

Cut a new, full-depth, 6 inch (152.4 mm) keyway in less than 4 minutes



The CLIMAX KM3000 Portable Key Mill is a simple, rugged, dependable machine tool designed to cut keyways in shafts without extensive dismantling. The automatically centering V-base is quick and easy to set up. Clamps onto any shaft from 1.5 - 4.5 inches (38.1 - 114.3 mm) in diameter with the standard bar clamp. It cuts stub-end and mid-shaft keyways. Or clamp the machine to a flat surface, and you can cut motor mount slots. With the optional shim kit, you can cut keyways or slots in shafts as small as 0.75 inches (19.1 mm) in diameter.

COMPACT & POWERFUL

Self-centering and self-aligning V-base ensures your keyway is perfectly centered on the shaft. Self-centering and self-aligning V-base.

Only 1.5 inches (38.1 mm) of the shaft is required for mounting the KM3000, allowing you to cut a keyway the full length of the machine's travel.

Optional chain clamp assembly allows the Key Mill to clamp onto shafts up to 10.5 inches (266.7 mm) in diameter.

Slotted V-base allows you to cut right to the end of the shaft.

EFFICIENT OPERATIONS WITH HIGH-QUALITY COMPONENTS

Versatile hand crank (t-handle) can be used for vertical and horizontal travel.

Dovetail ways for accurate cutting action.

Standard weldon-type spindle accepts 5/8 inch end mills or 16 mm shank end mills on metric machines.

Precision Acme thread leadscrew with roller thrust bearings for low friction advancement.

Zeroing-type vertical adjustment dial calibrated to control cutter depth in increments of 0.001 inch (0.1 mm).

Sealed aluminum alloy gearbox allows operation at any angle.

Precision ground quill housing ensures smooth operation.

Motor has soft start function and maintains speed as load increases.

SAFETY

CE and CSA certified and available worldwide! All KM3000 Key Mills are available for sale worldwide, including in the European Union and other locations where CE or CSA certification is required.



SPECIFICATIONS

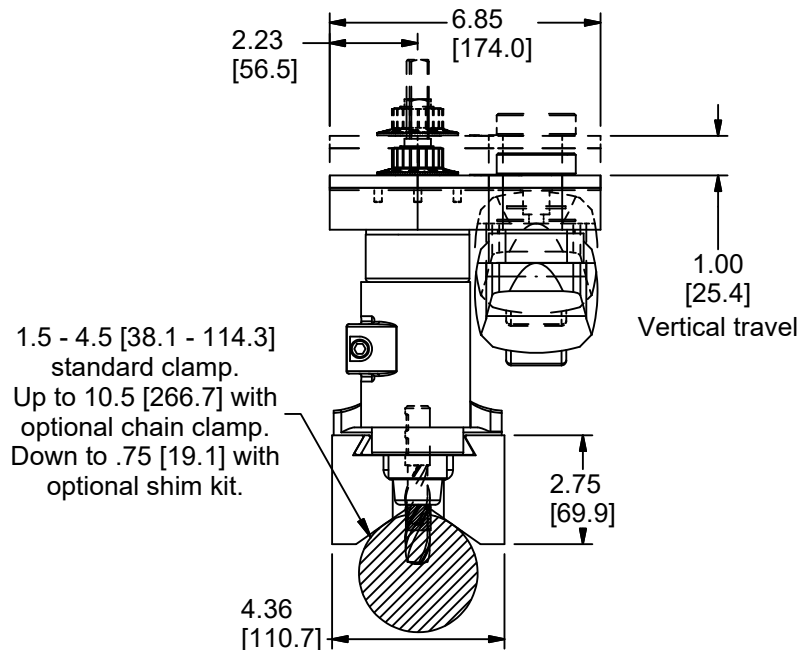
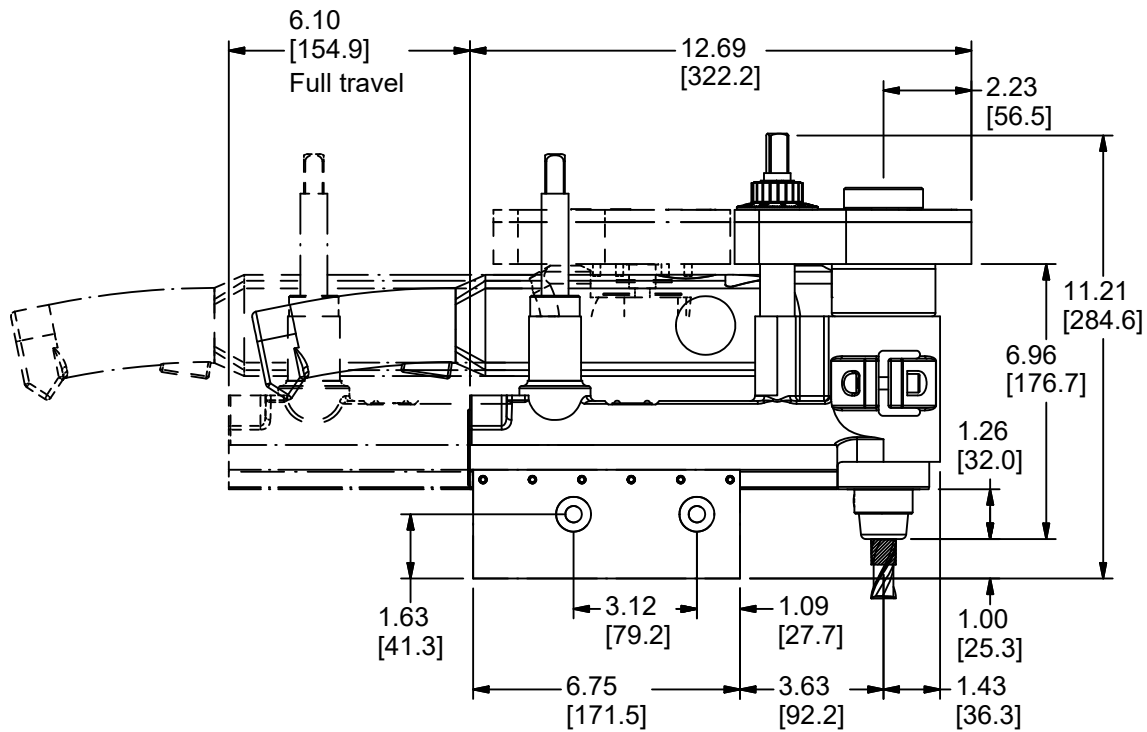
	Inch	Metric
Machine Performance Ranges		
Stroke (slide travel) max.	6 in.	152.4 mm
Vertical travel max.	1.75 in.	44.5 mm
No load variable spindle speed minimum maximum		180 rpm 530 rpm
Spindle hole diameter	0.625 in.	16 mm
Maximum end mill diameter	1.25 in.	31.75 mm
Maximum shaft diameter: standard bar clamp with optional chain clamp	4.5 in. 10.5 in.	114.3 mm 266.7 mm
Minimum shaft diameter: standard bar clamp with optional shim kit	1.5 in. 0.75 in.	38.1 mm 19.1 mm
Minimum clamping space required on stub shaft	1.5 in.	38.1 mm
Power Options		
Electric	120V or 230V, 50-60Hz	
Pneumatic (upon request)	1.5 HP	1.12 kW
Hydraulic (upon request)	0.79 in. ³ - 4.0 HP	12.9 cm ³ - 3.0 kW
	1.93 in. ³ - 3.3 HP	31.6 cm ³ - 2.5 kW
Measurements		
Overall length	12.9 in. to slide	327.7 mm to slide
	19 in. to cord	482.6 mm to cord
Overall width	6.85 in.	174 mm
Overall height	11.2 in.	284.5 mm
Base size	4.38 x 6.75 in.	113.3 x 175.1 mm
Operating weight	53 lbs	24 kg
Shipping weight	96 lbs	43.5 kg
Shipping dimensions	13 x 14 x 20 in.	330 x 360 x 508 mm
Machining Ability Example		
Material	C1018 steel	
Metal removal rate for hydraulic power	1 in. ³ /minute	16.4 cm ³ /min
Metal removal rate for electrical power	0.4 in. ³ /minute	6.5 cm ³ /min
Keyway dimensions	1 x 0.5 x 6 in.	25.4 x 12.7 x 152.4 mm
Cutting Time	3 minutes and 10 seconds *	

*Actual cutting time for a keyway 1 x 0.5 x 6 inches (25.4 x 12.7 x 152.4 mm) was 3 minutes 10 seconds. Achieved this time with C1018 steel and a sharp-end mill.

All dimensions should be considered reference. Contact your CLIMAX Representative for precision dimensions. Specifications are subject to change without notice. There are no systems or components on this machine that are capable of producing hazardous EMC, UV or other radiation hazards. The machine does not use lasers nor does it create hazardous materials such as gasses or dust.

OPERATIONAL DIMENSIONS

Dimensions in inch (mm)



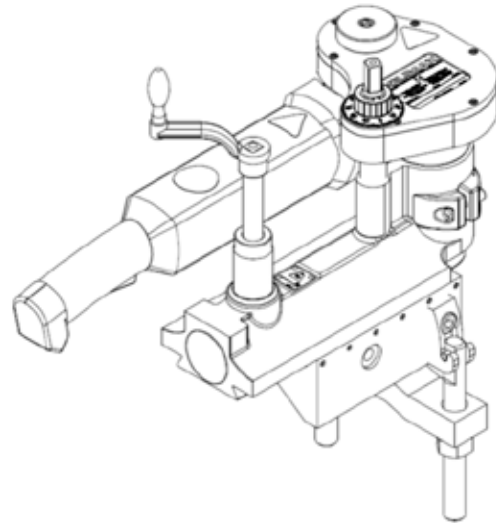
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TOOL CONFIGURATIONS

To order your KM3000 Key Mill, simply select your Key Mill and contact your CLIMAX sales representative.

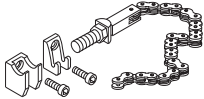
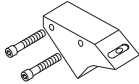
The KM3000 Key Mills come standard with a 1.0 Hp (0.75 kW) electric motor with speed controller, tool kit, bar clamp, operator manual, and wood crate.

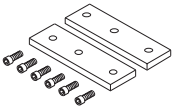
Order collets and end mills separately.

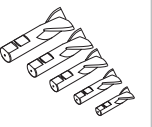


Part No.	Inch/Metric	Motor	Speed Control
103698	Inch	120 V	CSA Certified
103699	Metric	120 V	CSA Certified
103700	Inch	230 V	CE Certified
103701	Metric	230 V	CE Certified

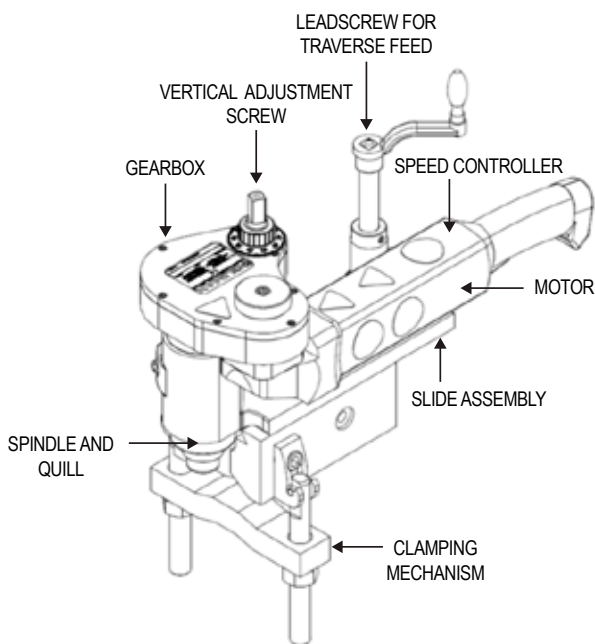
ACCESSORIES

 <p>Chain clamp assembly - Chain, clamping blocks and bolts for attaching key mill to shafts up to 10.5 inch (266.7 mm) diameters. Net weight 7 lb (3.2 kg)</p>	27364
 <p>Cross milling adapter - Allows key mill to be clamped 90 degrees to shaft axis. Net weight 7.18 lb (3.5 kg)</p>	10381

 <p>Shim kit - Shims fit inside V- base to enable key mill to be mounted to shafts with diameters as small as 0.7 inch (19.1 mm). Net weight 3.4 lb (1.6 kg).</p>	11669
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<p>End Mill Sets - SAE and metric 2-flute end mills are available. Short flutes for maximum rigidity. See separate end mill price list for availability.</p>	
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<p>End mill set, inch - Seven end mills from 1/4 - 1 inch in 1/8 inch increments, plus collet.</p>	10385
<p>End mill set, inch - Eight end mills from 3/16 - 1 inch in 1/16 inch increments, and seven end mills from 1/4 - 1 inch in 1/8 inch increment, plus 3/8 inch ID collet for end mills 7/16 inch and smaller.</p>	10386
<p>End mill set, metric - Five end mills: 8 mm, 10 mm, 12 mm, 16 mm, and 18 mm, plus two collets, one with 16 mm OD with 10 mm ID, the other with 16 mm OD and 12 mm ID.</p>	10387
<p>End mill set, metric - Eight end mills: 5 mm, 6 mm, 8 mm, 10 mm, 12 mm, 14 mm, 16 mm, 18 mm, plus three collets.</p>	22387



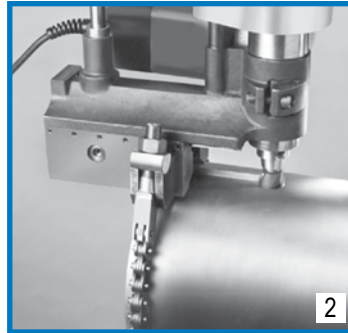
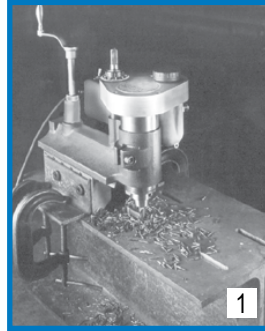
NOTE: Drawings are for reference only, are not to scale, and may not represent actual product.

APPLICATION PHOTOS

As versatile as your imagination

Here are some examples:

1. Attach angles to the sides of the base, and clamp the KM3000 down to cut motor mount slots or bore holes.
2. Clamp on shafts up to 10.5 inches (266 mm) dia. with optional chain clamp.
3. Mounted in a vice, the KM3000 can cut keyways in small shafts and mill other small parts such as gear pullers.
4. Special fixtures allow the KM3000 to cut ID keyways and slots in large tubing, etc.
5. Use the KM3000 in tight places, like the shaft on a paving machine.
6. Cut flats on drill pipe section with the optional cross milling adapter and stamp ID marks if you wish.
7. Mounted vertically on a stationary milling machine, the KM3000 can cut a mounting pad for a readout instrument.

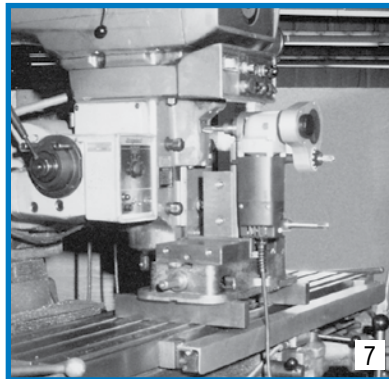
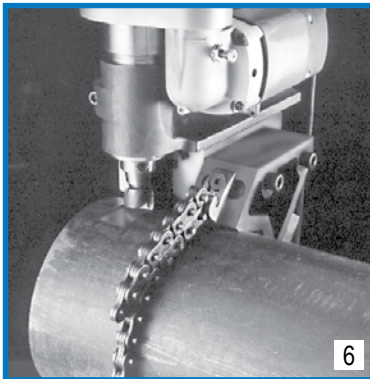
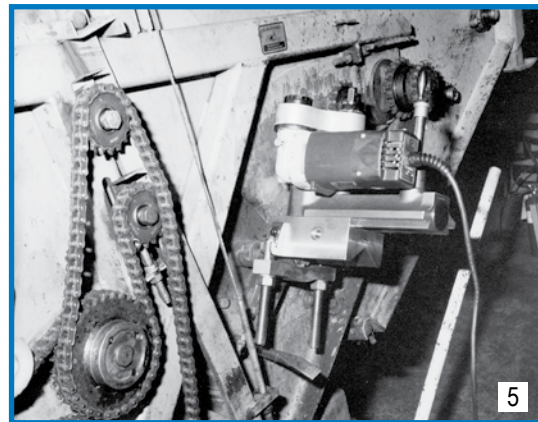
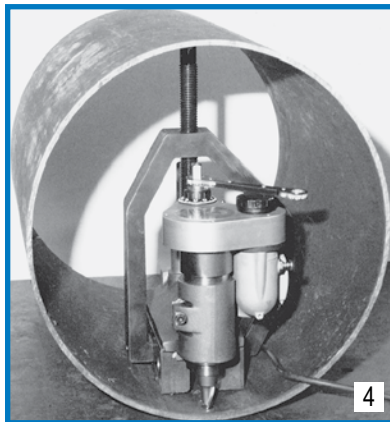
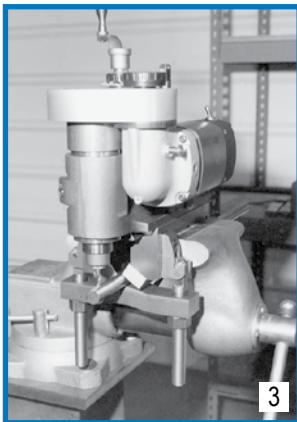


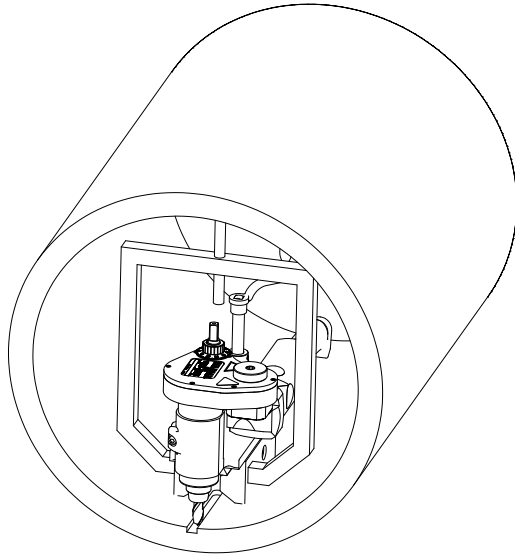
The KM3000 is widely used by these industries:

- Construction
- Mining
- Power Generation
- Ship building
- Pulp and paper
- Steel and aluminum

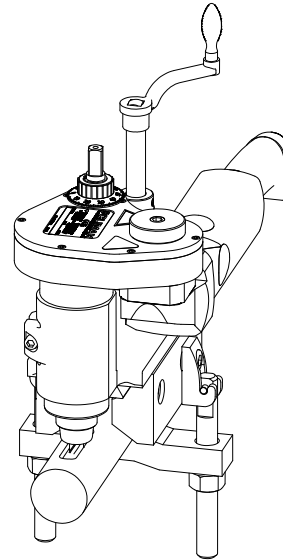
Typical applications:

- Key slots on crank shafts
- Keyways on tapered shafts
- Keyways on pump shafts
- Motor and pump repair
- Mill radius slots in turbine shafts
- Cutting new keyways on paper rolls
- Chipper and conveyor repair
- Keyways on motors

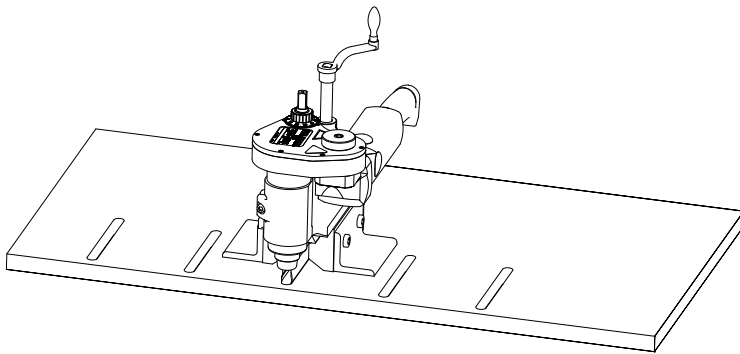




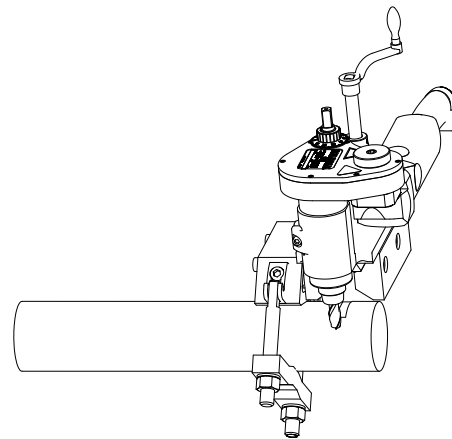
ID Keyway Cutting



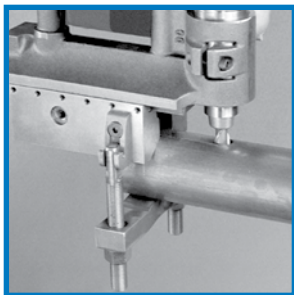
OD Keyway Cutting



Slotting

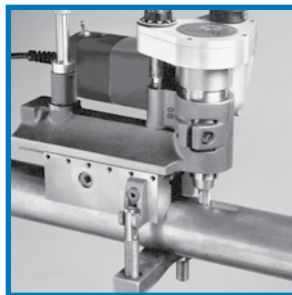


Cross Milling



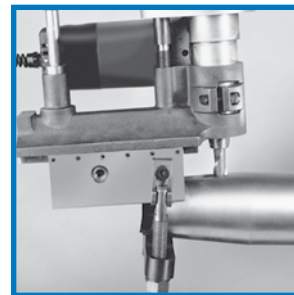
Mount on end

Only 1.5 inches (38.1 mm) of shaft required for mounting the KM3000.



Mount in the middle

The machine can be leveled for cutting long keyways.



Tapered shafts

Mounting on tapered shafts require shimming.

OEM PROFESSIONAL OPERATIONAL TRAINING



Backed by Over 50 Years of Experience

CLIMAX pioneered the concept of portable machine tools in 1964. Since that time, CLIMAX has grown to become the world's largest provider of innovative on-site machining solutions.

Professional, Experienced Instructors

All training programs are taught by experienced OEM CLIMAX trainers. Your instructor will provide valuable information on operator safety, tool set-up, mounting, and operation that will help you complete your on-site machining tasks quickly and to the highest quality standards.



Typical Courses Include:

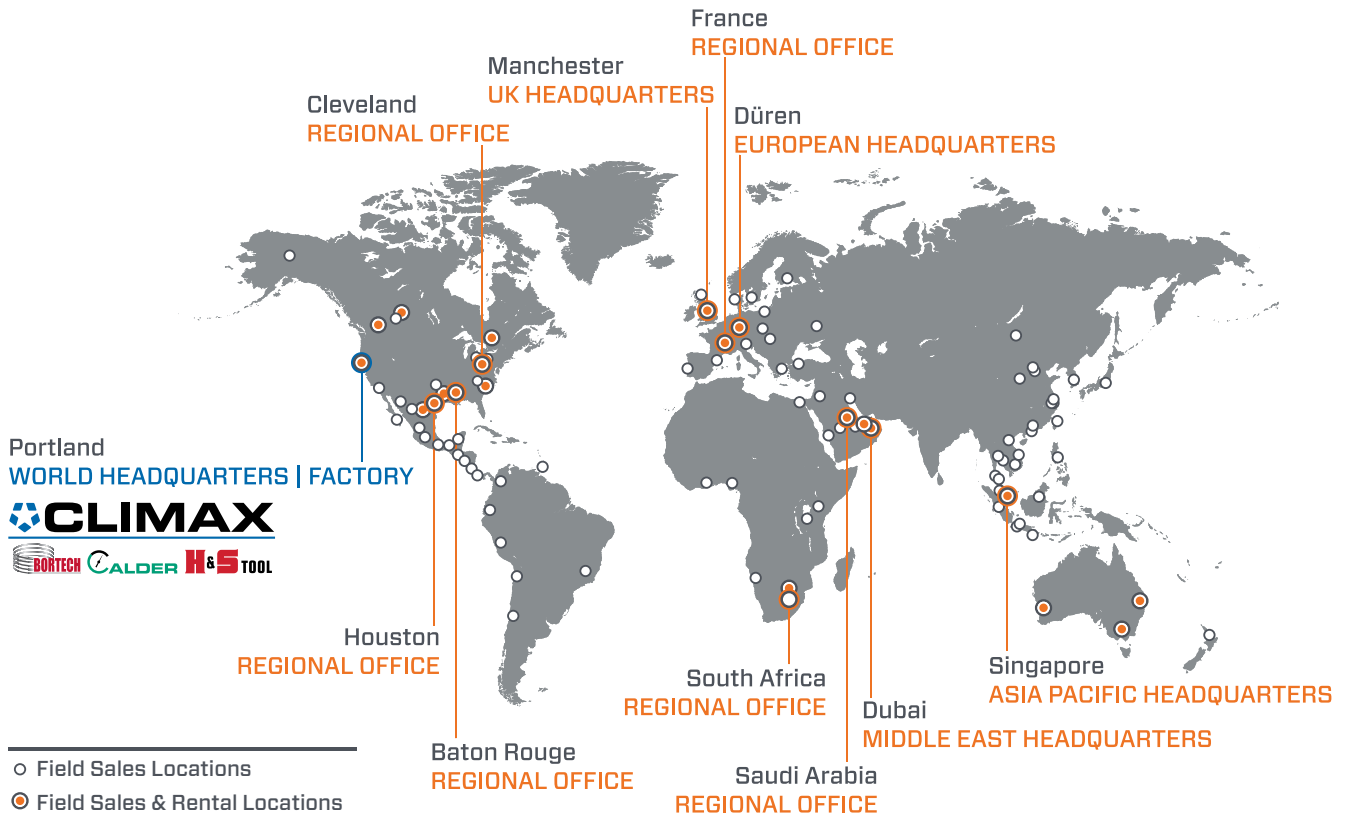
- ✓ Operator safety
- ✓ Tool component review and setup
- ✓ Standard operational techniques
- ✓ Overview of cutting tools and recommend usage
- ✓ Maintenance procedures
- ✓ A certificate of achievement - issued to each student immediately following course completion

Sign up today for training at one of our **seven** Global CLIMAX training centers.

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- Cleveland, Ohio
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- Dubai, United Arab Emirates



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World Headquarters

Address: 2712 E. 2nd St, Newberg, Oregon 97132
Tel: +1 503 538 2185
Fax: +1 503 538 7600
Email: info@cpmt.com

Asia Pacific

Address: 10, Raeburn Park, #02-08, Singapore 088702
Tel: +65 6801 0662
Fax: +65 6801 0699
Email: ClimaxAsia@cpmt.com

European

Address: Am Langen Graben 8, 52353 Dürren, Germany
Tel: (+49) (0) 2421 9177 0
Fax: (+49) (0) 2421 9177 29
Email: ClimaxEurope@cpmt.com

Middle East

Address: C9, Phase 5, Light Industrial Units, DSO, Dubai, UAE
Tel: +971 4 321 0328
Email: ClimaxUAE@cpmt.com

United Kingdom

Address: Unit 3 Martel Court, S.Park Business Park, Stockport SK1 2AF
Tel: +44 (0) 161 406 1720
Email: ClimaxUK@cpmt.com

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