

Modular, Automated Cladding in either a full machine configuration or as an integration package to incorporate into your existing setup.

The CLIMAX AC5000 AutoClad is a great way to add automated cladding to your arsenal. Modular options allow you to configure either a full AutoClad machine, or select just the components you need to integrate automated cladding into your existing setup.

This document contains information specific to configuring a Complete Machine. Please ask your salesperson for information on the Integration Package.

Flexible & Versatile

- Unique to the industry, an "all in one" cladding machine designed specifically for small diameter cylinders, nozzles and pipes, the AC5000 AutoClad takes all the welding parameters and routes them to a single control.
- Select MIG or TIG options
- Weld diameters as small as 1.2 inches (30.5 mm) for MIG, and 2 inches (50.8 mm) for TIG, and up to 24 inches (609.6 mm) deep. And with over 3 inches of bore size, reach increases to 48 inches (1219.2 mm) on certain models.

Simple, Safe Setup & Operation

- Remote control keeps operator safely away from fumes, flash, and heat.
- Tilting Chuck allows the part to be chucked in while the machine is in the vertical axis.



High Quality Welds:

- Rotation of the part instead of the torch head eliminates wire flip.
- Push/Pull Wire Feeder ensures consistent welds by providing positive consistent feeding over long periods of time, for a perfect void-free overlay.
- Water-Cooled Torch keeps the torch cool, allowing long weld times, maximizing productivity and increasing consumable life.
- Beam Angle makes it easy to achieve the best bead profile, resulting in repeatable, high-quality welds. The part is in the perfect position for welding difficult-to-weld materials such as Nickel Alloys, (Inconel™, Monel™, Hastelloy™) and Stainless Steels.

Easy, Accurate Remote Control

- Encoder allows operator to precisely position weld start and resume location, even when the weld tip can not be seen.
- Control Box allows operator to make changes to critical parameters, from a central location with the best perspective of the weld process.
- Cross slide provides variable torch diameter settings. Also allows fine adjustment of MIG stickout and TIG arc length control. (Automatic voltage control available for TIG systems.)

SPECIFICATIONS

AC5000 Small Frame Machine (10 inch (254.0 mm) Chuck Base Unit)

Machine Performance Range

Minimum bore diameter, MIG	1.2 inches	30.5 mm
Minimum bore diameter, TIG	2.0 inches	50.8 mm
Maximum bore diameter	10 inches	254 mm
Maximum flange diameter (swing)	13.75 inches	350 mm
Available stroke lengths	18, 24, 36 and 48 inches	457, 609, 914 and 1,219 mm
Cross slide stroke (radial adjustment)	2.9 inches	73.7 mm
Maximum work piece weight	150 lbs	68 kg
Amperage at 100% duty cycle	200 Amp	200 Amp
Torch type	MIG or TIG water cooled	MIG or TIG water cooled
Wire size	0.035 or 0.045	0.9 mm or 1.2 mm

Measures

Machine height, maximum	95 inches	2413.0 mm
Machine operating weight, approx.	525 lbs.	238.1 kg

AC5000 Large Frame Machine (20 inch (508.0 mm) Chuck Base Unit)

Machine Performance Range

Minimum bore diameter, MIG	1.2 inches	30.5 mm
Maximum bore diameter, MIG	22.0 inches	558.8 mm
Minimum bore diameter, TIG	2.0 inches	50.8 mm
Maximum bore diameter, TIG	19.0 inches	482.6 mm
Maximum flange diameter (swing)	32 inches	812.8 mm
Available stroke lengths	18, 24, 36 and 48 inches	457, 609, 914 and 1,219 mm
Cross slide stroke (radial adjustment)	2.9 inches	73.7 mm
Maximum work piece weight	550 lbs	249.5 kg
Amperage at 100% duty cycle	200 Amp	200 Amp
Torch type	MIG or TIG water cooled	MIG or TIG water cooled
Wire size	0.035 or 0.045	0.9 mm or 1.2 mm

Measures

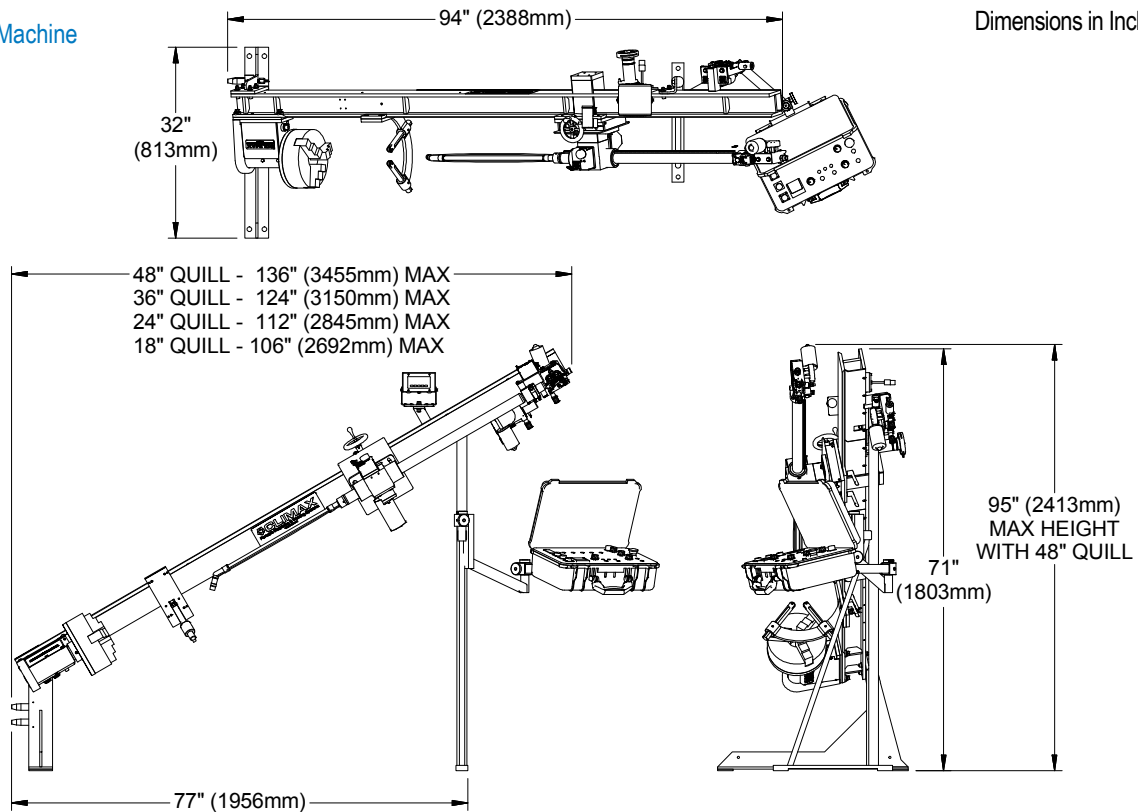
Machine height, maximum	95 inches	2413.0 mm
Machine operating weight, approx.	1285 lbs	582.9 kg

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.

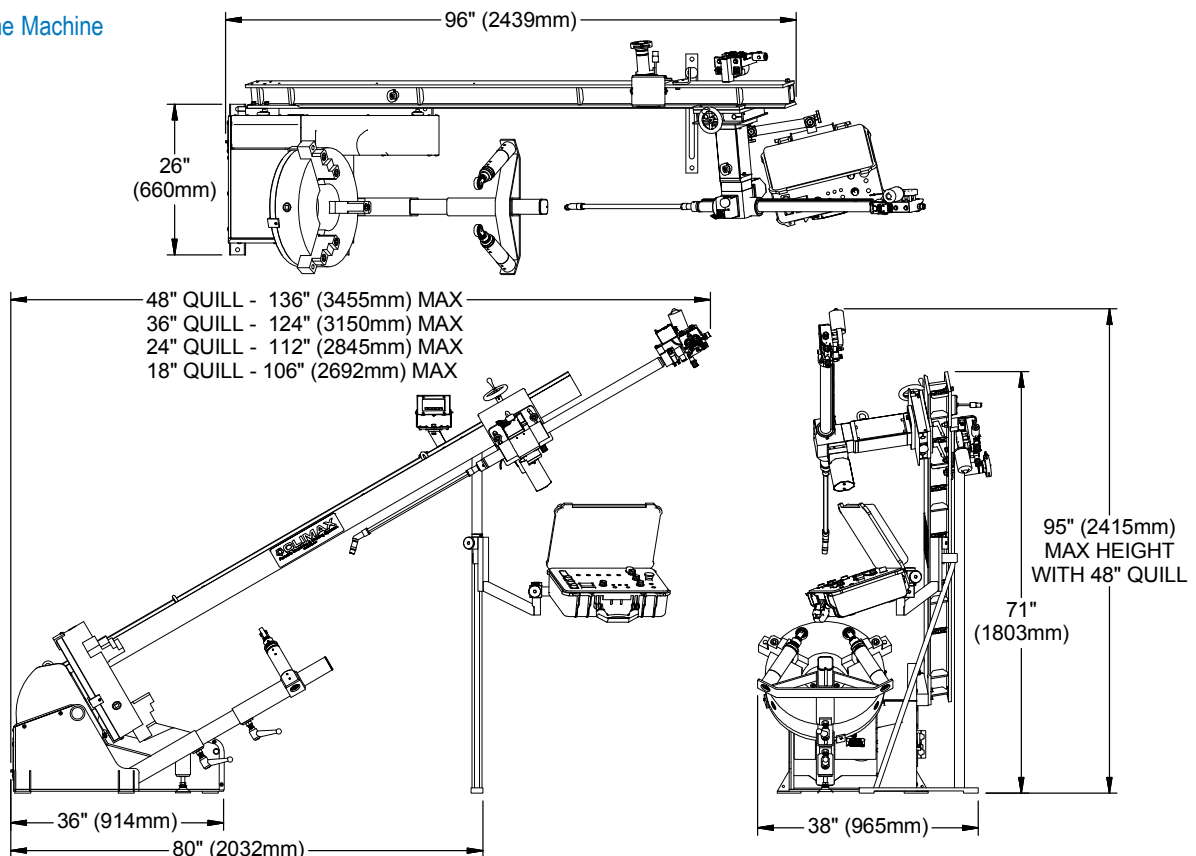
OPERATIONAL DIMENSIONS

Small Frame Machine

Dimensions in Inch (mm)

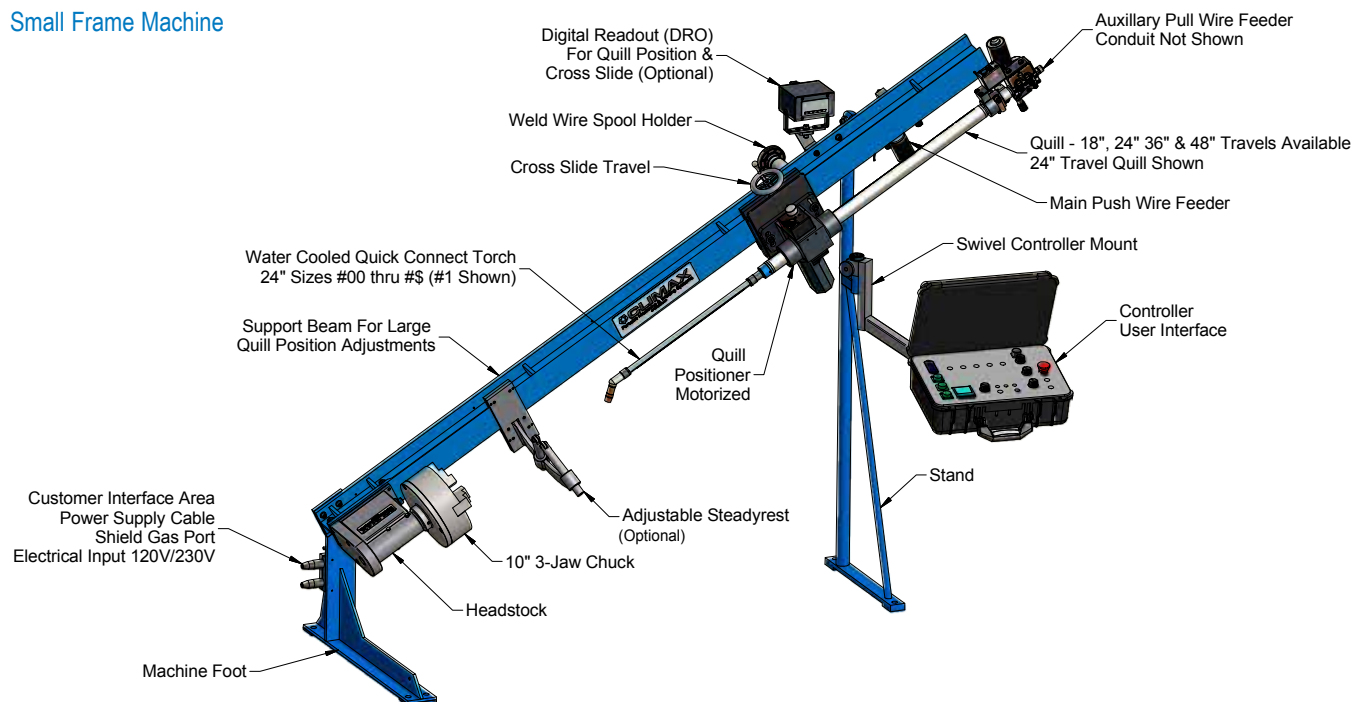


Large Frame Machine



MACHINE OVERVIEW

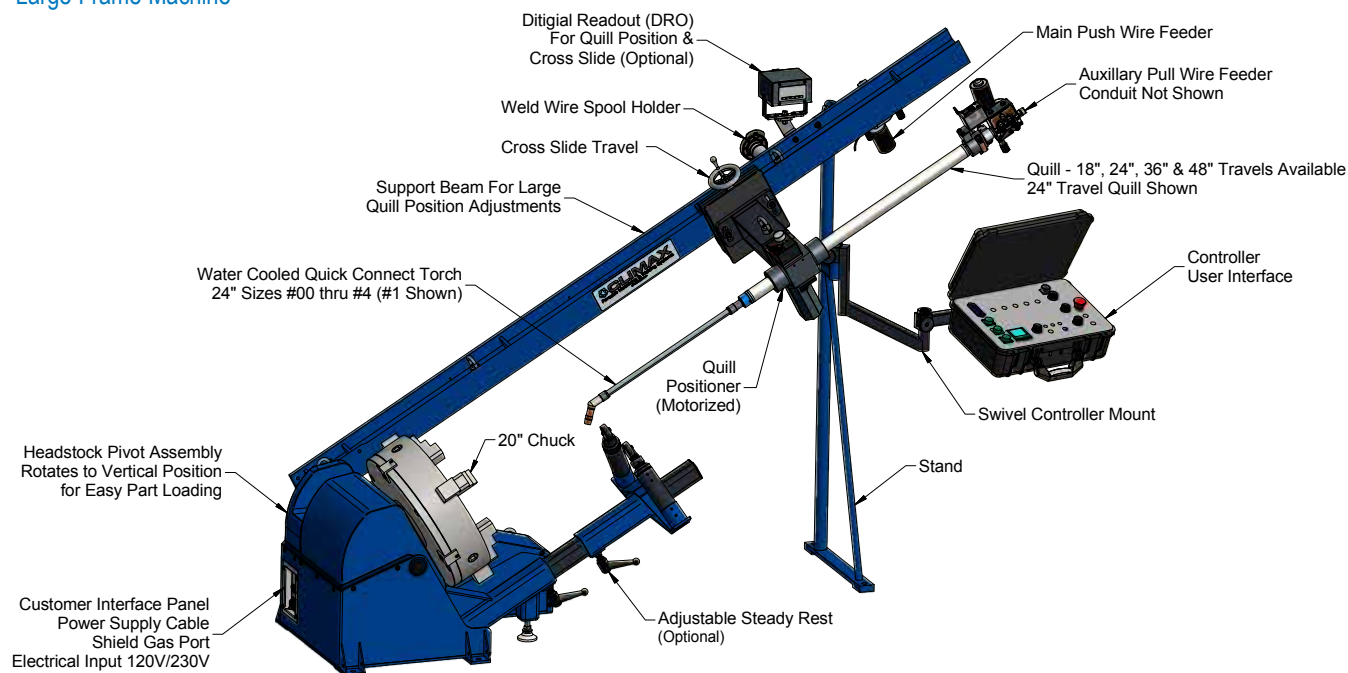
Small Frame Machine



Notes:

1. Control Cables, Weld Cables, Conduits, and Water Hoses Not Shown
2. All Machines Are Tig Ready. Conversion Requires, Controller, New Torches, & Liner. Kits Available

Large Frame Machine



Notes:

1. Control Cables, Weld Cables, Conduits, and Water Hoses Not Shown
2. All Machines Are Tig Ready. Conversion Requires, Controller, New Torches, Liner, and Headstock Sprocket Change. Kits Available

TOOL CONFIGURATIONS

Configure your AC5000 AutoClad Complete Machine following these 7 easy steps:

- 1 Select a Base Unit
- 2 Select a Steady Rest Assembly
- 3 Select a Cross Slide & DRO Assembly
- 4 Select a Quill and Positioner Assembly
- 5 Select a Torch (or Torches)
- 6 Select Torch Accessories
- 7 Select a Wire Feeder

1 Base Unit

MACHINE PACKAGE. Includes: frame, headstock, tilt actuator, controller, cords, cables, packaging, tool kit, consumables, torch case.

MIG

Base Unit 10 inch (254.0 mm), 120V controller	75695
Base Unit 10 inch (254.0 mm), 230V controller	75696
Base Unit 20 inch (508.0 mm) with tilt, 120V controller	75697
Base Unit 20 inch (508.0 mm) with tilt, 230V controller	75698

TIG

Base Unit 10 inch (254.0 mm), 120V controller	75699
Base Unit 10 inch (254.0 mm), 230V controller	75700
Base Unit 20 inch (508.0 mm) with tilt, 120V controller	75701
Base Unit 20 inch (508.0 mm) with tilt, 230V controller	75702

2 Steady Rest Assembly

Steady rest, small frame	70087
Steady rest, large frame	70085

3 Cross Slide & DRO Assembly

MIG/TIG

Manual cross slide assy with single axis DRO	75703
Manual cross slide assy with single Axis DRO and spacer	75706

4 Quill & Positioner Assembly

MIG

18 inch (457.2 mm) stroke with encoder	75709
24 inch (609.6 mm) stroke with encoder	75710
36 inch (914.4 mm) stroke with encoder	75711
48 inch (1219.2 mm) stroke with encoder	75712

TIG

18 inch (457.2 mm) stroke with encoder	75713
24 inch (609.6 mm) stroke with encoder	75714
36 inch (914.4 mm) stroke with encoder	75715
48 inch (1219.2 mm) stroke with encoder	75716

5 Torches

MIG

#00 24 inch (609.6 mm) quick connect torch, water cooled	72476
#0 24 inch (609.6 mm) quick connect torch, water cooled	70095
#1 24 inch (609.6 mm) quick connect torch, water cooled	70097
#2 24 inch (609.6 mm) quick connect torch, water cooled	70092
#3 24 inch (609.6 mm) quick connect torch, water cooled	70093
#4 24 inch (609.6 mm) quick connect torch, water cooled	70094
#00 to #2 torch set for 10 inch (254.0 mm) small frame machine	75717
#00 to #4 torch set for 20 inch (508.0 mm) large frame machine	75718

TIG

#0 24 inch (609.6 mm) quick connect torch, cold wire water cooled	73826
#1 24 inch (609.6 mm) quick connect torch, cold wire water cooled	73719
#2 24 inch (609.6 mm) quick connect torch, cold wire water cooled	73789
#3 24 inch (609.6 mm) quick connect torch, cold wire water cooled	73792
#4 24 inch (609.6 mm) quick connect torch, cold wire water cooled	73793
#0 to #2 torch set for 10 inch (254.0 mm) small frame machine	75719
#0 to #4 torch set for 20 inch (508.0 mm) large frame machine	75720

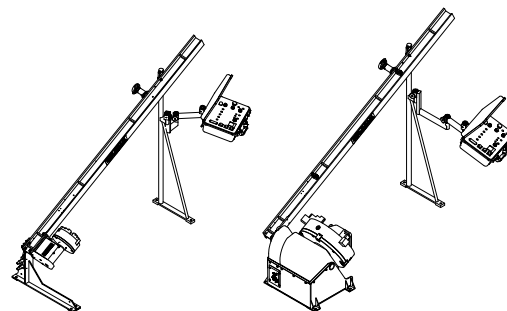
6 Torch Accessories

MIG

Quick connect face torch assembly, 31 inch (787.4 mm) range	70722
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7 Wire Feeder

Push/pull wire feed assembly with main & auxiliary feeders, reel support and conduit	75721
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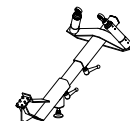


Small frame machine
10 inch (254.0 mm)

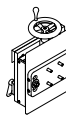
Large frame machine
20 inch (508.0 mm)



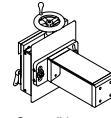
Steady rest, small frame



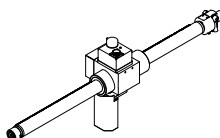
Steady rest, large frame



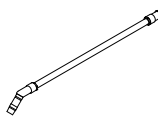
Cross slide assy
with DRO



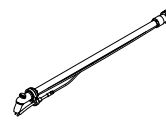
Cross slide assy
with DRO & spacer



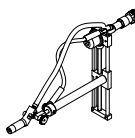
Quill & positioner assembly



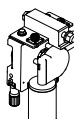
MIG Torch



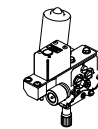
TIG Torch



Face torch, MIG



Wire Feeder, main



Wire Feeder, auxiliary style

To convert a machine from MIG to TIG, or from TIG to MIG, select the appropriate Conversion Kit below.

NOTE: In addition to this kit, please also order MIG or TIG torches as required (shown on Tool Configuration Page).

Conversion Kit for Small Frame Machine

- 73985 MIG to TIG 120V
Converts a 120V Small Frame Machine from MIG to TIG.
- 76177 MIG to TIG 230V
Converts a 230V Small Frame Machine from MIG to TIG.
- 76104 TIG to MIG 120V
Converts a 120V Small Frame Machine from TIG to MIG.
- 76303 TIG to MIG 230V
Converts a 230V Small Frame Machine from TIG to MIG.

Conversion Kit for Large Frame Machine

- 76118 MIG to TIG 120V
Converts a 120V Large Frame Machine from MIG to TIG.
- 76304 MIG to TIG 230V
Converts a 230V Large Frame Machine from MIG to TIG.
- 76168 TIG to MIG 120V
Converts a 120V Large Frame Machine from TIG to MIG.
- 76305 TIG to MIG 230V
Converts a 230V Large Frame Machine from TIG to MIG.

CLIMAX Training Facilities

CLIMAX has been teaching the fundamentals and fine points of portable machine tool operation for practically as long as we've been inventing and building the tools.

We offer several training facilities across the United States - the Global Learning Center, situated in our corporate headquarters near Portland, Oregon, our New Hampshire Training Facility, and our Houston Training Facility. All facilities offer training for machine tool operators on safety and machine setup and operation. Trainees also receive technical tips and tools to improve operational efficiencies, with the vast majority of every program devoted to hands-on activities and skill development.

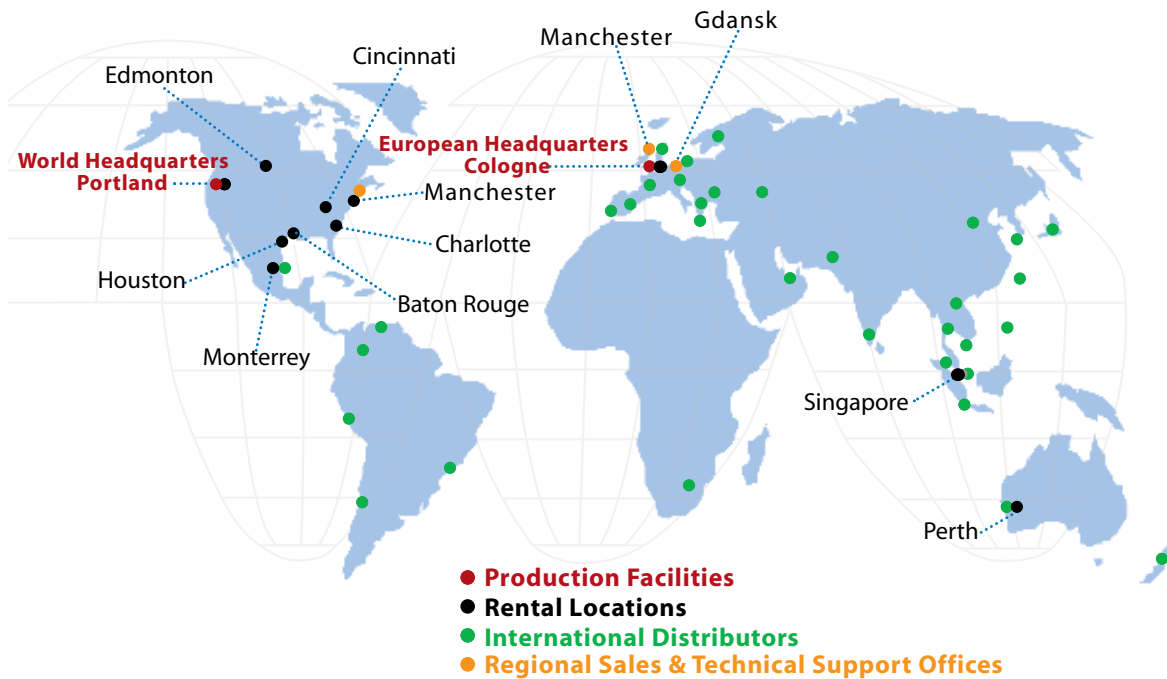
The CLIMAX instructional team includes specialists in shipbuilding, power generation, civil engineering, bridge re-building, petrochemical and other industries.

Whether it's a regularly scheduled course at one of our training facilities, or custom curriculum conducted at your facility, your machinists will benefit from courses developed by some of the most respected authorities in the business.

Call us today to register for a regularly scheduled class, or talk to us about how we can customize a training program for your specialized application.



CLIMAX GLOBAL LOCATIONS



Call CLIMAX for:

On-site Training

Need some refresher courses in setting up and operating your CLIMAX machine tool?

Special Projects

CLIMAX has been solving complicated on-site machining and welding problems for our customers since 1964.

Rentals

With 16 worldwide rental depot locations, you are never far away from a CLIMAX tool.

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