

PRODUCT CATALOG



MADE IN THE U.S.A.





WARRANTY

Omega TMM's 10 year limited warranty* not only gives you peace of mind, it shows Omega TMM's commitment to provide a high level of quality, dependability, and reliability.

*Please see an Omega TMM representative for warranty details.





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TECHNOLOGY

Omega TMM World Headquarters in Fairport NY is where innovation is born. Customer feedback is what drives the manufacturing world, you speak and we listen. Our mechanical engineering and software engineering teams work hand in hand with our executive team to develop the most user friendly, accurate, repeatable, and reliable tool measuring machines on the planet!

PERFECT SET

The most accurate automated tool height setting available patent pending. Utilizing an ultra precise sub 1-micron resolution glass scale encoder users have the ability to accurately set tool heights to +/- 5 microns, the best in the business!

HOLDING RECOGNITION SYSTEM

Utilizing Balluff nearfield RFID communication the spindle offsets are automatically adjusted no matter what cartridge or adapter type you are using with no operator action needed.

VIRTUAL CONTROL DEVICE

Utilize a 3D CAD mouse to control all 3 automated axes on your CNC presetter. This hands-off control allows micron precise movement, and increases throughput, while being flexible to accommodate ergonomic challenges. Our VCD has 3 fully programmable "smart buttons" that can be used to complete often used functions with the press of a single button. (3 axis CNC required)

P7 SOFTWARE

User friendly yet robust our G3/ P7 software suites were designed for productivity. Intuitive function and an elegant no nonsense GUI make the Omega TMM machines the easiest to use presetting machines on the market.

A.A.I.M.

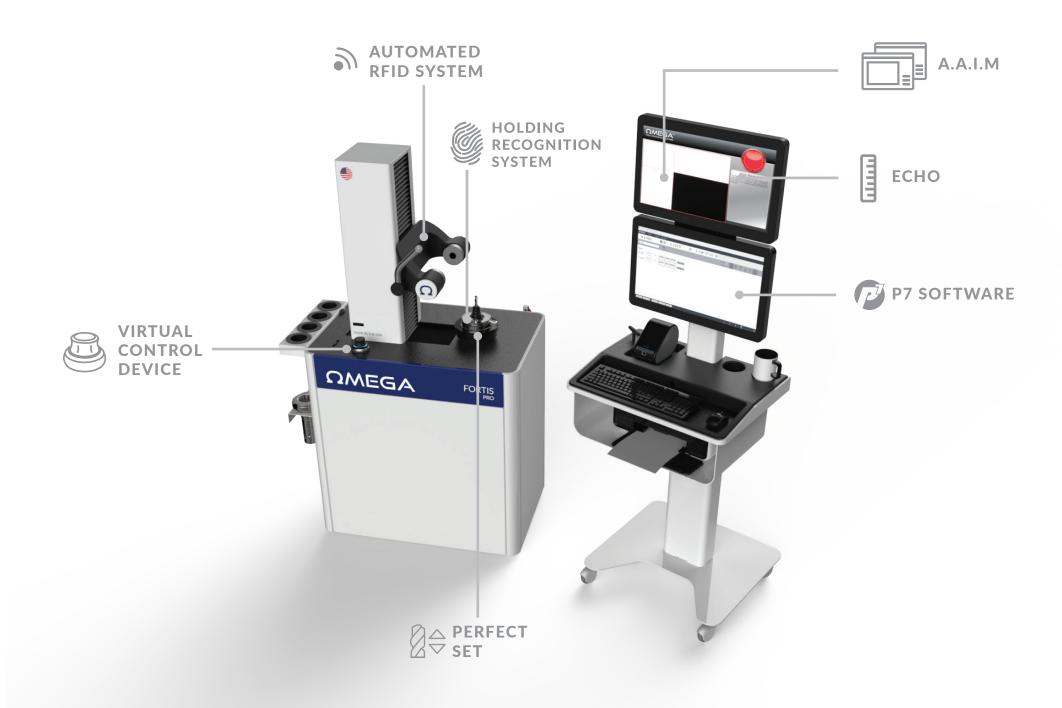
Automated Analysis Inspection and Measurement software allows you to verify profiles and the most difficult forms with ease. Our fully automated imaging software will create a 2+ million point cloud to generate a micron precise DXF for overlay or export. Robust features like tolerance bands, nominal vs. actual comparison, and shadow delete make AAIM your number one choice for all your profiling needs. (3 axis CNC required)

ECHO

The world's only "learning presetter"!
Simply turn on the Echo function,
measure your tool and Echo will
learn your movements, optimize the
program, and create your macro. This is
hands down simplest way to program
presetting macros on the market.
Period. (3 axis CNC required)

AUTOMATED RFID

Read and write RFID tags on your tool holder from any provider with the push of a button.





FUNCTIONALITY

Featuring dual precision ground guideways on each axis, sub-micron resolution glass scales, and double recirculating ball bearings sourced from some of the finest manufacturers in the world.

The Omega TMM product line is the apex of the term "World Class."



Reducing operator fatigue, ease of use, and universal fit were our top priorities and we have succeeded! Exhaustive research on grip width, grip length, reach reduction, posture of hand, and more has led us to the development of this ergonomically perfect handle.

LED inspection light to see a live view of your tool.

Our vision system is comprised of three main components for all the heavy lifting, the camera, the backlight, and the image processing. 80x magnification, a collimated backlight, 5MP CMOS sensor and a custom ground bi-telecentric lens gives you the most accurate image in the industry. A Dell AIO touch screen PC featuring a robust Core i5 processor, 8GB RAM, 500GB HD, and the latest Windows10 operating system, processes this image at lightning speed to calculate the most accurate and repeatable measurements possible.

Laser tool finder to easily find the tip or an individual step on your tool.



MACHINE LINEUP







SOLIS

The fastest, most reliable, and most accurate heat shrink/measurement combo PERIOD. Through years of engineering and innovation Omega TMM has developed the ultimate machine to meet your high capacity heat shrink and presetting needs. Cutting edge technology such as a proprietary self cooling induction coil shrink head built for continuous shrinking 24 hours a day 7 days a week make the Solis a real workhorse.

FEATURES		SPECIFICATIONS
C.H.I.L.L. automated 60 second tool cooling Perfect Set provides users the ability to set tool height to an industry leading +/- 5 microns (patent pending) Length Verification spindle for quick serial shrinking of different length and diameter tools with no extra "masterpiece" step required Virtual Control Device for simple ergonomic use Mobile Command Center rolling kiosk Laser location finder to easily find your tooltip Fume extractor to remove all vapors produced from the heated tool A fully integrated heat shrink and presetting unit Up to 9 full CNC axes Serial shrinking of different tool heights and diameters	Holding recognition system Liquid cooled tray for hot cutting tools (patent pending) Micron accurate fine adjust P7 user interface suite Led tool inspection light 21.5" touch screen control 21.5" tool window monitor 15" touch screen LVS monitor Automated unshrinking of damaged tools ECHO AAIM	DIMENSIONS AND WEIGHT Length: 1854 mm (73") Width: 813 mm (32") Height: 1930 mm (76") Average Shipping Weight: 930 kg (2050 lbs) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz 480V AC 3 phase Air: 80-110 PSI
Pearlitic cast iron construction with our proprietary SYMMETRY design		*Shown with optional casters



PERFECT SET LENGTH RODS

Patent Pending

Provides users the ability to set tool height to an industry leading +/- 5 microns.

LIQUID COOLED TOOL TRAY

Patent Pending

The first machine in the industry to offer a liquid cooled tray to cool your hot tools.

LENGTH VERIFICATION SPINDLE

Eliminates the use of "masterpiece" sets to reduce your cycle time by more than a minute and a half!

C.H.I.L.L.

Contained Hyper Infrigidated Lossy Liquid cooling system for our revolutionary Solis machine. Self contained and maintenance free our C.H.I.L.L. automated cooling system can cool your heat shrink tools to working temperature in 60 seconds.





FORTIS

With over 600 ft/lbs of power-clamping spindle force the Fortis Series are the most repeatable measuring machines on the market.

FEATURES		SPECIFICATIONS	OPTIONS
600+ lb/ft universal power clamping spindle with	Instantly finds tool geometries	MEASURING DIAMETERS	MEASURING LENGTHS
interchangeable cartridge system to work with any tool holding type	Theoretical intersection points	420 mm (16.5")	400 mm (15.75") 600 mm (23.6")
Integrated spindle brake and 360° indexing	Fixed or Dynamic crosshairs	DIMENSIONS AND WEIGHT	800 mm (31.5")
1μ repeatable measuring	Dual 21.5" tool window monitor (P7)	Overall Width: 1575 mm (62")	CONTROL SYSTEMS
Shop floor ready, full size freestanding machine	Pearlitic cast iron construction with our proprietary SYMMETRY design	Depth:	G3 or P7 user interface Autofocus CNC Spindle
Spindle weight capacity of over 200 lbs	proprietary 31141141 design	813 mm (32")	Manual and automated RFID systems
Laser Location finder			Mazak Cyber Tool and Smooth
Laser Location finder		Height:	Tool Management system integration
LED ring-light for tool inspection		400 mm Column (1730 mm / 68")	Data output
		600 mm Column (1930 mm / 76")	Perfect Set automated tool height system
Robust easy to use control interface		800 mm Column (2130 mm / 84")	Holding recognition system AAIM- tool profile software
		Average Shipping Weight:	Virtual control device
		522 kg (1150 lbs.)	ECHO
			User management
		UTILITIES	
		120V AC or 220V AC, 50 Hz to 63 Hz	FORTIS PRO
			System is full 3 axis CNC automation
		Air: 80-110 PSI	



ERGONOMIC, QUICK POSITIONING Offers smooth and effortless motion UNIVERSAL POWER CLAMPING SPINDLE **UNLIMITED .001 MM FINE ADJUSTMENT** Fine adjust/axis brake provides .001 mm unlimited fine adjust • MADE IN THE USA OMEGA **INTEGRATED STEEL BASE FORTIS** With perlitic cast iron horizontal and vertical castings PRO





FORTIS-XL

The FORTIS-XL can handle heights and diameters up to 1000mm and with a 1000lb spindle capacity it can measure any tool in your arsenal.

with interchangeable cartridge system to work with any tool holding type Instantly finds tool geometries Integrated spindle brake and 360° indexing Simple to use 3D VCD with programmable smart buttons Fixed or Dynamic crosshairs 1µ repeatable measuring 21.5" LCD touchscreen control Shop floor ready, full size freestanding machine 21.5" tool window monitor	DIMENSIONS AND WEIGHT Overall Width: 1838 mm (72.4") Depth: 701 mm (27.6")	MEASURING OPTIONS 1000mm Length 1000mm Diameter CONTROL SYSTEMS G3 or P7 user interface
LED ring-light for tool inspection	Height: 600mm Column (1948 mm/76.7") 1000 mm Column (2342mm/93.2") Average Shipping Weight: 1020 kg (2240 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz	Autofocus CNC Spindle Manual and automated RFID system Mazak Cyber Tool and Smooth Tool Management system integration Data output Perfect Set automated tool height system Holding recognition system AAIM- tool profile software ECHO User management
	Air: 80-110 PSI	FORTIS - XL PRO System is full 3 axis CNC automation





EXACTUS LITE

Need accurate measurements but tight on space? The Exactus Lite tabletop machine is your answer.

FEATURES		SPECIFICATIONS	OPTIONS
Precision ground taper 50 spindle Adapters available for all tool holding types 1 micron concentricity Vacuum clamping Shop floor ready Laser Location finder LED ring-light for tool inspection Robust easy to use control interface Pearlitic cast iron construction with our proprietary SYMMETRY design	Instantly finds tool geometries Theoretical intersection points Fixed or Dynamic cross-hairs 21.5" LCD touchscreen control Label printer	DIMENSIONS AND WEIGHT Overall Width: 748 mm (30") Depth: 527mm (21") Height: 400 mm Column (890mm/ 35") 600mm Column (1115mm/44") 800mm Column (1315mm/42") Average Shipping Weight: 272 kg (600 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	MEASURING OPTIONS 400mm (15.75") 600mm (23.6") 800mm (31.5") CONTROL SYSTEMS G3 or P7 user interface Manual and automated RFID systems Mazak Cyber Tool and Smooth Tool Management system integration Data output Single or dual 21.5" monitors User management Document manager



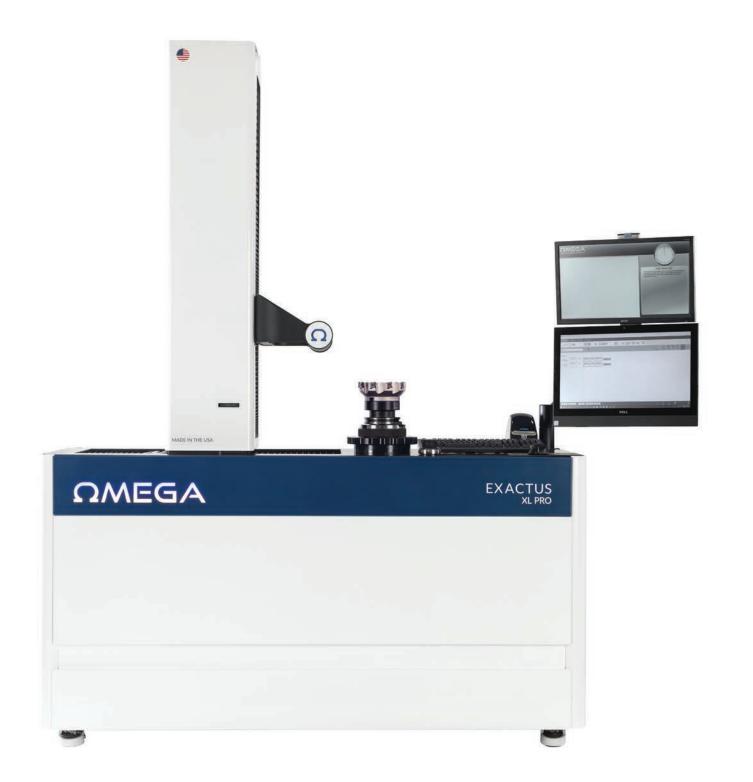


EXACTUS

Easy to use, accurate, and robust. The Exactus line can transform your production efficiency from good to world class.

FEATURES		SPECIFICATIONS	OPTIONS
Precision ground taper 50 spindle	Instantly finds tool geometries	MEASURING DIAMETERS	MEASURING OPTIONS
Adapters available for all tool holding types	Theoretical intersection points	420 mm (16.5")	400 mm Column (1730 mm / 68") 600 mm Column (1930 mm / 76")
1 micron concentricity	Fixed or Dynamic cross-hairs	DIMENSIONS AND WEIGHT	800 mm Column (2130 mm / 84")
Vacuum clamping	21.5" LCD touchscreen control	Overall Width: 1575 mm (62")	CONTROL SYSTEM
Shop floor ready full size freestanding machine	Label printer		G3 or P7 user interface
Laser Location finder		Depth: 813 mm (32")	Autofocus CNC Spindle Manual and automated RFID systems
LED ring-light for tool inspection		Height:	Mazak Cyber Tool and Smooth Tool Management system integration
Robust easy to use control interface		400 mm Column (1730 mm / 68")	Data output
Pearlitic cast iron construction with our proprietary SYMMETRY design		600 mm Column (1930 mm / 76") 800 mm Column (2130 mm / 84")	Perfect Set automated tool height system Holding recognition system
		Average Shipping Weight: 522 kg (1150 lbs.)	AAIM- tool profile software Virtual control device ECHO
		UTILITIES	User management
		120V AC or 220V AC, 50 Hz to 63 Hz	EXACTUS PRO
		Air: 80-110 PSI	System is full 3 axis CNC automation





EXACTUS-XL

Cast iron construction with our proprietary SYMMETRY design, our innovative virtual control device, and multiple spindle options make the Exactus-XL the definition of the word "heavyweight".

FEATURES		SPECIFICATIONS	OPTIONS
Precision ground taper 50 spindle Integrated spindle brake and 360° indexing Simple to use 3D VCD with programmable smart buttons Shop floor ready, full size freestanding machine Laser Location finder	Instantly finds tool geometries Theoretical intersection points Fixed or Dynamic crosshairs 21.5" LCD touchscreen control 21.5" tool window monitor	DIMENSIONS AND WEIGHT Overall Width: 1838 mm (72.4") Depth: 701 mm (27.6") Height: 600mm Column (1948 mm/76.7")	MEASURING OPTIONS 1000mm Length 1000mm Diameter CONTROL SYSTEM G3 or P7 user interface Autofocus CNC Spindle Manual and automated RFID systems
LED ring-light for tool inspection Robust easy to use control interface Pearlitic cast iron construction with our proprietary SYMMETRY design		600mm Column (1948 mm/76.7") 1000 mm Column (2342mm/93.2") Average Shipping Weight: 1020 kg (2240 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	Mazak Cyber Tool and Smooth Tool Management system integration Data output Perfect Set automated tool height syste Holding recognition system AAIM- tool profile software Taper 60 spindle HSK 125a spindle ECHO User management
			EXACTUS XL-PRO System is full 3 axis CNC automation *Shown with optional casters





ORIGIN

Easy to use, cost effective, and shop floor ready, the Origin is the perfect entry level machine in the optical presetting industry.

FEATURES	SPECIFICATIONS	OPTIONS
Cast aluminum construction with proprietary SYMMETRY design	DIMENSIONS AND WEIGHT	ACCESSORIES
Precision ground taper 50 spindle	Overall Width: 610 mm (24")	Adapters for all tool holding styles Label printer
Integrated spindle brake and 360° indexing	Depth:	Sturdy Industrial Grade Maple Bench Monitor Arm
LED surface inspection	686 mm (27")	Monitor Ann
Intuitive icon based software	Height:	
21.5" LCD screen	965 mm (38")	
Maintenance free design	Average Shipping Weight:	
1-year parts and labor warranty	102 kg (225 lbs.)	
	UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz	
	Air: 80-110 PSI	







APEX

Reflection and dirt are the enemies of creating an accurate tool profile. Our Apex machine features a full environmental enclosure with and automated light diffuser to make sure your tools are kept safe from the perils of the shop floor. The Apex can profile all types of tools or grinding wheels for any industry using our AAIM software creating the perfect DXF for comparison or export. Whether it is basic presetting or profiling wheels or form tools the Apex is a world class machine.

FEATURES		SPECIFICATIONS	OPTIONS
Fully integrated environmental enclosure with auto-retracting light diffuser AAIM profiling software User management ECHO learning function Instantly finds tool geometries Theoretical intersection points Fixed or Dynamic crosshairs 21.5" LCD touchscreen control 21.5" tool window monitor 600+ lb/ft universal power clamping spindle with interchangeable cartridge system to work with any tool holding type	Pearlitic cast iron construction with our proprietary SYMMETRY design Integrated spindle brake and 360° indexing Simple to use 3D VCD with programmable smart buttons 1µ repeatable measuring Shop floor ready, full size freestanding machine Laser Location finder LED ring-light for tool inspection Robust easy to use control interface	DIMENSIONS AND WEIGHT Length: 939.8 mm (37") Width: 1168.4 mm (46") Height: 1828.8 mm (72") Weight: 475 kg (1046 lbs) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	CONTROL SYSTEM Virtual control device Automated RFID Data output Perfect Set automated tool height system Mazak Cyber Tool and Smoot Tool Management system integration





VERI-GRIND

The Veri-Grind is the benchmark for grinding wheel form and offset verification in both the metal cutting and stone grinding industries.

FEATURES		SPECIFICATIONS	OPTIONS
Instantly finds tool and wheel geometries Theoretical intersection points Fixed or Dynamic cross-hairs 21.5" LCD touchscreen control Label printer Precision ground taper 50 spindle Adapters available for all tool holding types 1 micron concentricity Vacuum clamping	Pearlitic cast iron construction with our proprietary SYMMETRY design Shop floor ready full size freestanding machine Laser Location finder LED ring-light for tool inspection Robust easy to use control interface AAIM profiling software with tolerance banding	MEASURING DIAMETERS 420 mm (16.5") DIMENSIONS AND WEIGHT Overall Width: 1575 mm (62") Depth: 813 mm (32") Height: 400 mm Column (1730 mm / 68") 600 mm Column (1930 mm / 76") 800 mm Column (2130 mm / 84") Average Shipping Weight: 522 kg (1150 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	CONTROL SYSTEM Automated or manual RFID Data output Document manager User management ECHO Mazak Cyber Tool and Smoot Tool Management system integration





VERI-GRIND LITE

Veri-Grind Lite is the cost effective bench-top solution for grinding wheel verification.

FEATURES		SPECIFICATIONS	OPTIONS
Precision ground taper 50 spindle Adapters available for all tool holding types Template tracking to verify wheel forms 1 micron concentricity Vacuum clamping Shop floor ready Laser Location finder LED ring-light for tool inspection Pearlitic cast iron construction with our proprietary SYMMETRY design	Robust easy to use control interface Instantly finds tool geometries Theoretical intersection points Fixed or Dynamic cross-hairs 21.5" LCD touchscreen control Label printer	DIMENSIONS AND WEIGHT Overall Width: 748 mm (30") Depth: 527mm (21") Height: 400 mm Column (890mm/ 35") 600mm Column (1115mm/44") 800mm Column (1315mm/42") Average Shipping Weight: 272 kg (600 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	MEASURING OPTIONS 400mm (15.75") 600mm (23.6") 800mm (31.5") CONTROL SYSTEMS G3 or P7 user interface Manual and automated RFID systems Mazak Cyber Tool and Smoot Tool Management system integration Data output Single or dual 21.5" monitors





MICRO

Developed specifically for micro tools with micro features. With an industry leading 300x lens the micro can measure even the most microscopic features repeatedly and accurately.

FEATURES		SPECIFICATIONS	OPTIONS
300x magnification bi-telecentric lensing 600+ lb/ft universal power clamping spindle with interchangeable cartridge system to work with any tool holding type Integrated spindle brake and 360° indexing 1µ repeatable measuring Shop floor ready, full size freestanding machine Laser Location finder LED ring-light for tool inspection	Robust easy to use control interface Instantly finds tool geometries Pearlitic cast iron construction with our proprietary SYMMETRY design Theoretical intersection points Fixed or Dynamic cross-hairs 21.5" tool window monitor	MEASURING DIAMETERS 420 mm (16.5") DIMENSIONS AND WEIGHT Overall Width: 1575 mm (62") Depth: 813 mm (32") Height: 400 mm Column (1730 mm / 68") Average Shipping Weight: 522 kg (1150 lbs.) UTILITIES 120V AC or 220V AC, 50 Hz to 63 Hz Air: 80-110 PSI	CONTROL SYSTEMS G3 or P7 user interface Autofocus CNC Spindle Manual and automated RFID systems Mazak Cyber Tool and Smooth Tool Management system integration Data output Perfect Set automated tool height system Holding recognition system AAIM- tool profile software Virtual control device ECHO User management





SHRINKSET

Shrink and cool your tools automatically with the press of a button.

PRODUCT SPECIFICATIONS

FEATURES	SHRINKSET LITE	SHRINKSET	SHRINKSET PRO
480v power supply	MACHINE TYPE	MACHINE TYPE	MACHINE TYPE
Oscillating air cooling (Shrinkset and Shrinkset Lite)	Compact Tabletop	Full-size Tabletop	Freestanding Machine
	HEATING TIME	HEATING TIME	HEATING TIME
Lightning fast quench cooling (Shrinkset Pro)	>15 seconds	>10 seconds	>10 seconds
Easy to use full color LCD touch-screen	COOLING TIME	COOLING TIME	COOLING TIME
display	2 minutes	2 minutes	30 seconds
Adapters and stop discs for multiple tool types are included	COOLING TYPE	COOLING TYPE	COOLING TYPE
Automated Cooling Cycle	Oscillating Air	Oscillating Air	Auto Quench
Automated Heat Cycle	TOOL SIZE	TOOL SIZE	TOOL SIZE
Manufactured, assembled, and supported in the U.S.A.	Maximum Length: 11"/21" with ext.	Maximum Length: 22"	Maximum Length: 22"
	Maximum Diameter:	Maximum Diameter:	Maximum Diameter:
	1/8"-1 ¼" (3-32mm)	1/8"-1 ¼" (3-32mm)	1/8"-1 ¼" (3-32mm)
	ADAPTERS INCLUDED	ADAPTERS INCLUDED	ADAPTERS INCLUDED
	HSK100/63/50/40	HSK100/63/50/40	HSK100/63/50/40
	CAT50/40/30	CAT50/40/30	CAT50/40/30
	Capto C6	Capto C6	Capto C6



ACCESSORIES

TAPER 50 ADAPTERS

Adapt your taper 50 machine to work with any type of tool holder.

- All taper types
- ABS
- Big Plus
- Clamping HSK
- Clamping Capto
- Clamping KM
- VDI



CERTIFIED TEST BARS

50 taper: 50mm Dia. X 150mm projection

50 taper: 50mm Dia. X 300mm projection

50 taper: 50mm Dia. X 450mm projection

ZERO GAUGES

50 taper: 50mm Dia. X 75mm projection



CLAMPING CARTRIDGES

All cartridges are universal clamping giving you 600+ ft/lbs of pull force on every tool.

- All taper types
- ABS
- Big Plus
- Clamping HSK
- Clamping Capto
- Clamping KM
- VDI



CONTACT

Omega TMM is a customer centric company and service is the cornerstone upon which we are built. With certified factory trained technicians throughout the world we are always ready to serve you!

SERVICE AND TECHNICAL SUPPORT CONTACT INFORMATION:

Toll-Free: (844) 396-5537

Email: service@omegatmm.com

SALES CONTACT INFORMATION:

Toll-Free: (844) 396-5537

Email: sales@omegatmm.com

OMEGA SWAG!

Send us a video or picture* using your Omega TMM machine and we will send you a care package of Omega swag!

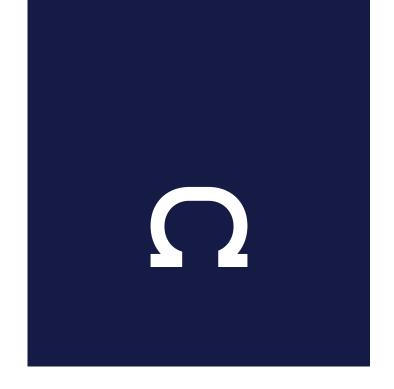
*These pictures and videos may be used for marketing purposes





STANDARD

● OPTIONAL NOT AVAILABLE	SOLIS	FORTIS	FORTIS XL	EXACTUS LITE	EXACTUS	EXACTUS XL	ORIGIN	APEX	VERI-GRIND	VERI-GRIND LITE	MICRO	
TAPER 50 SPINDLE	Ø	Ø	Ø	•	•	•	•	•	•	•	•	
UNIVERSAL POWER CLAMPING SPINDLE	•	•	•	Ø	Ø	Ø	Ø	•	•	Ø	•	
AUTO FOCUS	Ø	•	•	\varnothing	•	•	\varnothing	\varnothing	\varnothing	\varnothing	\varnothing	
3 AXIS CNC	•	•	•	Ø	•	•	Ø	•	•	\varnothing	•	
VIRTUAL CONTROL DEVICE	•	•	•	Ø	•	•	Ø	•	•	Ø	•	
PERFECT SET HEIGHT ADJUSTMENT	•	•	•	Ø	•	•	Ø	•	•	Ø	•	
RFID TOOL IDENTIFICATION	•	•	•	•	•	•	\varnothing	•	•	•	•	
DATA OUTPUT/POST PROCESSING	•	•	•	•	•	•	Ø	•	•	•	•	
AAIM PROFILING SOFTWARE	•	•	•	Ø	•	•	Ø	•	•	Ø	•	
MOBILE COMMAND CENTER	•	•	•	•	•	•	Ø	•	•	•	•	



TOOLING & MACHINERY

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