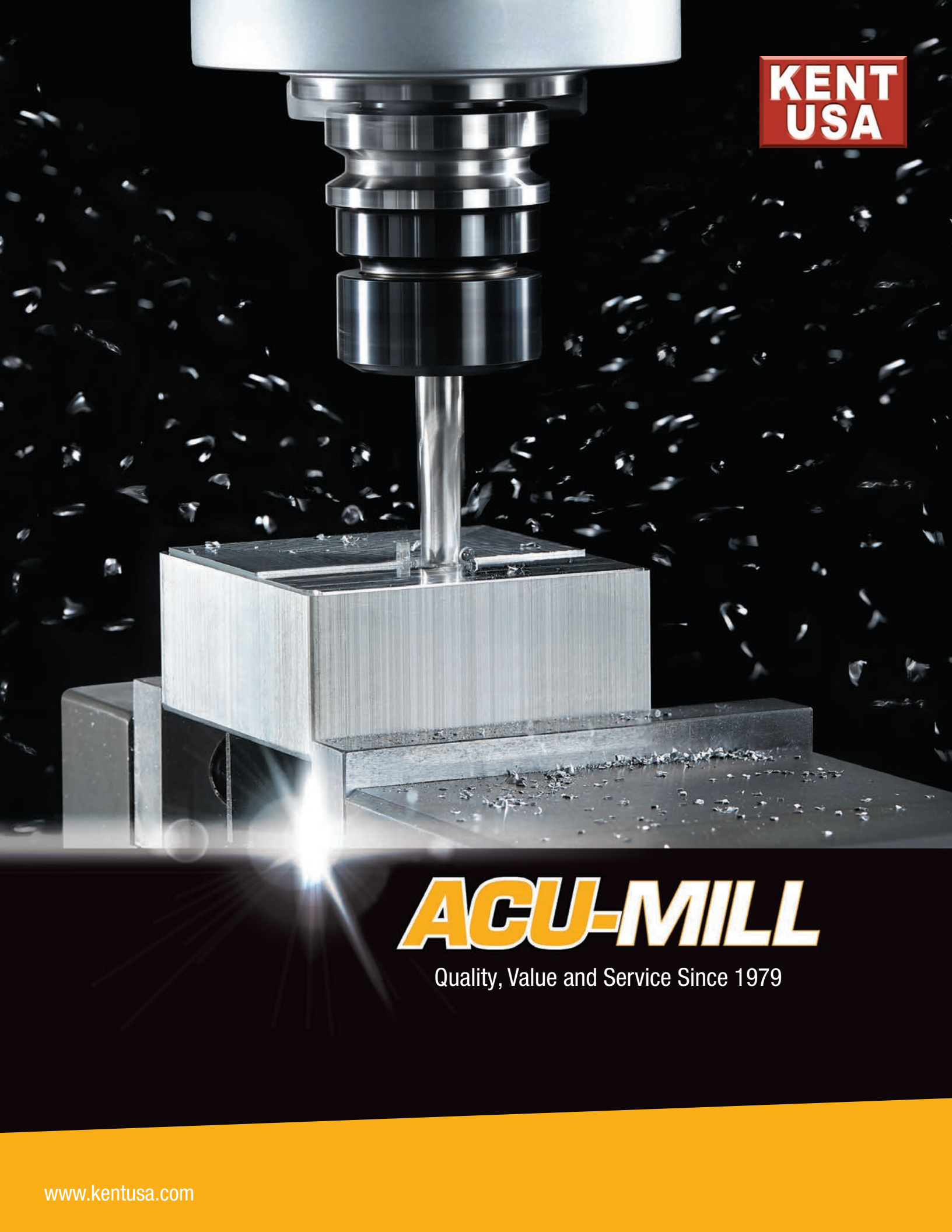




**KENT
USA**

ACU-MILL

Quality, Value and Service Since 1979



Kent Industrial USA, Inc. sets the standard in providing conventional and CNC machine tool equipment, serving the machine tool industry since 1979. With a commitment to excellence, we are dedicated to serving our customers in the metalworking, manufacturing, aerospace, medical, automotive, semiconductor, oil and gas, energy, telecommunications industries and job shops.

Our mission at Kent USA is to provide market-competitive products and solutions to our customers while maintaining industry-benchmarked quality, cost, and delivery metrics. Our goal, always, is to provide the highest level of service and support for our worldwide customer base.

We focus on helping our clients get their job done efficiently and productively by partnering with the best people and companies in the industry, working together with a common purpose and vision for excellence. We are successful when we help make our clients successful.



**KENT
USA**

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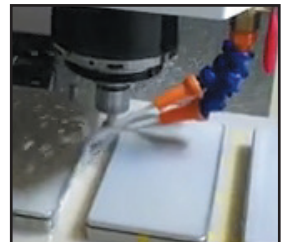
AM1 ACU-MILL GLASS ENGRAVING MACHINE



- Perfect for streamlined machining of small intricate-shaped parts and jobs requiring high-accuracy and efficiency.
- Compact-construction with a small footprint.
- Highly rigid machine structure with a massive cast iron machine stand.
- 30,000 RPM spindle ensures low heat build-up and maximum stability.
- Choice of ER16, ER20 and ISO spindle tapers.
- Servo motor drive on X, Y and Z-axes.
- Linear guide ways on X, Y and Z-axes, featuring reduced stick-slip and improved positioning accuracy.
- Rapid traverse rates of 30 or 45m/min on X, Y and Z-axes.
- Choice of full-enclosure with sheet metal or aluminum frame.



▲ Oil Cooler



▲ Mobile phone glass grinding



▲ Machine frame available upon request



▲ Casting stand



◀ AM1+ATC

AM5 RAPID MACHINING FOR SMALL PARTS

Designed for Efficient
Drilling, Milling
and **Engraving**



▲ Machine frame available upon request



▲ **AM5+Sheet Metal enclosure**
(aluminum frame available)



Now, you can get the perfect CNC mill with outstanding features for precise and efficient milling year after year. Kent USA mills are quality-built with many outstanding features, such as Windows-based Conversational CNC control, 8,000 RPM spindle speed and linear ways on 3-axes that allow for high-speed machining.

Heavy-Duty Design for Linear Ways on Three Axes

- The bed and column are manufactured from high-quality Meehanite cast iron and is stress relieved for a lifetime of precision accuracy.
- Box-type column construction, combined with scientific rib reinforcement for outstanding rigidity which dampens vibration and reduces deflection and thermal displacement.
- Precision linear motion guides are used on X, Y, Z-axes, providing 10-15 M/min. of rapid traverse rates and 10 M/min. of cutting feed rates on X, Y, Z-axes.



▲ Bench Top



▲ AM5+Aluminum Frame



▲ Choice of casting stand



Automatic Tool Changer

(optional)

- The carousel-type magazine has a capacity for loading 8 tools.
- Tool shank is BT30 or BT40.
- Tool change in just 8 seconds (tool to tool).

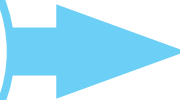
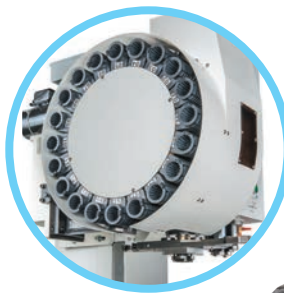
Applications

Perfect for high-speed mass production of PC boards, small workpieces, SOHO spare parts, molds development, educational, personal and casual use for spare sampling .

▲ AM5 ACU-MILLS are ideal for machining small precision parts and molds.

AM8 ACU-MILL

Engineered Specifically
for **Precision Parts** and
Molds Machining



▲ AM8+Drum-type ATC



▲ Machine frame available upon request

Features (above photo)

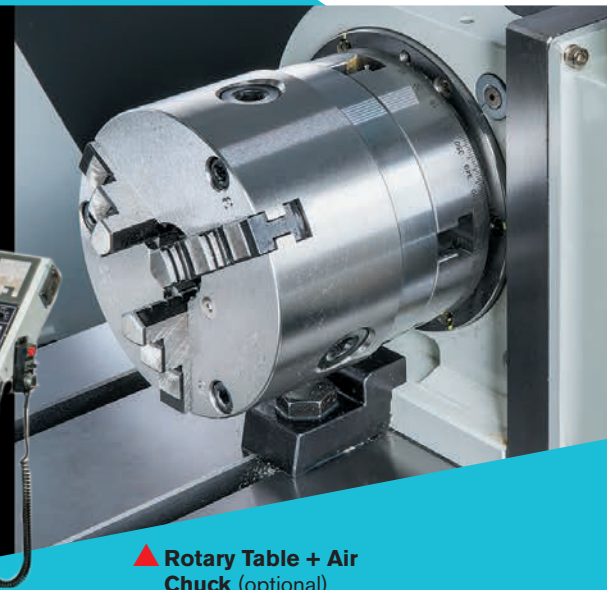
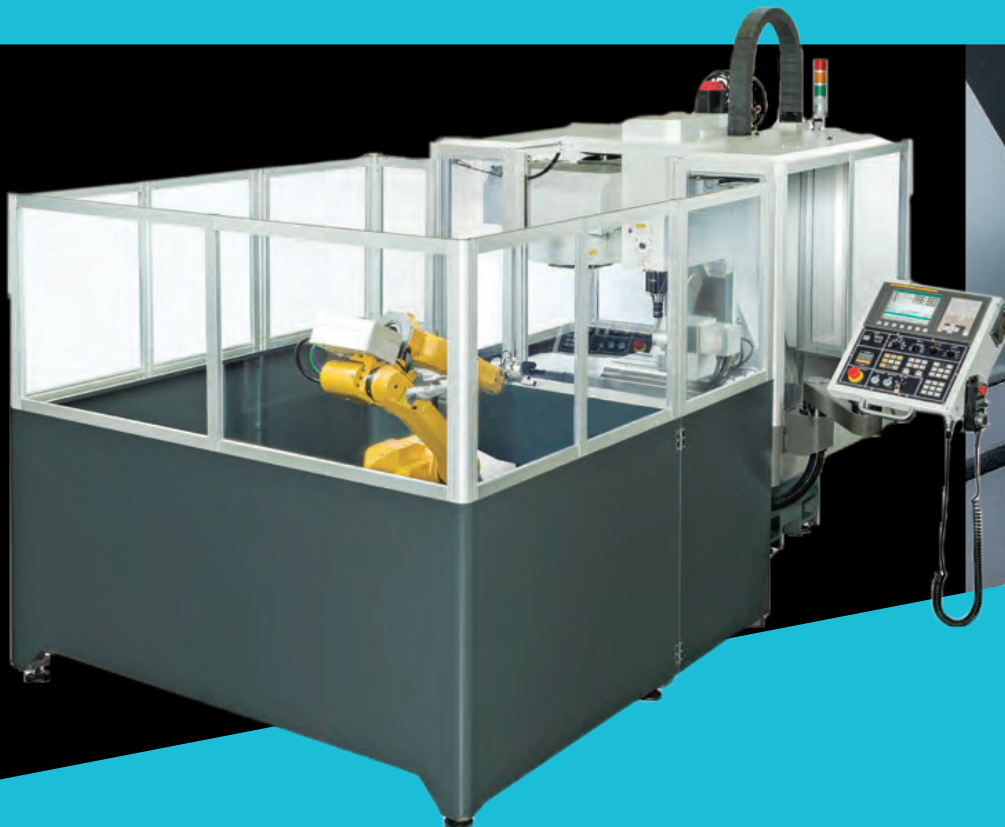
- Full-enclosure splash guard
- Automatic tool changer
- CE version
- Aluminum frame available

Kent USA AM8 ACU-MILLS are precision, compact machines that meet all requirements for drilling, milling and engraving small parts and molds. The AM8 has a high thermal and mechanical stability to ensure a lifetime of accuracy and productivity. It is equipped with an 8-tool carousel ATC for quick tool changes. For increased productivity, accuracy and profitability, put Kent USA AM8 ACU-MILLS to work in your plant.

Heavy-Duty Design Ensures **Maximum Rigidity** and **Stability** of **Linear Ways** on **Three Axes**



- The bed and column are manufactured from high-quality Meehanite cast iron and stress relieved for a lifetime of precision accuracy.
- Box-type column construction, combined with scientific rib reinforcement, for outstanding rigidity and capability to dampen vibration and reduce deflection and thermal displacement.
- Precision linear motion guides are used on X, Y, Z-axes, providing 10-15 M/min. of rapid traverse rates and 10 M/min. of cutting feed rates on X, Y, Z-axes.

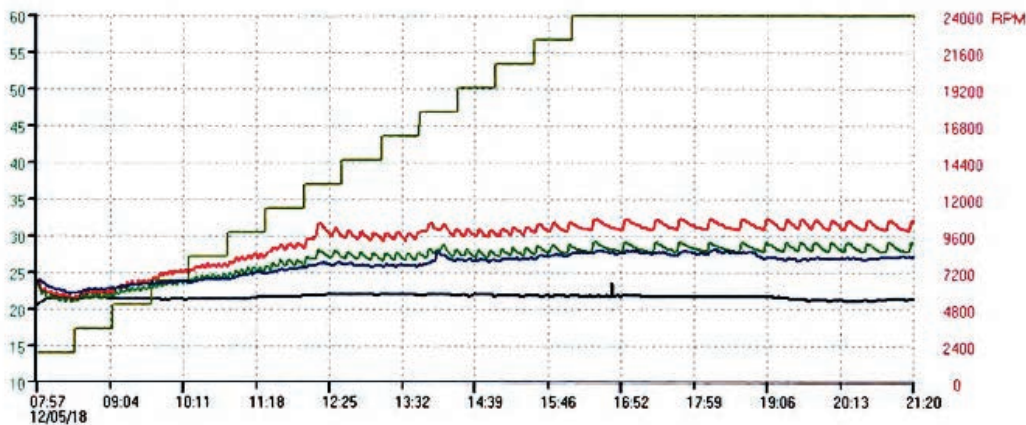


▲ **Rotary Table + Air Chuck** (optional)

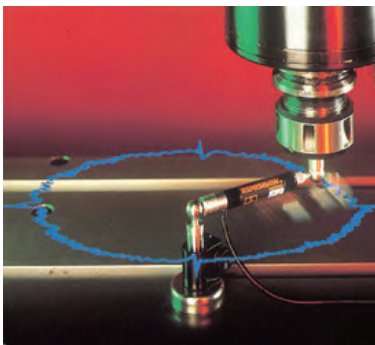
▲ This machine can be fitted with an optional 4th axis rotary table and robot arm for greater versatility in various milling jobs.

VERSATILE & POWERFUL SPINDLE

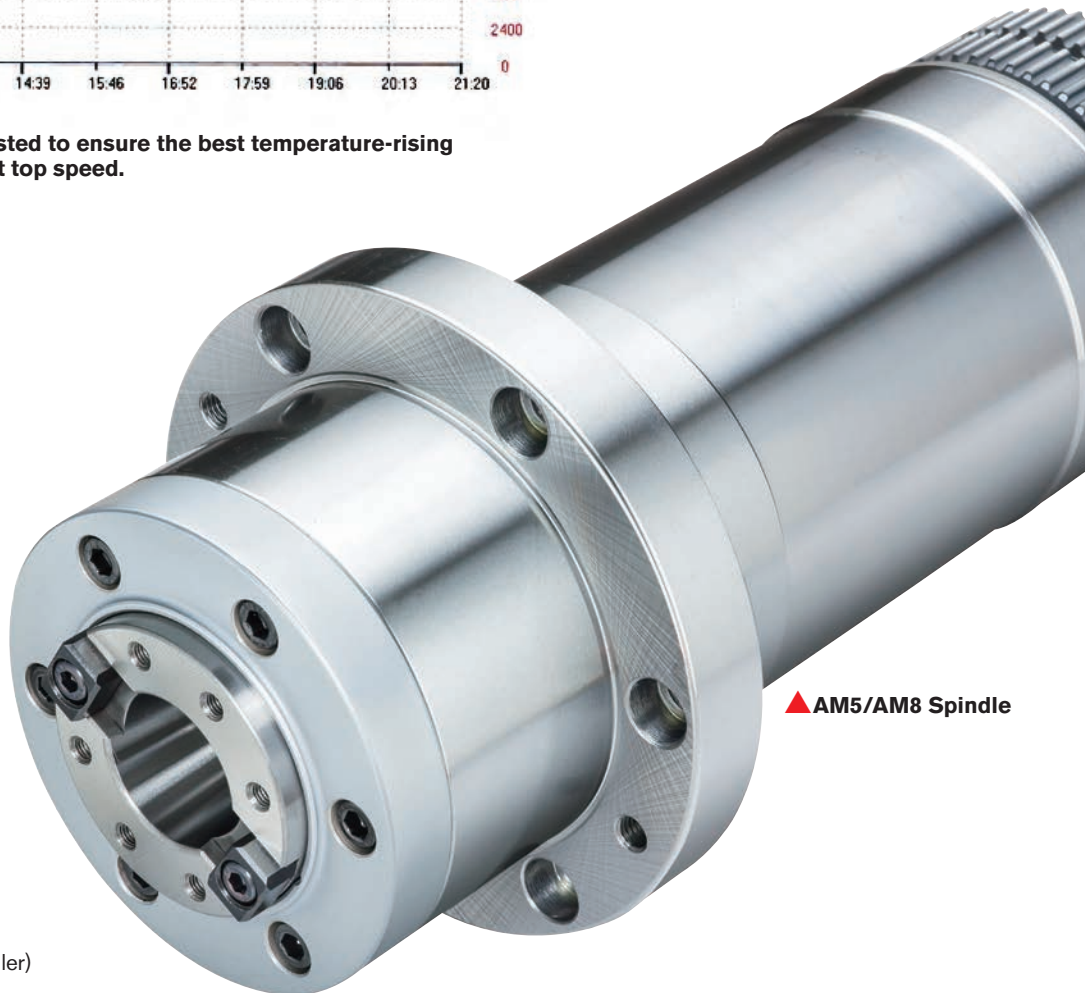
Kent USA **ACU-MILL** Series Machines Offer **High-Quality Spindles** that Provide Superb Cutting Performance



▲ Each spindle is thoroughly dry-run tested to ensure the best temperature-rising stability when running the machine at top speed.



▲ **Laser and Ball Bar Testing**
(Not available for ordering without Controller)



▲ **AM5/AM8 Spindle**



▲ Dynamic Balance Calibration
Kent USA utilizes a scope-type, dynamic balancing device to calibrate the balance of the spindle. This minimizes spindle vibration during high-speed running, resulting in high-accuracy machining.



▲ Dynamic Balance Analyzer
Kent USA uses a dynamic balance analyzer to test spindle vibration. The results are displayed by spectrum for accurate analysis.



▲ Noise Test
To ensure the machine runs at low-noise levels, each machine is subject to noise tests prior to shipping.



▲ Vibration Test
Each spindle is subject to a vibration test before it is assembled into the machine.

CHOICE OF CONTROLLERS

Compatible with All Major **CNC Controllers** and Shop Mill Assorted **CNC Controls**

Shop mill assorted CNC controls:

- Windows-based industrial Conversational CNC controls
- 15" color LCD monitor
- Automatic mill (round or rectangular pockets)
- Graphics 2D & 3D
- For FANUC, SIEMENS and SYNTEC control systems, we can provide a machine frame for self-wiring.



FANUC

**KENT
USA**



SIEMENS

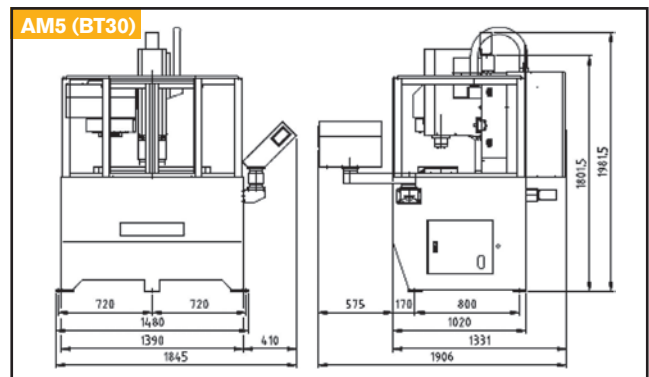
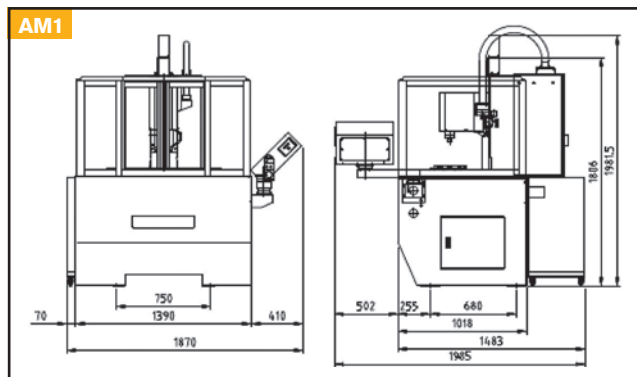


SYNTEC

SPECIFICATIONS

Item	Unit		AM1 Engraving Machine		AM5 (BT30)		AM5 (BT30) W/Casting Stand		AM5
Travels									
X/Y/Z Travels	mm / in		350/210/340	13.779"*8.268"*13.385"	350/210/340	13.779"*8.268"*13.385"	350/210/340	13.779"*8.268"*13.385"	350/240/400
Spindle nose to table	mm / in		50-390	1.968"-15.354"	50-390	1.968"-15.354"	50-390	1.968"-15.354"	75-475
Spindle center to z-axis cover distance	mm / in		260	10.236"	260	10.236"	260	10.236"	260
Feed rates									
Ballscrew size (Dia x pitch)	mm / in		15	0.59"	5	0.197"	5	0.197"	5
x/y/z rapid traverse	M/ min/ M/ft	Siemens	30 X 30 X 30	98.4'*98.4'*98.4'	10 X 10 X 10	32.8'*32.8'*32.8'	10 X 10 X 10	32.8'*32.8'*32.8'	10 X 10 X 10
		Fanuc	45 X 45 X 45	147.6"*147.6"*147.6'	15 X 15 X 15	49.2"*49.2"*49.2'	15 X 15 X 15	49.2"*49.2"*49.2'	15 X 15 X 15
Cutting feed rate	mm/min/in/min		1 – 10000	0.039" – 393.7"	1 – 10000	0.039" – 393.7"	1 – 10000	0.039" – 393.7"	1 – 10000
Spindle									
Spindle speed	RPM		30000	30000	8000/10000/12000/15000		8000/10000/12000/15000		8000/10000/
Spindle taper size			ER16/ISO20	ER16/ISO20	BT30	BT30	BT30	BT30	BT40
Drive system					Belt	Belt	Belt	Belt	Belt
Table									
Table size	mm / in		810 X 250	31.889"*9.843"	810 X 250	31.889"*9.843"	810 X 250	31.889"*9.843"	810 X 250
Max table capacity	Kgs/lbs		80	176	80	176	80	176	80
T-slot (pitch x width x No:)	mm / in		80 x16 x 3T	3.15"*0.63"*3T	80 x16 x 3T	3.15"*0.63"*3T	80 x16 x 3T	3.15"*0.63"*3T	80 x16 x 3T
Automatic tool change system									
Capacity	Pcs		Single or 8T	Single or 8T	Armless type 8T	Armless type 8T	Armless type 8T	Armless type 8T	Armless type 8T
Max.tool diemeter	mm / in		10	0.393"	80	3.15"	80	3.15"	125
Max.tool length	mm / in				200	7.874"	200	7.874"	260
Max.tool weight	Kgs / lbs				3	6.6	3	6.6	7
Motor									
Spindle motor	Kw / Hp		2.2	2.93	1.5	2	1.5	2	2.2
X/Y/Z Axis motor	Kw / Hp		0.75X0.75X0.75	1*1*1	0.75X0.75X.75	1*1*1	0.75X0.75X0.75	1*1*1	0.75X0.75X0.75
Coolant pump	Kw / Hp		0.09	1/8	0.09	1/8	0.09	1/8	0.09
Other									
Coolant water	L/G		32	8	32	8	32	8	32
Air supply	Kg/cm²/lb/in²		5.5	78.21	5.5	78.21	5.5	78.21	5.5
Power requirement	KVA		8	8	12	12	12	12	12
Machine dimension									
Machine dimension (LXWXH)	mm / in		1985 x 1870 x 1982	78.15"*73.622"*78.031"	1906*1845* 2042	75.039"*72.637"*80.393"	1906 x 1845 x 1982	75.039"*72.637"*78.031"	1960 x 1845 x 2300
Machine weight	Kg / lbs		1335	2937	1060	2332	1400	3080	1150

DIMENSIONS



(BT40)	AM5 (BT40) W/Casting Stand		AM8 (BT40)			
13.779"×9.449"×15.748"	350/240/400	13.779"×9.449"×15.748"	400/300/500	15.748"×11.811"×19.685"	400/300/500	15.748"×11.811"×19.685"
2.953"×18.7"	75-475	2.953"×18.7"	80-580	3.15"×22.835"	80-580	3.15"×22.835"
10.236"	260	10.236"	330	12.992"	330	12.992"
0.197"	5	0.197"	5	0.197"	5	0.197"
32.8"×32.8"×32.8'	10 X 10 X 10	32.8"×32.8"×32.8'	10 X 10 X 10	32.8"×32.8"×32.8'	10 X 10 X 10	32.8"×32.8"×32.8'
49.2"×49.2"×49.2'	15 X 15 X 15	49.2"×49.2"×49.2'	15 X 15 X 15	49.2"×49.2"×49.2'	15 X 15 X 15	49.2"×49.2"×49.2'
0.039" – 393.7"	1 – 10000	0.039" – 393.7"	1 – 10000	0.039" – 393.7"	1 – 10000	0.039" – 393.7"
12000/15000	8000/10000/12000/15000		8000/10000/12000/15000			
BT40	BT40	BT40	BT40	BT40	BT40	BT40
Belt	Belt	Belt	Belt Belt	Belt	Belt	Belt
31.889"×9.843"	810 X 250	31.889"×9.843"	300 X 600 (11.811"×23.622") / Option 300 X 920 (11.811"×36.22")			
176	80	176	150	330	150	330
3.15"×0.63"×3T	80 x16 x 3T	3.15"×0.63"×3T	95 x16 x 3T	3.74"×0.63"×3T	95 x16 x 3T	3.74"×0.63"×3T
Armless type 8T	Armless type 8T	Armless type 8T	Armless type 8T	Armless type 8T	Armless type 8T	Drum Type 20T
4.921"	125	4.921"	130	5.118"	130	5.118"
10.236"	260	10.236"			150	5.9"
15.4	7	15.4	8	17.6	8	17.6
3	2.2	3	3.7	5	3.7	5
1"×1"	0.75X0.75X0.75	1"×1"	0.75 X 0.75 X 1.8 / 1"×2.4 (For Fanuc)			
1/8	0.09	1/8	0.09	1/8	0.09	1/8
8	32	8	80	20	80	20
78.21	5.5	78.21	5.5	78.21	5.5	78.21
12	12	12	15	15	15	15
77.165"×72.637"×90.551"	1960 x 1845 x 2300	77.165"×72.637"×90.551"	2361 x 2068 x 2300	92.952"×81.417"×90.551"	2361 x 2068 x 2300	92.952"×81.417"×90.551"
2530	1490	3278	1840	4048	2040	4488

AM1

Standard Equipment

- Linear guide ways, ball screws
- Servo motors (X, Y, Z)
- Spindle motor
- Auto lubricator
- ER16 spindle
- 220V, 3 phase
- With enclosure (Sheet metal / Aluminum frame)
- Coolant system (8G)
- Limit switch for 3-axes
- MPG
- Controller (Fanuc / Siemens / Syntec)
- Oil cooler

Optional Equipment

- CE version
- Manual air gun
- LED work light
- Oil skimmer (For 8G / 15G only)
- Coolant system (15G)
- ATC (Auto Tool Changer)
- ER20, ISO20

AM5/AM8

Standard Equipment

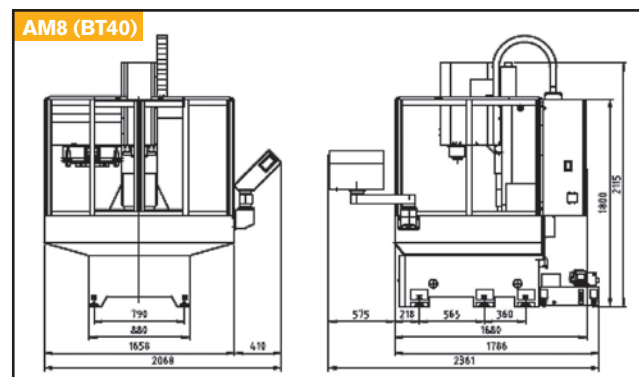
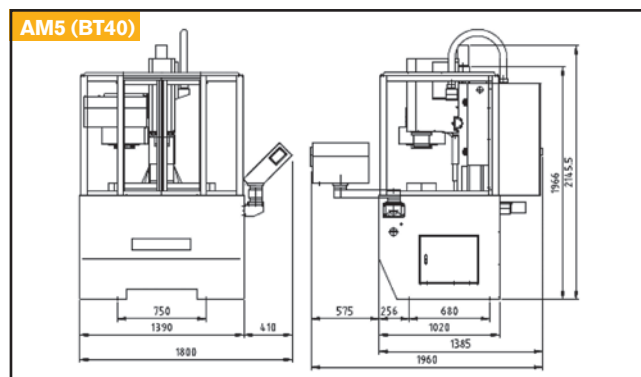
- Machine bench top, tray and stand
- PMI linear guide way, ball screws
- AC servo motors (X, Y, Z Spindle)
- BT-30 / BT-40 taper
- 220V, 3 phase
- S5/S8 – 8000 RPM
- Coolant system (8G)
- Rigid tapping (Alu. M3–M8 / Steel M4–M8)
- Alarm lamp
- Chip bucket

Options

- Armless tool magazine (8 Tools)
- Auto oiler
- Limit switch for 3-axes
- CE version
- Full-enclosure
- LED work light
- Manual air gun
- Coolant system (15G)
- Oil Skimmer (For 8G/15G only)
- NR12 door interlock (For Brazil only)
- 4th Axis rotary table/Air Chuck (Not for 808D)
- Screw-type or link-type chip conveyor
- Transformer
- Door lock
- 10000/12000/15000 RPM spindle (belt type)
- Robot arm
- Drum type ATC (20 Tools)
- 900 x 300 mm table

* Machine Frame is Available By Request.

Specifications subject to change without notice.





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