

Lightweight for easy handling and installation.

Powerful

- Wide working range: nominal diameter of 1.5 - 48 inches (40 -1200 mm).
- Submersion depth up to 55 inches (1400 mm).
- Heavy duty drive chains provide minimum of 10,000 hours of service.

Versatile

- Drive system uses a drive chain up to three sizes larger than the competition with a Mean Time Between Failure (MTBF) of approximately 10,000 hours. This minimizes the risk of breakage and costly downtime on the job.
- Five Planet Arms ensure no two discs are ever directly across from each other and carrying the entire work load. All of the discs are in contact with the work surface, eliminating development of high and low spots on valve seat.
- The adhesive on the media discs is specifically formulated to provide a firm hold while in use, but are easy to remove after use.
- High quality abrasives can help reduce grinding time by up to 50%.



Rigid

- Rigid Planet Arms eliminate machine chatter and ensure a uniform finish.
- Planet Arm bearings are sealed, preloaded and preset to be within .000079 inches (.002 mm) of each other.

Quick and Easy Setup

- Quickly change between electric and pneumatic by simply loosening a single clamping bolt.
- Quickly change from grinding to lapping operations by simply changing the discs.
- Factory sealed bearings for fast, easy grinding head change out.
- Planet Arms feature fast, one screw adjustment of diameter size.

SPECIFICATIONS

		US	Metric
Operating Ranges:			
Working range diameter	Minimum	1.25 inches	32 mm
	Maximum	8 inches	200 mm
Submerging depth	Minimum	16 inches	400 mm
	Maximum	18 inches	450 mm
Power	Electric	0.75 Hp	0.55 kW
	Pneumatic	0.75 Hp	0.55 kW
Variable spindle speed	Electric	100 - 550 rpm	100 - 550 rpm
	Pneumatic	100 - 650 rpm	100 - 650 rpm
Spindle Torque	Permanent	5.3 ft-lbs	7.2 N•m
	Max	29.5 ft-lbs	40.0 N•m

Measures

Model VM1150

Basic machine without tooling	11 lbs.	5 kg
Machine case	84 lbs	38 kg

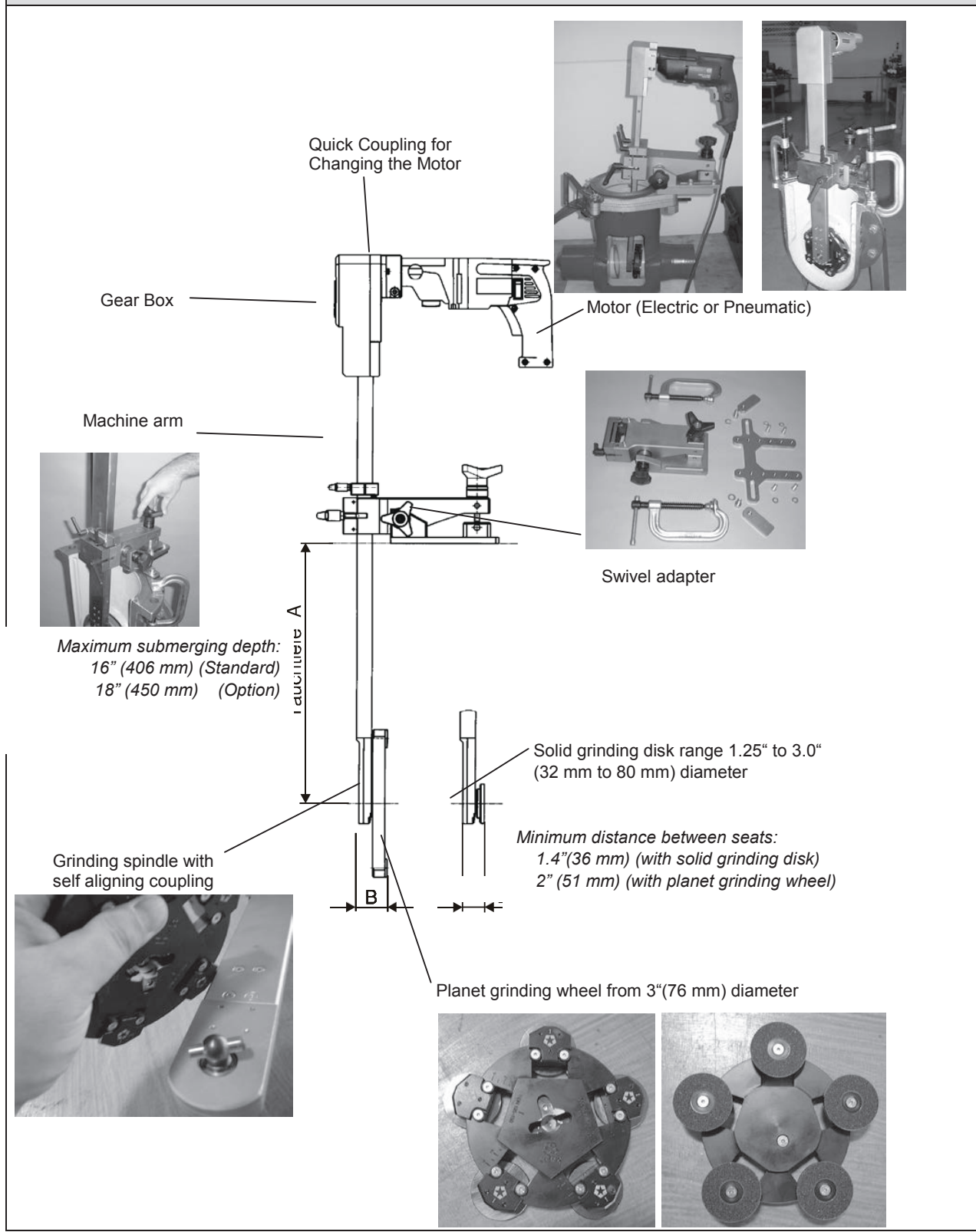
Model VM1200

Basic machine without tooling	11 lbs.	5 kg
Machine case	86 lbs	39 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.

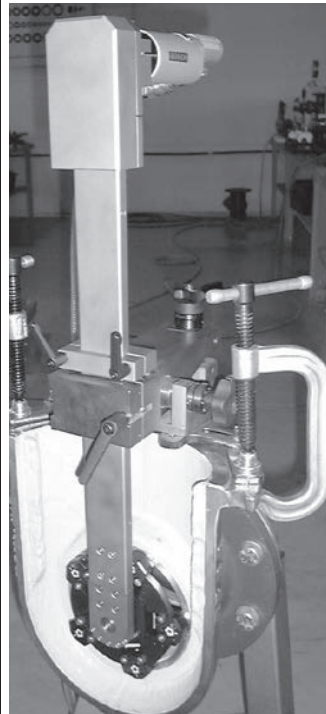
MACHINE OVERVIEW

Models VM1150, VM1200



TOOL CONFIGURATIONS

Model VM1150 (1.25 - 6.0" (32 - 150 mm) diameter range)



P/N	Description
	<p>Gate Valve Grinder VM1150S Nominal working diameter 1.25" to 6" (32 mm to 150 mm) Submerging depth 16" (400 mm). Included Components::</p> <ul style="list-style-type: none"> • 7 piece solid grinding disk set 2.0"(50 mm), 2.2"(55 mm), 2.4"(60 mm), 2.6"(65 mm), 2.9" (73 mm), 3.2"(80 mm) and 3.4"(85 mm) diameters. • 1 set (5) of planet arms 1.2"(30 mm) in length. • Set of 2 planet wheels 3.9"(100 mm), 5.3" (135 mm) diameters. • 1 set (5) of grinding discs 2.0"(50 mm) diameter. • 1 set of clamping equipment for mounting the machine on valves with and without top flange. • Start up set of abrasives grain 100 and 500. • 1 set of tooling. • Carrying cases with foam inlet for the machine and the accessories.
420-00S-S12	VM1150S with electric motor 230 V / 50 Hz
420-00S-S13	VM1150S with pneumatic motor
420-00S-S15	VM1150S with electric motor 115 V / 60 Hz

	<p>Gate Valve Grinding and Lapping machine VM1150 Machine like VM1150S but with additional lapping equipment:</p> <ul style="list-style-type: none"> • Set of 3 solid lapping disks 2.2"(55 mm), 2.6"(65 mm), 3.2"(80 mm) diameters • 2 sets of lapping disks 1.2"(30 mm) and 2.0"(50 mm) diameters. • Lapping paste 10 and 30 µm.
420-00S-S02	VM1150 with electric motor 230 V / 50 Hz
420-00S-S03	VM1150 with pneumatic motor
420-00S-S05	VM1150 with electric motor 115 V / 60 Hz

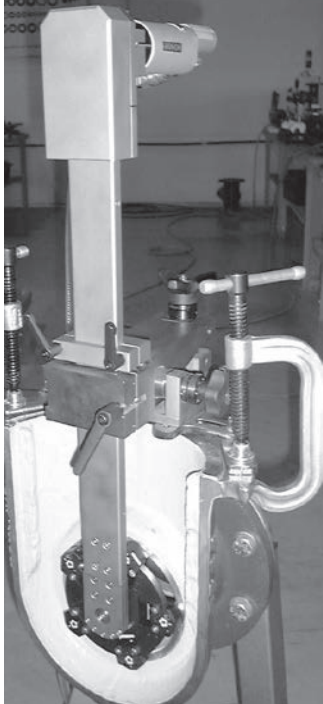
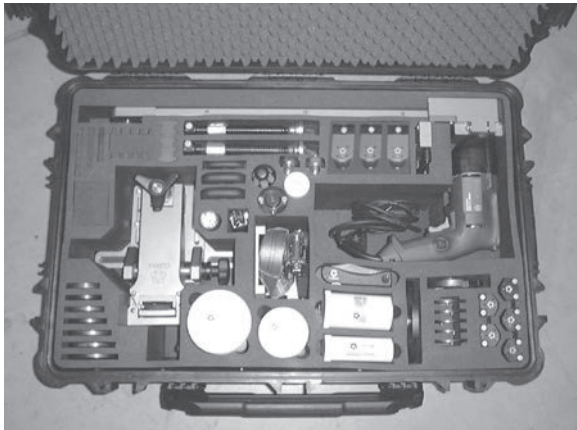



VM1150S with electric motor



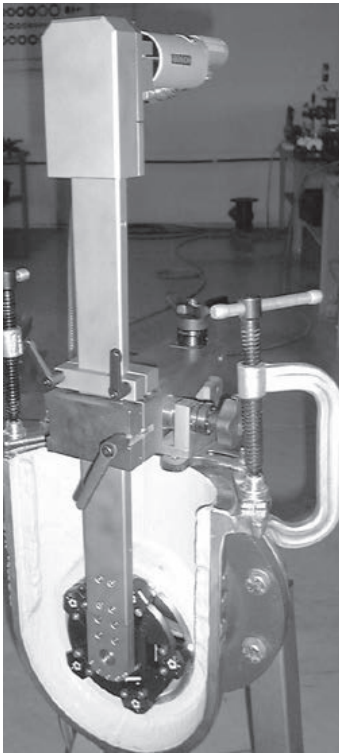
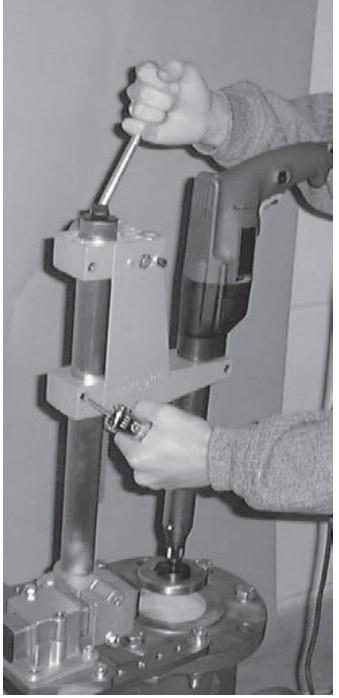
VM1150S with pneumatic motor
(standard scope of supply does not include maintenance unit)

TOOL CONFIGURATIONS

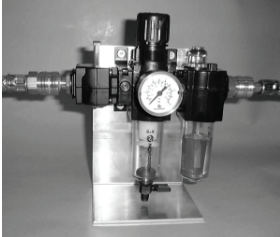
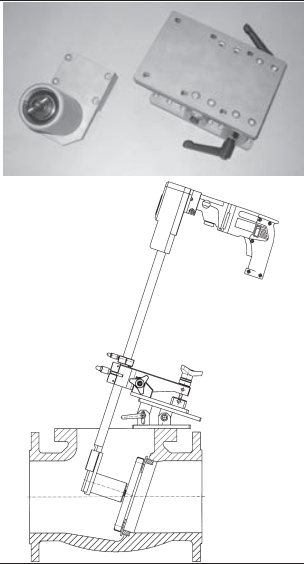
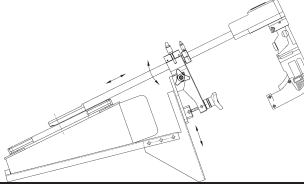


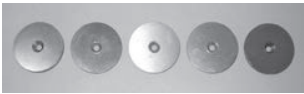
Model VM1200 (1.25 - 8.0" (32 - 200 mm) diameter range)		
	P/N	Description
		<p>Gate Valve Grinder VM1200S Nominal working dia 1.25" to 8" (32 mm to 200 mm) Submerging depth 16"(400 mm). Included Components:</p> <ul style="list-style-type: none"> • 7 piece solid grinding disk set 2.0"(50 mm), 2.2"(55 mm), 2.4"(60 mm), 2.6"(65 mm), 2.9" (73 mm), 3.2"(80 mm) and 3.4"(85 mm) diameters. • Set of 2 planet arms 1.2"(30 mm) and 2.6"(65 mm) in length. • Set of 2 planet wheels 3.9"(100 mm), 5.3" (135 mm) diameters. • 1 set of grinding discs 2.0"(50 mm) diameter • 1 set of clamping equipment for mounting the machine on valves with and without top flange. • Start up set of abrasives grain 100 and 500. • 1 set of tooling. • Carrying cases with foam inlet for the machine and the accessories.
	420-00S-S32	VM1200S with electric motor 230 V / 50 Hz
	420-00S-S33	VM1200S with pneumatic motor
	420-00S-S35	VM1200S with electric motor 115 V / 60 Hz
		<p>Gate Valve Grinding and Lapping machine VM1200 Machine like VM1200S but with additional lapping equipment:</p> <ul style="list-style-type: none"> • Set of 3 solid lapping disks 2.2"(55 mm), 2.6"(65 mm), 3.2"(80 mm) diameters • 2 sets of lapping disks 1.2"(30 mm) and 2.0"(50 mm) diameters. • Lapping paste 10 and 30 µm.
	420-00S-S22	VM1200 with electric motor 230 V / 50 Hz
	420-00S-S23	VM1200 with pneumatic motor
	420-00S-S25	VM1200 with electric motor 115 V / 60 Hz
		<p>VM1200S with electric motor</p>
		<p>VM1200S with pneumatic motor <i>(standard kit does not include pneumatic maintenance unit)</i></p>




TOOL CONFIGURATIONS

TWIN Machines for Gate and Globe Valves **(1.25 - 8.0" (32 - 200 mm) diameter range)**

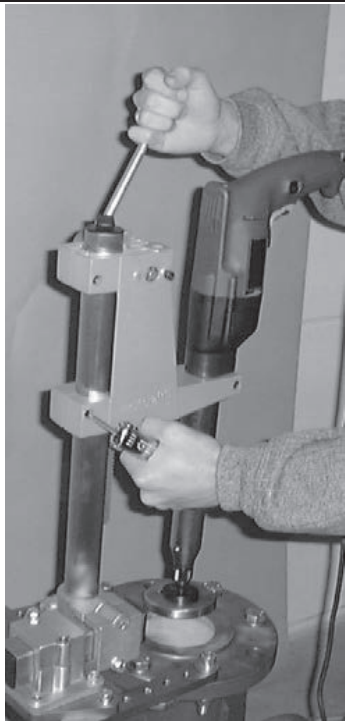
	P/N	Description
		<p>Gate Valve Grinder VM1150ST</p> <ul style="list-style-type: none"> Includes The VM1150S and the Globe valve conversion
	420-00S-T12	VM1150ST with electric motor 230 V / 50 Hz
	420-00S-T13	VM1150ST with pneumatic motor
	420-00S-T15	VM1150ST with electric motor 115 V / 60 Hz
		<p>Gate Valve Grinding and Lapping machine VM1150T</p> <ul style="list-style-type: none"> Includes The VM1150 and the Globe valve conversion
	420-00S-T02	VM1150T with electric motor 230 V / 50 Hz
	420-00S-T03	VM1150T with pneumatic motor
	420-00S-T05	VM1150T with electric motor 115 V / 60 Hz
		
420-00S-T32		VM1200ST with electric motor 230 V / 50 Hz
420-00S-T33		VM1200ST with pneumatic motor
420-00S-T35		VM1200ST with electric motor 115 V / 60 Hz
		<p>Gate Valve Grinding an Lapping machine VM1200T</p> <ul style="list-style-type: none"> Includes The VM1200 and the Globe valve conversion
420-00S-T22		VM1200T with electric motor 230 V / 50 Hz
420-00S-T23		VM1200T with pneumatic motor
420-00S-T25		VM1200T with electric motor 115 V / 60 Hz

CLIMAX is committed to product improvement. The machine you receive may vary slightly from what is shown.

Accessories	
	P/N Description
	<p>240-13K-001 Maintenance unit for pneumatic motor Required for machines with pneumatic motor. The maintenance unit is not included in the standard scope of supply with pneumatic driven machines. Includes:</p> <ul style="list-style-type: none"> • filter • oiler • pressure gauge • speed controller
	<p>420-00S-L03 Swing Check accessories For grinding of swing check valves. Includes:</p> <ul style="list-style-type: none"> • Swivel adapter for adaption of the machine on the valve • Spindle extension for reaching the seat with the planet wheels.
	<p>420-56S-N01 Fixture for gate wedges For grinding of gate wedges "on site" with the VM machines.</p>
	<p>Extension of submerging depth Extension of submerging depth without changing the max. grinding diameter (Must be ordered with the machine. Can not be ordered after delivery of the machine. e.g... 420-00S-S05-M01)</p> <p>-M01 Extension of submerging depth from 16" to 18" (400 mm to 450 mm)</p> <ul style="list-style-type: none"> • Extension of the machine arm. • Adaption of the machine case.
	<p>110-33S-N01 CBN grinding disk 2" (50 mm) diameter (each) (A total of five required) Required for rough grinding of heavily damaged seats (not included in the component package).</p>
	<p>110-41S-N01 Lapping disk 1.2" (30 mm) diameter (each) (A total of five required)</p>
	<p>110-42S-N01 Lapping disk 2" (50 mm) diameter (each) (A total of five required)</p>

Accessories		
	P/N	Description
		<p>Grinding adapter For using the tooling of the VM1150(S) on stationary drill presses. The grinding pressure is made by an application of springs. The scale for the grinding pressure is divided into two ranges: One for high rate of removal of material and the other for high precision surfaces.</p>
	185-00S-S22	<p>Grinding adapter MT2 For using on stationary drill presses with morse taper #2.</p>
	185-00S-S23	<p>Grinding adapter MT3 For using on stationary drill presses with morse taper #3.</p>
		<p>Planet Arms 3 degrees The spindles of these arms are designed with a 3 degree offset. These arms are made to rework the 3 degree relief angle in gate valves</p>
	110-51S-N01	<p>Planet arm #II 3 degrees (2.4" (60 mm) length) (each) (A total of five required) Outside grinding diameter 6.3"-13.0" (160-330 mm) (diameter depends on selected planet wheel)</p>
	110-52S-N01	<p>Planet arm #III 3 degrees (4.5" (115 mm) length) (each) (A total of five required) Outside grinding diameter 13.0"-21.7" (330-550 mm) (diameter depends on selected planet wheel)</p>
110-50S-L01	<p>3 degree Planet Arm Set Includes :</p> <ul style="list-style-type: none"> • Planet arm #II 3 degree (5 pieces) • Planet arm #III 3 degree (5 pieces) 	
		<p>Planet Arms 5 degree The spindles of these arms are designed with a 5 degree offset. These arms are made to rework the 5 degree relief angle in gate valves</p>
	110-61S-N01	<p>Planet arm #II 5 degrees (2.4" (60 mm) length) (each) (A total of five required) Outside grinding diameter 6.3"-13.0" (160-330 mm) (diameter depends on selected planet wheel)</p>
	110-62S-N01	<p>Planet arm #III 5 degrees (4.5" (115 mm) length) (each) (A total of five required) Outside grinding diameter 13.0"-21.7" (330-550 mm) (diameter depends on selected planet wheel)</p>
110-60S-L01	<p>5 degree Planet Arm Set Includes :</p> <ul style="list-style-type: none"> • Planet arm #II 5 degree (5 pieces) • Planet arm #III 5 degree (5 pieces) 	

Accessories



P/N

Description

Globe Valve Extension Kit

The extension kit comes with a complete machine arm including the drive motor and a mounting column. It uses the tooling of the VM1150/1200.

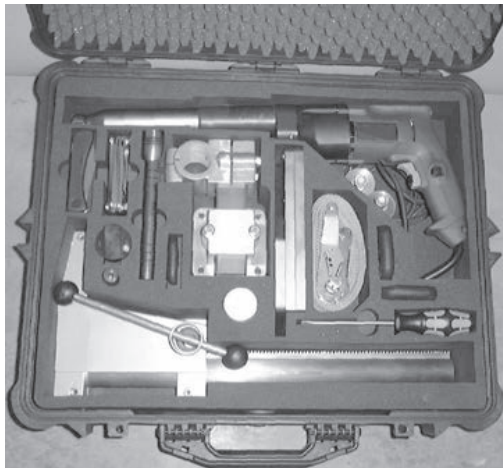
Included Components:

- One piece of ball joint coupling size 10 and 15 each.
- Integrated grinding pressure detection with a scale.
- Mounting column with mounting plate for valves with and without flange.
- Carrying cases with foam inlet for the machine and the accessories.

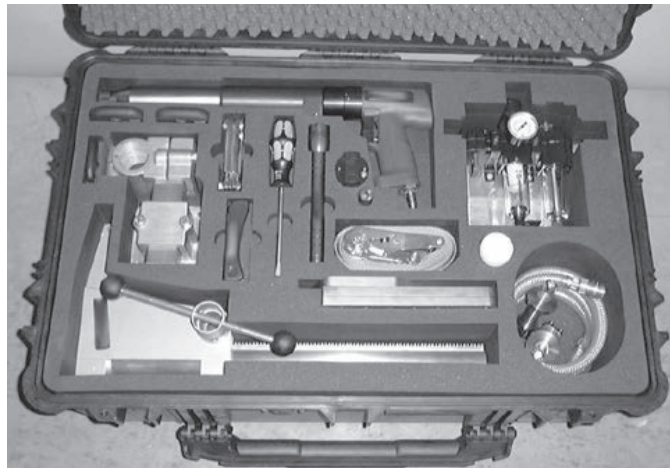
220-00S-L12 VM1150S with electric motor 230 V / 50 Hz

220-00S-L13 VM1150S with pneumatic motor

220-00S-L15 VM1150S with electric motor 115 V / 60 Hz



Globe valve extension kit with electric motor



Globe valve extension kit with pneumatic motor
(standard kit does not include maintenance unit)

CLIMAX TRAINING AND SUPPORT

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 and Houston, Texas 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.

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Rentals

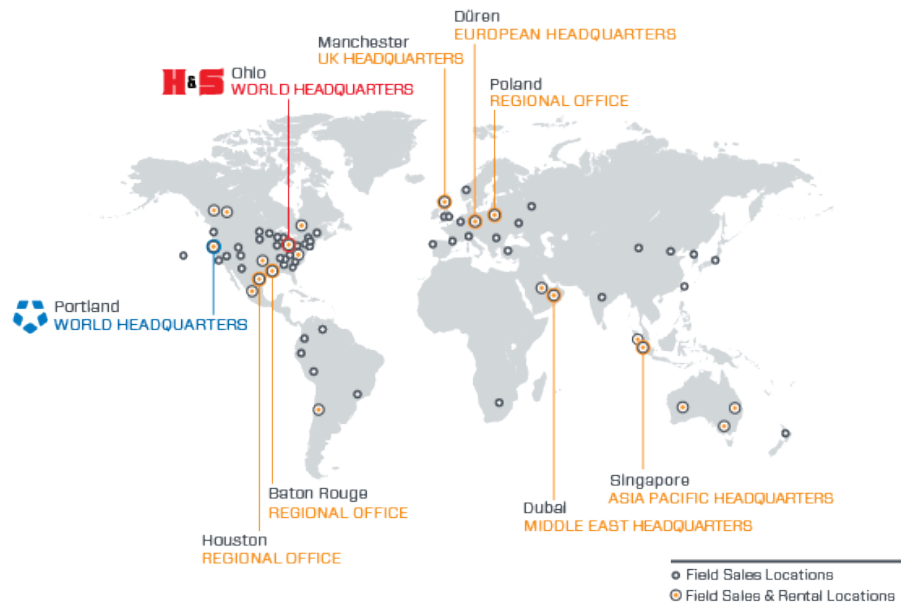
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