>
<td>551 lbs / 250 kg</td>
<td>550 lbs / 250 kg</td>
<td>770 lbs / 350 kg</td>
<td>330 lb / 150 kg</td>
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<tr>
<td>Spindle nose to table min / max</td>
<td>3.5 in (89 mm) / 25.7 in (653 mm)</td>
<td>5.9 in (150 mm) / 21.7 in (550 mm)</td>
<td>5.9 in (150 mm) / 24.9 in (633 mm)</td>
<td>1.4 in (36 mm) / 20.4 in (519 mm)</td>
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<tr>
<td>Table t-slots</td>
<td>6 x 0.55 in / 6 x 14 mm</td>
<td>3.9 in / 100 mm</td>
<td>3.9 in / 100 mm</td>
<td>6 x .39 in / 6 x 10 mm</td>
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<tr>
<td>X-axis</td>
<td>37.4 in / 950 mm</td>
<td>20.5 in / 520 mm</td>
<td>24.4 in / 620 mm</td>
<td>21 in / 533 mm</td>
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<tr>
<td>Y-axis</td>
<td>21.6 in / 549 mm</td>
<td>17.7 in / 450 mm</td>
<td>20.5 in / 520 mm</td>
<td>16 in / 406 mm</td>
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<tr>
<td>Z-axis</td>
<td>19.7 in / 500 mm</td>
<td>15.8 in / 400 mm</td>
<td>18.1 in / 460 mm</td>
<td>19 in / 483 mm</td>
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<td>A-axis</td>
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<td>+30° / -110°</td>
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<td>B-axis</td>
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<td>-110° / +110°</td>
<td>-110° / +110°</td>
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<tr>
<td>C-axis</td>
<td>360°</td>
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<tr>
<td><strong>TRAVEL</strong></td>
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<tr>
<td>Max. spindle speed / tool type</td>
<td>18,000 rpm / HSK 63</td>
<td>12,000 rpm / CAT 40</td>
<td>12,000 rpm / CAT 40</td>
<td>12,000 rpm / CAT 40 / Big Plus</td>
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<tr>
<td>Spindle power (peak)</td>
<td>47 hp / 35 kW</td>
<td>17.4 hp / 13 kW</td>
<td>21.4 hp / 16 kW</td>
<td>15 hp / 11.2 kW @ 1,740 rpm</td>
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<td>Spindle torque (peak)</td>
<td>88 ft lbs / 119 Nm</td>
<td>60.5 ft lbs / 82 Nm</td>
<td>80.2 ft lbs / 108.7 Nm</td>
<td>45 ft lbs / 61 Nm</td>
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<td>Tool capacity</td>
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<td>Max. tool diameter</td>
<td>3 in / 76 mm</td>
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<td>2.95 in / 75 mm</td>
<td>3.5 in / 89 mm</td>
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<td>Max. tool length</td>
<td>11.8 in / 300 mm</td>
<td>9.8 in / 250 mm</td>
<td>11.8 in / 300 mm</td>
<td>9.8 in / 250 mm</td>
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<tr>
<td>Rapid Traverse XYZ per minute</td>
<td>XY= 1,417 in / 36 m</td>
<td>XY= 945 / 24 m</td>
<td>XY= 1,417 in / 36 m</td>
<td>XY= 945 in / 24 m</td>
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<tr>
<td>Prog. feedrate per minute</td>
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<td>945 in / 24 m</td>
<td>984 in / 25 m</td>
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<td>A-axis max. RPM</td>
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<td>25 rpm</td>
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<td>B-axis max. RPM</td>
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<td>50 rpm</td>
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<tr>
<td>C-axis max. RPM</td>
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<td>100 rpm</td>
<td>25 rpm</td>
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<tr>
<td>Power rating/full load KVA</td>
<td>51 KVA</td>
<td>34 KVA</td>
<td>39 KVA</td>
<td>14 KVA</td>
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<tr>
<td>Machine weight</td>
<td>20,062 lbs / 9,100 kg</td>
<td>18,520 lbs / 8,400 kg</td>
<td>19,400 lbs / 8,800 kg</td>
<td>7,392 lbs / 3360 kg</td>
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</table>

Information may change without notice. Optimum machine performance is reliant upon installation conditions at the facility, such as power supply, air supply, and ambient air conditions.
### SPECIFICATIONS

#### CAPACITY

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<thead>
<tr>
<th></th>
<th>VM10UHSi</th>
<th>VMX30Ui</th>
<th>VMX30UHSi</th>
<th>VMX42Ui</th>
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<tr>
<td>Table size</td>
<td>7.8 in / 198 mm</td>
<td>9.8 in / 248 mm</td>
<td>9.8 in / 248 mm</td>
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<tr>
<td>Max. weight on rotary/trunnion table</td>
<td>330 lb / 150 kg</td>
<td>440 lb / 200 kg</td>
<td>440 lb / 200 kg</td>
<td>550 lb / 250 kg</td>
</tr>
<tr>
<td>Spindle nose to table min / max</td>
<td>1.4 in (36 mm) / 20.4 in (519 mm)</td>
<td>3.5 in (90 mm) / 24 in (610 mm)</td>
<td>3.5 in (90 mm) / 24 in (610 mm)</td>
<td>3.5 in (90 mm) / 24 in (610 mm)</td>
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<tr>
<td>Table t-slots</td>
<td>6 x .39 in / 6 x 10 mm</td>
<td>6 x .48 in x 60° / 6 x 12 mm x 60°</td>
<td>6 x .48 in x 60° / 6 x 12 mm x 60°</td>
<td>6 x .56 in x 60° / 6 x 14 mm x 60°</td>
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#### TRAVEL

<table>
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<tr>
<td>X-axis</td>
<td>21 in / 533 mm</td>
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<td>30 in / 762 mm</td>
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<td>Y-axis</td>
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<td>Z-axis</td>
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<tr>
<td>C-axis</td>
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#### SPINDLE

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<th>VMX30UHSi</th>
<th>VMX42Ui</th>
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<tbody>
<tr>
<td>Max. spindle speed / tool type</td>
<td>20,000 rpm / BT30</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
<td>18,000 rpm / HSK63</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
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<tr>
<td>Spindle power (peak)</td>
<td>11.4 hp / 8.5 kW @ 14,700 rpm</td>
<td>18 hp / 13.4 kW@ 600 rpm</td>
<td>47 hp / 35 kW @ 2,800 rpm</td>
<td>24 hp / 18 kW @ 720 rpm</td>
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<tr>
<td>Spindle torque (peak)</td>
<td>4.4 ft lbs / 5.9 Nm</td>
<td>158 ft lbs / 214 Nm</td>
<td>88 ft lbs / 119 Nm</td>
<td>175 ft lbs / 237 Nm</td>
</tr>
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</table>

#### ATC

<table>
<thead>
<tr>
<th></th>
<th>VM10UHSi</th>
<th>VMX30Ui</th>
<th>VMX30UHSi</th>
<th>VMX42Ui</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool capacity</td>
<td>20</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Max. tool diameter</td>
<td>2.4 in / 60 mm</td>
<td>3.0 in / 76 mm</td>
<td>(40) 3.0 in , 75 mm</td>
<td>3 in / 76 mm</td>
</tr>
<tr>
<td>Max. tool length</td>
<td>9.8 in / 250 mm</td>
<td>11.8 in / 300 mm</td>
<td>11.8 in / 300 mm</td>
<td>11.8 in / 300 mm</td>
</tr>
<tr>
<td>Tool to tool ATC time</td>
<td>2.5 sec</td>
<td>2 sec</td>
<td>1.5 sec</td>
<td>2 sec</td>
</tr>
<tr>
<td>Max. tool weight</td>
<td>11 lb / 5 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
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</table>

#### FEEDRATE

<table>
<thead>
<tr>
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<th>VM10UHSi</th>
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<th>VMX30UHSi</th>
<th>VMX42Ui</th>
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<tbody>
<tr>
<td>Rapid Traverse XYZ per minute</td>
<td>XY= 945 in / 24 m</td>
<td>XY= 1,496 in / 38 m</td>
<td>XY= 1,771 in / 45 m</td>
<td>XY= 1,496 in / 38 m</td>
</tr>
<tr>
<td>Prog. feedrate per minute</td>
<td>945 in / 24 m</td>
<td>1,260 in / 32 m</td>
<td>1,575 in / 40 m</td>
<td>1,260 in / 32 m</td>
</tr>
<tr>
<td>A-axis max. RPM</td>
<td>25 rpm</td>
<td>25 rpm</td>
<td>25 rpm</td>
<td>25 rpm</td>
</tr>
<tr>
<td>B-axis max. RPM</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>C-axis max. RPM</td>
<td>25 rpm</td>
<td>25 rpm</td>
<td>25 rpm</td>
<td>25 rpm</td>
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<tr>
<td>Power rating/full load KVA</td>
<td>15 KVA</td>
<td>23 KVA</td>
<td>48 KVA</td>
<td>31 KVA</td>
</tr>
<tr>
<td>Machine weight</td>
<td>6,825 lbs / 3102 kg</td>
<td>11,640 lbs / 5280 kg</td>
<td>11,640 lbs / 5280 kg</td>
<td>15,840 lbs / 7,200 kg</td>
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</table>

Information may change without notice. Optimum machine performance is reliant upon installation conditions at the facility, such as power supply, air supply, and ambient air conditions.
<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VMX42UHi</th>
<th>VMX60Ui</th>
<th>VTXUi</th>
<th>VMX42SRTi</th>
<th>VMX60SRTi</th>
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<td><strong>CAPACITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table size</td>
<td>13.7 in / 348 mm</td>
<td>19.7 in / 500 mm</td>
<td>23.6 x 19.7 in / 610 x 530 mm</td>
<td>50 x 24 in / 1270 x 610 mm</td>
<td>66 x 26 in / 1676 x 660 mm</td>
</tr>
<tr>
<td>Max. weight on machine table</td>
<td>—</td>
<td>—</td>
<td>1,100 lb / 500 kg</td>
<td>3,000 lb / 1360 kg</td>
<td>3,000 lb / 1360 kg</td>
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<tr>
<td>Max. weight on rotary/trunnion table</td>
<td>550 lb / 250 kg</td>
<td>880 lb / 400 kg</td>
<td>—</td>
<td>1,100 lb / 500 kg</td>
<td>1,100 lb / 500 kg</td>
</tr>
<tr>
<td>Spindle nose to table min/max</td>
<td>2.2 in (56 mm) / 22.7 in (576 mm)</td>
<td>3.5 in (90 mm) / 24 in (610 mm)</td>
<td>5.9 in (150 mm) / 26 in (660 mm)</td>
<td>.4 in (10 mm) / 24.4 in (620 mm)</td>
<td>.5 in (13 mm) / 24.5 in (622 mm)</td>
</tr>
<tr>
<td>Table t-slots</td>
<td>6 x .56 in x 60° / 6 x 14 mm x 60°</td>
<td>5 x .71 in / 5 x 18 mm</td>
<td>5 x .71 in / 5 x 18 mm</td>
<td>5 x .71 in / 5 x 18 mm</td>
<td>5 x .71 in / 5 x 18 mm</td>
</tr>
<tr>
<td><strong>TRAVEL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X-axis</td>
<td>42 in / 1067 mm</td>
<td>60 in / 1524 mm</td>
<td>31.5 in / 800 mm</td>
<td>42 in / 1067 mm</td>
<td>60 in / 1,524 mm</td>
</tr>
<tr>
<td>Y-axis</td>
<td>24 in / 610 mm</td>
<td>26 in / 660 mm</td>
<td>27.6 in / 700 mm</td>
<td>24 in / 610 mm</td>
<td>26 in / 660 mm</td>
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<tr>
<td>Z-axis</td>
<td>20.5 in / 520 mm</td>
<td>20.5 in / 520 mm</td>
<td>20 in / 510 mm</td>
<td>24 in / 610 mm</td>
<td>24 in / 610 mm</td>
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<td>A-axis</td>
<td>+30° / -110°</td>
<td>+30° / -110°</td>
<td>+30° / -110°</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B-axis</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>+/-90°</td>
<td>+/-90°</td>
</tr>
<tr>
<td>C-axis</td>
<td>360°</td>
<td>360°</td>
<td>360°</td>
<td>360°</td>
<td>360°</td>
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<tr>
<td><strong>SPINDLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. spindle speed / tool type</td>
<td>18,000 rpm / HSK63</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
</tr>
<tr>
<td>Spindle power (peak)</td>
<td>47 hp / 35 kw @ 2,800 rpm</td>
<td>24 hp / 18 kw @ 720 rpm</td>
<td>24 hp / 18 kw @ 720 rpm</td>
<td>48 hp / 36.5 kw @ 2,900 rpm</td>
<td>48 hp / 36.5 kw @ 2,900 rpm</td>
</tr>
<tr>
<td>Spindle torque (peak)</td>
<td>88 ft lbs / 119 Nm</td>
<td>175 ft lbs / 237 Nm</td>
<td>175 ft lbs / 237 Nm</td>
<td>87 ft lbs / 118 Nm</td>
<td>87 ft lbs / 118 Nm</td>
</tr>
<tr>
<td><strong>ATC</strong></td>
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<tr>
<td>Tool capacity</td>
<td>40</td>
<td>40</td>
<td>48 or 96</td>
<td>40</td>
<td>40</td>
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<tr>
<td>Max. tool diameter</td>
<td>3.0 in / 76 mm</td>
<td>3 in / 76 mm</td>
<td>2.95 in / 75 mm</td>
<td>3 in / 76 mm</td>
<td>2.95 in / 75 mm</td>
</tr>
<tr>
<td>Max. tool length</td>
<td>11.6 in / 300 mm</td>
<td>11.8 in / 300 mm</td>
<td>11.0 in / 280 mm</td>
<td>9.8 in / 249 mm</td>
<td>9.8 in / 250 mm</td>
</tr>
<tr>
<td>Tool to tool ATC time</td>
<td>1.5 sec</td>
<td>2 sec</td>
<td>3 sec</td>
<td>4 sec</td>
<td>4 sec</td>
</tr>
<tr>
<td>Max. tool weight</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
</tr>
<tr>
<td><strong>FEEDRATE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid Traverse XYZ per minute</td>
<td>XY= 1,771 in / 45 m</td>
<td>XY= 1,260 in / 32 m</td>
<td>XY= 1,378 in / 35 m</td>
<td>XY= 1,496 in / 38 m</td>
<td>XY= 1,260 in / 32 m</td>
</tr>
<tr>
<td>Prog. feedrate per minute</td>
<td>2+1,575 in / 40 m</td>
<td>2+945 in / 24 m</td>
<td>2+1,378 in / 35 m</td>
<td>2+1,260 in / 32 m</td>
<td>2+945 in / 24 m</td>
</tr>
<tr>
<td>A-axis max. RPM</td>
<td>25 rpm</td>
<td>16.6 rpm</td>
<td>16.6 rpm</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B-axis max. RPM</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>90 rpm</td>
<td>90 rpm</td>
</tr>
<tr>
<td>C-axis max. RPM</td>
<td>25 rpm</td>
<td>20.8 rpm</td>
<td>16.6 rpm</td>
<td>100 rpm</td>
<td>100 rpm</td>
</tr>
<tr>
<td>Power rating/full load KVA</td>
<td>50 KVA</td>
<td>34 KVA</td>
<td>38 KVA</td>
<td>68 KVA</td>
<td>69 KVA</td>
</tr>
<tr>
<td>Machine weight</td>
<td>15,840 lbs / 7,200 kg</td>
<td>18,800 lbs / 8,545.5 kg</td>
<td>48 sta. 27,560 lbs / 12,500 kg</td>
<td>96 sta. 28,600 lbs / 13,000 kg</td>
<td>18,520 lbs / 8,400 kg</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>VMX42HSRTi</th>
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<th>VMX60SWi</th>
<th>VMX84SWi</th>
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<tr>
<td><strong>CAPACITY</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Table size</td>
<td>50 x 24 in / 1,270 x 610 mm</td>
<td>50 x 24 in / 1,270 x 610 mm</td>
<td>66 x 26 in / 1,676 x 660 mm</td>
<td>86 x 34 in / 2,184 x 865 mm</td>
</tr>
<tr>
<td>Max. weight on machine</td>
<td>3,000 lb / 1,360 kg</td>
<td>3,000 lb / 1,360 kg</td>
<td>3,000 lb / 1,360 kg</td>
<td>5,000 lb / 2,268 kg</td>
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<tr>
<td>Max. weight on rotary/trunnion table</td>
<td>1100 lb / 500 kg</td>
<td>—</td>
<td>—</td>
<td>5.8 in (147 mm) / 35.8 in (909 mm)</td>
</tr>
<tr>
<td>Spindle nose to table min / max</td>
<td>.1 in (25 mm) / 24.1 in (612 mm)</td>
<td>6 in (152 mm) / 30 in (762 mm)</td>
<td>4 in (102 mm) / 28 in (711 mm)</td>
<td>5 in (127 mm) / 35 in (889 mm)</td>
</tr>
<tr>
<td>Table t-slots</td>
<td>5 x .71 in / 5 x 18 mm</td>
<td>5 x .71 in / 5 x 18 mm</td>
<td>6 x .71 in / 6 x 18 mm</td>
<td>7 x .71 in / 7 x 18 mm</td>
</tr>
<tr>
<td><strong>TRAVEL</strong></td>
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<td></td>
</tr>
<tr>
<td>X-axis</td>
<td>42 in / 1,067 mm</td>
<td>42 in / 1,067 mm</td>
<td>60 in / 1,524 mm</td>
<td>84 in / 2,134 mm</td>
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<tr>
<td>Y-axis</td>
<td>24 in / 610 mm</td>
<td>24 in / 610 mm</td>
<td>26 in / 660 mm</td>
<td>34 in / 865 mm</td>
</tr>
<tr>
<td>Z-axis</td>
<td>24 in / 610 mm</td>
<td>24 in / 610 mm</td>
<td>24 in / 610 mm</td>
<td>30 in / 762 mm</td>
</tr>
<tr>
<td>A-axis</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B-axis</td>
<td>+/-90°</td>
<td>+/-90°</td>
<td>+/-90°</td>
<td>+/-90°</td>
</tr>
<tr>
<td>C-axis</td>
<td>360°</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>SPINDLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max. spindle speed / tool type</td>
<td>18,000 rpm / HSK63</td>
<td>12,000 rpm / CAT, BT, DIN 40</td>
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<td>12,000 rpm / CAT, BT, DIN 40</td>
</tr>
<tr>
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<td>48 hp / 36.5 kW @ 2,900 rpm</td>
<td>48 hp / 36.5 kW @ 2,900 rpm</td>
</tr>
<tr>
<td>Spindle torque (peak)</td>
<td>88 ft lbs / 119 Nm</td>
<td>87 ft lbs / 118 Nm</td>
<td>87 ft lbs / 118 Nm</td>
<td>87 ft lbs / 118 Nm</td>
</tr>
<tr>
<td><strong>ATC</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Tool capacity</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Max. tool diameter</td>
<td>3.0 in / 76 mm</td>
<td>3 in / 76 mm</td>
<td>3 in / 76 mm</td>
<td>3.0 in / 76 mm</td>
</tr>
<tr>
<td>Max. tool length</td>
<td>9.8 in / 250 mm</td>
<td>9.8 in / 250 mm</td>
<td>9.8 in / 250 mm</td>
<td>11.8 in / 300 mm</td>
</tr>
<tr>
<td>Tool to tool ATC time</td>
<td>2 sec</td>
<td>2 sec</td>
<td>2 sec</td>
<td>2.5 sec</td>
</tr>
<tr>
<td>Max. tool weight</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
<td>15.4 lb / 7 kg</td>
</tr>
<tr>
<td><strong>FEEDRATE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid Traverse XYZ per minute</td>
<td>XY= 1,771 in / 45 m</td>
<td>XY= 1,496 in / 38 m</td>
<td>XY= 1,260 in / 32 mm</td>
<td>XY= 709 in / 18 m</td>
</tr>
<tr>
<td>Prog. feedrate per minute</td>
<td>1,575 in / 40 m</td>
<td>1,260 in / 32 m</td>
<td>945 in / 24 m</td>
<td>530 in / 13.5 m</td>
</tr>
<tr>
<td>A-axis max. RPM</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>B-axis max. RPM</td>
<td>50 rpm</td>
<td>90 rpm</td>
<td>90 rpm</td>
<td>33.3 rpm</td>
</tr>
<tr>
<td>C-axis max. RPM</td>
<td>100 rpm</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Power rating/full load KVA</td>
<td>70 KVA</td>
<td>56 KVA</td>
<td>54 KVA</td>
<td>54 KVA</td>
</tr>
<tr>
<td>Machine weight</td>
<td>16,640 lbs / 7,550 kg</td>
<td>15,686 lbs / 7,130 kg</td>
<td>19,074 lbs / 8,670 kg</td>
<td>36,806 lbs / 16,730 kg</td>
</tr>
</tbody>
</table>

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A History of Innovation

Hurco has been advancing the manufacturing industry for over 50 years. From the first computer controlled back gauge in 1969 to our patented UltiMotion system, we are dedicated to technology innovation that makes manufacturing more efficient and manufacturing companies more profitable.
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>UltiMax 4 control introduced</td>
</tr>
<tr>
<td>2000</td>
<td>WinMax Desktop software released</td>
</tr>
<tr>
<td>2003</td>
<td>TM turning centers introduced</td>
</tr>
<tr>
<td>2004</td>
<td>VM machining centers introduced</td>
</tr>
<tr>
<td>2006</td>
<td>SR 5-axis machining centers introduced</td>
</tr>
<tr>
<td>2008</td>
<td>U-Series 5-Axis machining centers expanded</td>
</tr>
<tr>
<td>2009</td>
<td>DCX double column machining centers introduced</td>
</tr>
<tr>
<td>2010</td>
<td>First Hurco 5-axis machine introduced</td>
</tr>
<tr>
<td>2011</td>
<td>HeliMotion® invented</td>
</tr>
<tr>
<td>2012</td>
<td>Record sales</td>
</tr>
<tr>
<td>2013</td>
<td>TM and TMX Series expanded to include heavy-duty turning and multi-axis</td>
</tr>
<tr>
<td>2014</td>
<td>Hurco invents HeliMotion®</td>
</tr>
<tr>
<td>2015</td>
<td>USA machine assembly operation established</td>
</tr>
<tr>
<td>2016</td>
<td>Hurco acquires Milltronics and Takumi</td>
</tr>
<tr>
<td>2017</td>
<td>HM horizontal machining centers introduced</td>
</tr>
<tr>
<td>2018</td>
<td>Record sales</td>
</tr>
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