

Fill Plant Tools

Ratermann Manufacturing, Inc. carries a vast number of fill plant accessories necessary for your operation requirements.

CYLINDER INSPECTION KIT

Black Light –

Easily Identify Cylinders that have been Exposed to Hydrocarbons

FEATURES

- The *Black Light Kit* easily confirms oil residue in a cylinder. Simply insert the ultra-violet light-emitting probe into the cylinder to inspect the neck and interior walls.



Part #
BLK-KIT12

SPECIFICATIONS

- Dimensions –
4 1/2" L x 4" W x 3" H

INDEX

Fill Plant Tools

- Aluminum Cylinder Kit **7A-2**
- Compound Vacuum Pumps . . **7A-10-12**
- Cryo Pump Grease **7A-8**
- Cylinder Roller
 - Large 1, 2, 4 or 6
 - Cylinder Roller with Control Timer **7A-6**
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TEMPERATURE GAUGES

NEW STYLE MAGNETIC TEMPERATURE GAUGE

Heavy Duty Magnet Temperature Gauge for Steel Cylinders also **Certified Heavy Duty Magnetic Temperature Gauges**



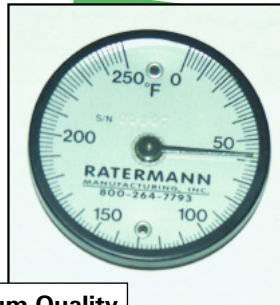
Pt # GT-HDM2

Temperature Gauge

Part #	Description
GT-HDM2	Heavy Duty Magnet & Temp Gauge for Steel Cylinders
GT-CHDM2	Certified Heavy Duty Magnet & Temp Gauge for Steel Cylinders

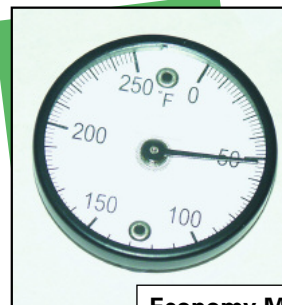
MAGNETIC TEMPERATURE GAUGE

Magnetic Temperature Gauge and **Certified Magnetic Gauges**



Premium Quality
Pt # GT-RMIM2

uncertified
also available



Economy Model
Pt # GT-M2



Premium & Economy Temperature Gauges

Part #	Description
GT-RMIM2	Premium Quality – 2 Inch Temperature Gauge – 0 to 250° F
GT-CRMIM2	Premium Quality with Certification 2 Inch Temperature Gauge – 0 to 250° F
GT-M2	Economy – 2 Inch Temperature Gauge – 0 to 250° F <i>This model cannot be Certified</i>

Certified Tolerance: +/- 2% of Full Scale Range

ALUMINUM CYLINDER KIT

Temperature Gauge Strap Accessory for Aluminum Cylinders

Industrial quality strap with safety line attaches to temperature gauge.

Holds temperature gauge to cylinder along with a safety chain to catch gauge from hitting the ground.

Aluminum Cylinder Kit for GT-HDM2

Part #	Description
GT-HLKIT	Strap Accessory for Aluminum Cylinders



Pt # GT-HLKIT

TEMPERATURE GAUGES

TEMPERATURE GAUGE



• Pocket Holder Included

Part #	Description	1+	3+
GT-1	1 Inch Temperature Gauge – 40 to 160° F	15.40	14.30

CYLINDER SURFACE THERMOMETERS

- Accuracy of ± of Full Scale
- NIST Certification Available

These thermometers are specifically designed to measure the surface temperature of aluminum cylinders.



Part #	Range	° Div
TG-150A	0° F to 150° F	2°

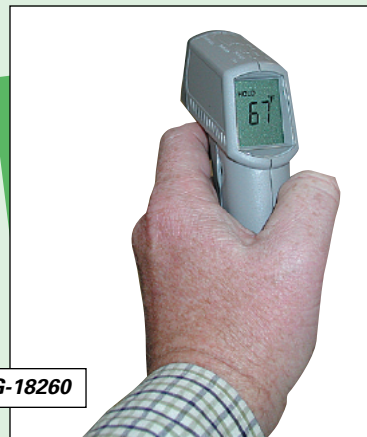
CYLINDER TEMPERATURE GUN

Noncontact Thermometer allows taking temperature of each cylinder while filling on manifold to insure accurate filling of individual bottle.

Your Cyl-Temp noncontact thermometer lets you take the surface temperature of any object quickly and easily. Just point, pull the trigger, and read the temperature on display. Its compact size makes it handy for hundreds of work, home, or recreational uses.

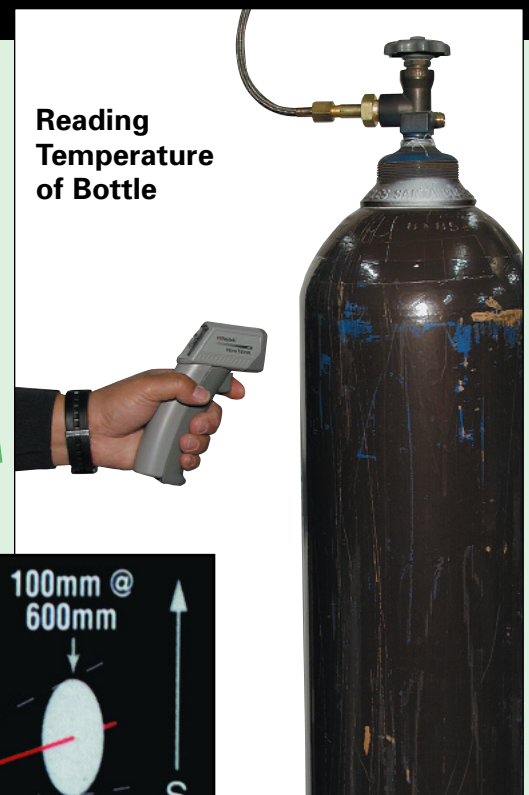
- Switchable between Celsius and Fahrenheit
- Accessory package with pouch and wrist strap available

Note: Not for taking human temperatures

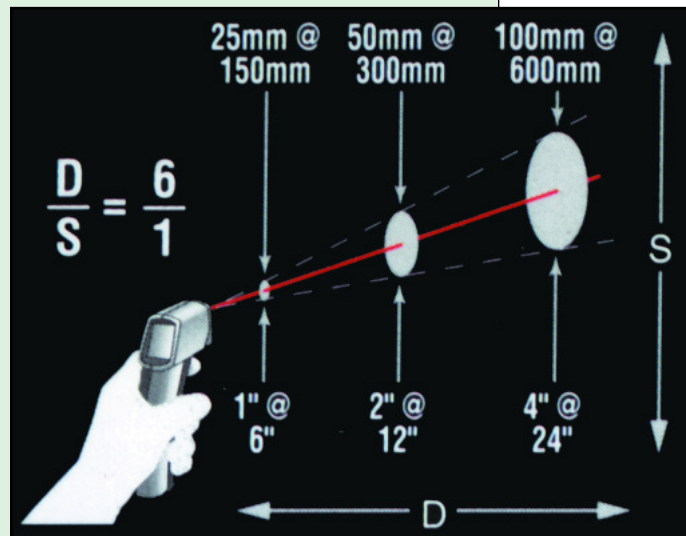


Pt # TG-18260

Reading Temperature of Bottle



Pt # TG-18260



Recommended Target Ranges

The unit's distance-to-target spot size ratio is 6:1. For best results, make sure the target is larger than the unit's spot size. Instructions included in package.

Part #	Description	Accuracy	1+	3+
TG-18260	Temp Gun 0-500° F	± 2%	98.24	90.52
TG-30400	Temp Gun -25 to 750° F	± 1%	313.80	304.56
TG-30400C	Temp Gun -25 to 750° F Certified*	± 1%	442.47	399.44

*NIST Certified for Temperature Accuracy

VALVE TOOLS

VALVE QUICK TURN TOOL



Quick Turn Valve Tool Open and Close Valve Fast

Use Quick Turn in your filling operation for hard to open valves. This device works on all major brand valves.

OPPORTUNITY FOR RESALE TO

- Labs
- Specialty Gas Accounts
- Hospitals
- Balloon Helium Accounts

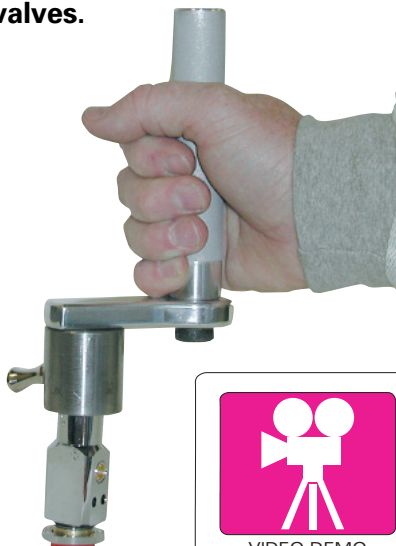


Part #	Description
CV-QT	Valve Quick Turn Tool

MEDICAL VALVE SOCKET



Hand Tools speed up plant production for opening and closing valves.



Quick Turn Medical Valve Tool

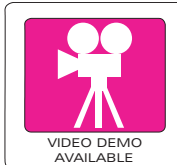
- Use with Toggle or Non-Toggle Style Valve

Part #	Description	Price
QT-Med	Tool & Valve Socket	49.95



Quick Turn Medical Valve Tool

- Use with Toggle or Non-Toggle Style Valve



Quick Turn Socket Only

Pt # QT-SOC38

Medical Socket Only

Part #	Description	Price	5+
QT-SOC38	3/8" Drive	55.08	39.95
QT-SOC12	1/2" Drive	55.08	39.95



*Ratchet Wrench not included

POWER TOOL ATTACHMENT

Fill Plant Tools

Section

7A

FOR VALVES - VALVE CLOSING TOOL



Valve Closing Tool

Rubber Insert gives cushion to valve handle when opening and closing.



Pt # CV-38RVT

Power Tool Attachment for Valves

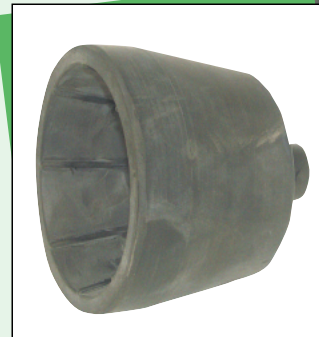
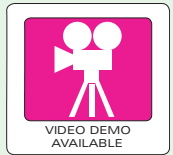
Part #	Description	each
CV-12RVT	Complete Unit - 1/2" Drive Valve Tool - Holder Shell	74.41
CV-38RVT	Complete Unit - 3/8" Drive Valve Tool - Holder Shell	74.41
CV-12SHELL	1/2" Drive Valve Tool - Holder Shell	59.98
CV-38SHELL	3/8" Drive Valve Tool - Holder Shell	59.98
CV-LGINSERT	Hard Replacement Insert for Valve Tool	17.29

* Air tool not included

CAP REMOVER

Fast Cap Tool

Speed up your filling operation with the Fast Cap Tool. The power tool attachment for cylinder caps.



Fast Cap Tool

Part #	Description
CC-CR38	3/8" Drive Full Unit Cap Remover Tool

FOR VALVES - VALVE OPENING AND CLOSING SOCKET

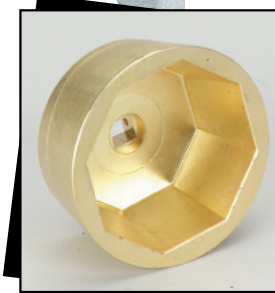


Use with 3/8 Angle Air Wrench



Power Tool Attachment is used for fast opening and closing of valve.

Part #	Price
CV-OC	61.15



Pt # CV-OC

* Air tool not included

CYLINDER ROLLER

LARGE 1, 2, 4, or 6 CYLINDER ROLLER with CONTROL TIMER

Cylinder Roller makes it safe and simplifies the process of cylinder tumbling for use in mixing gases and is also useful for cleaning the cylinder's interior using abrasive tumbling media. There is no need to lift heavy cylinder's in order to load them onto the machine, especially when you order the aluminum ramp.

Unit comes with safety bar to prevent possibility of cylinder falling forward as table moves from horizontal to vertical position. Limit switches will prevent unit from operating if safety bar is not in place. Can handle 10 5/8" Dia. by 68" tall (*cap included*) or scuba size cylinders.

FEATURES

- Safety bar with limit switch
- Programmable microprocessor directional control timer
- Urethane molded cylinder rollers (*doesn't leave marks on cylinders*)
- Fluorescent Orange for Safety
- Capability: Can roll cylinders from 4" to 10 5/8" Dia.
- Aluminum cylinder loading Ramp (Separate Option)
- Air Filter Lubricator

SPECIFICATIONS

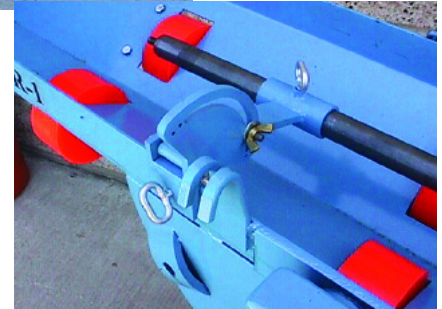
- Air requirements: 120 PSIG
Filtered and lubricated
- Dimensions: 80" long by 56" wide by 36" tall

ELECTRICAL OPTIONS

- 220V – 3 phase
- 220V – 1 phase
- 110V – 1 phase
- 440V – 3 phase



Single Cylinder Roller



Single Cylinder Roller

Part Number	Description
CYL-ROLLER-1-220V3	Single Cylinder Roller, 220V - 3 Phase
CYL-ROLLER-1-220V1	Single Cylinder Roller, 220V - 1 Phase
CYL-ROLLER-1-110V1	Single Cylinder Roller, 110V - 1 Phase
CYL-ROLLER-1-440V3	Single Cylinder Roller, 440V - 3 Phase

Two Cylinder Roller

Part Number	Description
CYL-ROLLER-2-220V3	Two Cylinder Roller, 220V - 3 Phase
CYL-ROLLER-2-220V1	Two Cylinder Roller, 220V - 1 Phase
CYL-ROLLER-2-110V1	Two Cylinder Roller, 110V - 1 Phase
CYL-ROLLER-2-440V3	Two Cylinder Roller, 440V - 3 Phase
CYL-ROLLER-2-RAMP	Ramp for the Two Cylinder Rollers

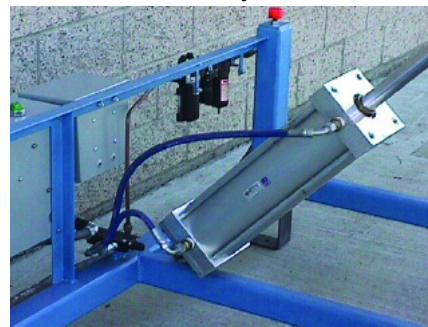
Four Cylinder Roller

Part Number	Description
CYL-ROLLER-4-220V3	Four Cylinder Roller, 220V - 3 Phase
CYL-ROLLER-4-220V1	Four Cylinder Roller, 220V - 1 Phase
CYL-ROLLER-4-110V1	Four Cylinder Roller, 110V - 1 Phase
CYL-ROLLER-4-440V3	Four Cylinder Roller, 440V - 3 Phase
CYL-ROLLER-4-RAMP	Ramp for the Four Cylinder Rollers

Six Cylinder Roller

Part Number	Description
CYL-ROLLER-6-220V3	Six Cylinder Roller, 220V - 3 Phase
CYL-ROLLER-6-220V1	Six Cylinder Roller, 220V - 1 Phase
CYL-ROLLER-6-110V1	Six Cylinder Roller, 110V - 1 Phase
CYL-ROLLER-6-440V3	Six Cylinder Roller, 440V - 3 Phase
CYL-ROLLER-6-RAMP	Ramp for the Six Cylinder Rollers

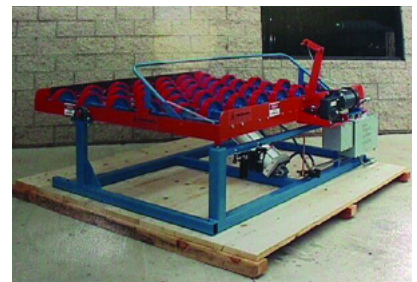
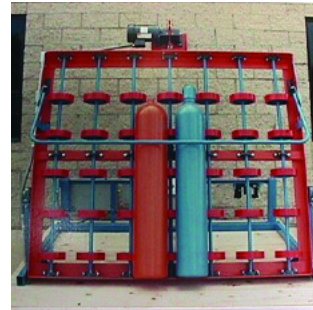
Two Cylinder Roller



Four Cylinder Roller



Six Cylinder Roller



VALVING MACHINE

FEATURES and OPTIONS

- Portable or base plate
- Right and left hand models
- Heavy duty locking casters
- Flexible in test area
- Base plate models
- Steel base plate (L= 48" W= 38" THK= 3/8")
- Single lever control
- Single lever controlled drive motor
- Instantaneous directional response
- Release lever – stops machine immediately
- Cylinder clamp
 - Tough urethane rubber
 - Fluorescent orange for safety
- Filtered, Lubricated and Regulated Air
- Pneumatic operated, Explosion proof

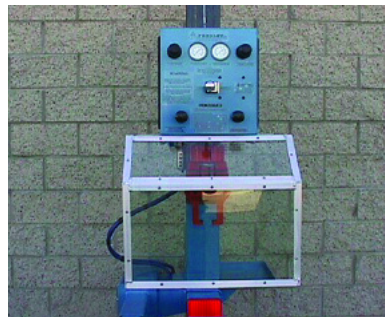
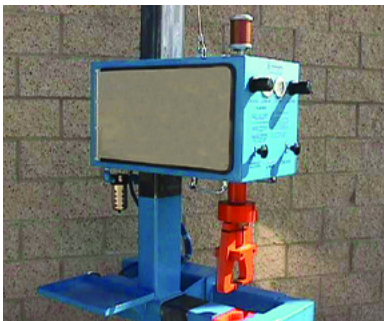
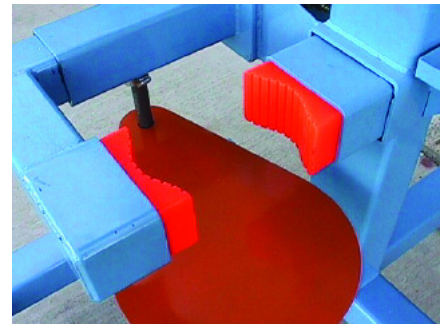
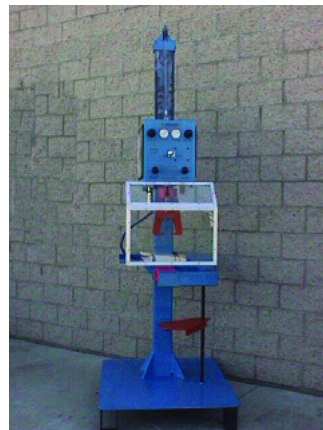
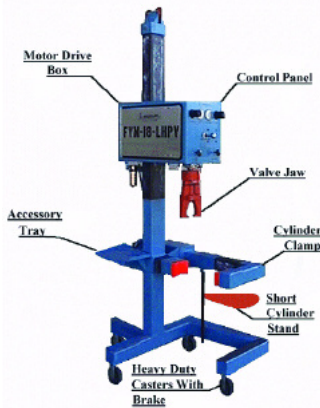
SPECIFICATIONS

- Dimensions: L= 48" W= 38" H= 104"
- Weight: 875 lbs. (Approx.)
- Crate Size: L=110" W=55" H=45"
- Shipping Weight: 1250 lbs.
- Maximum cylinder size: 3" to 18" diameter x 62" high
- Maximum clamping force: 3200 lbs.
(Fully adjustable)
- Maximum stall torque: 1000 ft./lbs. (Fully adjustable)
- Air requirements: 125 PSIG at 95 SCFM at maximum power

OPTIONS

- .5" thick polycarbonated protective shield
- Mobile unit
- Stationary unit
- Can be manufactured to operate in horizontal position

Part #	Description
VM-RLMB	Valving Machine, Right Load, Mobile Base
VM-LLMB	Valving Machine, Left Load, Mobile Base
VM-RLFB	Valving Machine, Right Load, Fixed Base
VM-LLFB	Valving Machine, Left Load, Fixed Base



CYLINDER UPENDERS

MANUAL ACETYLENE UPENDER

FEATURES

- Filtered and lubricated air
- Warranty: 2 years
- The manually operated control valve allows the operator to move the cylinder into any position from vertical to upside down and can stop at any point in between.
- No electrical components are used which eliminates the need for "Explosion Proofing".
- Used for inspection of foot rings and plugs on acetylene cylinders
- Pressure gauges show inlet and clamping
- Casters can be locked in position
- Has extended clamping arm for smaller cylinders



Manual Acetylene Upender

SPECIFICATIONS

for Part # **CYL-UPENDER-1-ACEY-M**

- Air requirements 110 PSIG.MIN. Filtered and lubricated air.
- Cylinder O.D. limits 6" to 18"
- Maximum cylinder weight limits 500 lbs.
- Warranty 2 years

Part #	Description
CYL-UPENDER-1-ACEY-M	Manual pneumatic single cylinder Acetylene Upender

AUTOMATIC COMPUTER CONTROLLED UPENDER

FEATURES

- Replaceable grips.
- Cylinders can vary in diameter, as machine is adjustable.
- Eliminates potential handling injuries typical of outdated methods for emptying cylinders and cleaning cylinders.
- Durable-Heavy duty Design
- Computer Keyboard on console is located at a user-friendly height.
- One touch, preprogrammed operation
- Extension to clamping arm for smaller cylinders
- Portable or stationary designs
- Adjustable Cylinder Clamps
 - Soft urethane
 - Florescent orange for safety
- Moveable paddle can be swung out for short cylinder application
- Quick disconnects on probes for fast turn around removal and reconnection
- The probe design fits all cylinder diameters so there is no need for several probes "one fits all"
- Short probes available for short cylinders
- Floor Mounting
- Safety features in control system components
- Shroud trim keeps control components from contamination.

SPECIFICATIONS

for Part

CYL-UPENDER-1-AWD
and
CYL-UPENDER-2-AWD

- Air requirements 110 PSIG
- Electrical Requirements: 110 volt, 220 volt 50/60 HZ
- Acceptable cylinder dimensions: 4"-18" inches in diameter, up to 60" tall
- Maximum acceptable cylinder weight: 500 lbs.



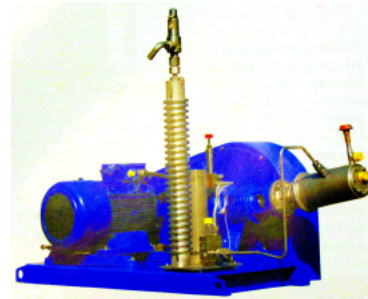
Part #	Description
CYL-UPENDER-1-AWD	Automatic computer controlled single cylinder Upender with wash and dry option
CYL-UPENDER-2-AWD	Automatic computer controlled dual cylinder Upender with wash and dry option

Cryo Pump Grease

- Cryostar Pumps
- ACD Cryo Pumps
- Bearings
- Krytox GPL-226 Cartridge
1.75 Pounds to a Cartridge



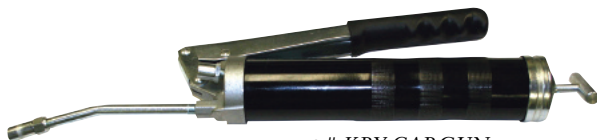
part # **KRY-GPL226CART**



General Maintenance

Oxygen Safe Grease with Anti-Corrosion Additive

Part #	Description	Size Container
KRY-GPL226CART	Grease Gun Cartridge	1.75 Lb.
KRY-CARGUN	Grease Gun H.D.	each



part # **KRY-CARGUN**

for Hot and Cold Ends of Pumps

DEWAR BUFFER/POLISHER

Fill Plant Tools

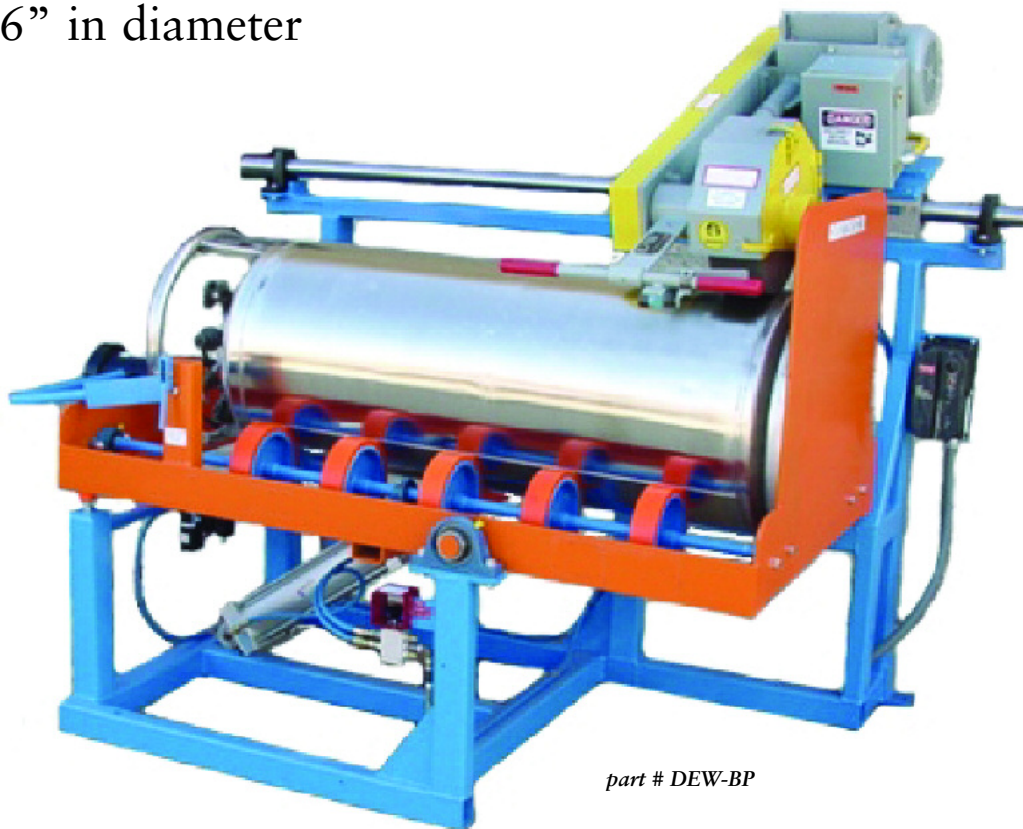
Section

7A

STAINLESS DEWAR BUFFER/POLISHER

For Dewar 18" to 26" in diameter

- Warranty: 2 years
- Cylinder Length 72" Max
- Cylinder Diameter 18"-26"
- Variable Speed Control
- Built-In Safety Interlocks
- Heavy Duty Linear Bearings



part # DEW-BP

Meeting the needs of our customers in the cylinder service industry, we have developed the Model DEW-BP cylinder buffer/polisher. Using our industry standard cylinder roller design, and incorporating a heavy-duty rotary buffer, we provide a quick and simple method of re-conditioning cylinder surfaces. Able to remove paint, labels, and minor surface irregularities, the DEW-BP allows the operator total control to the extent of surface renewal. With the ease of loading cylinders in the vertical position, a low friction linear bearing slide, safety bar and inter-locks, the DEW-BP will provide many years of trouble free service. For additional details and configurations please consult factory.

DIMENSIONS:

Length: 93" (236 cm)
Height: 66" (168 cm)
Width: 57" (145 cm)

WEIGHT:

1,200 lbs (545 kg)

SAFETY:

Eye Protection to be
Worn by Operator

AIR REQUIREMENTS:

Max 125 PSIG

ELECTRICAL REQUIREMENTS:

208-230/460 vac, 3 phase (Buffer)
110v, 1 phase (Cyl Roller)

COMPOUND VACUUM PUMPS

TUTHILL ROTARY PISTON COMPOUND VACUUM PUMPS

Model *VP-KC-15*

Features

- High pumping speed at pressures below 10 microns; much lower than attainable with single stage pumps
- Ultimate Vacuum: 0.2 microns (McLeod Gauge)
- Positive pressure lubrication assures operation at any pressure up to atmospheric pressure
- Adjustable gas ballast permits handling of condensable vapors
- No metal-to-metal contact in pumping chamber
- Unequalled durability, even in dirty applications

Specifications

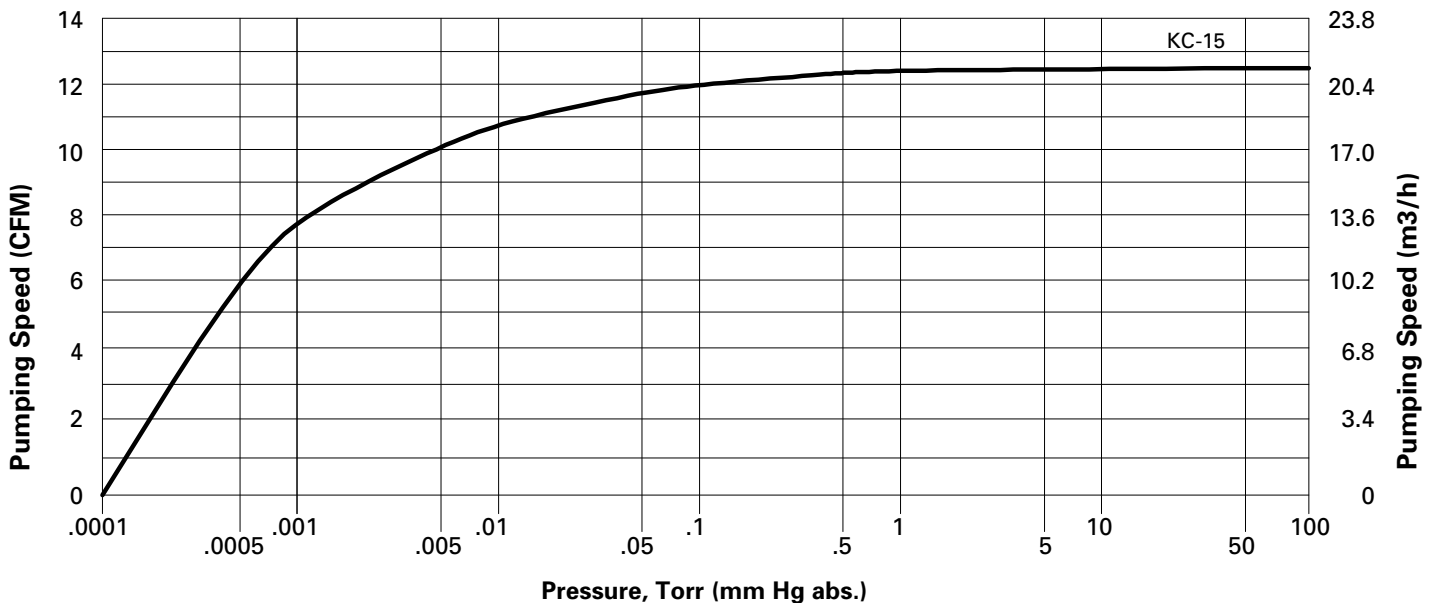
	<i>MODEL</i>	<i>VP-KC-15</i>
• Displacement at Rated RPM	CFM / m3/h	15 / 25.5
• Motor	HP / kW	1 / .75
• Pump RPM	RPM	571
• Oil Capacity	Quarts / Liters	3.0 / 2.84
• Pump Weight	Lbs. / kg	210 / 95
• Maximum Gas Ballast Flow	%	15
• Gas Ballast Pressure	Torr (mm Hg abs.) / mbar	.02 / .027
• Ultimate Pressure	Microns / Pascals (Pa)	.2 / .027
• Noise Level at 0.1 Torr (0.13 mbar)	dB(A)	75



Tuthill Rotary Piston Connections

Part #	Description
VP-KC-15-BELT	Belt Connection
VP-KC-15-DIRECT	Direct Connection

Typical Pumping Speed Curves



COMPOUND VACUUM PUMPS

TUTHILL ROTARY PISTON COMPOUND VACUUM PUMPS

Models *VP-KVC-21* & *VP-KVC-35*

Features

- High pumping speed at pressures below 10 microns; much lower than attainable with single stage pumps
- Ultimate Vacuum: 0.2 microns (McLeod Gauge)
- Positive pressure lubrication assures operation at any pressure up to atmospheric pressure
- No metal-to-metal contact in pumping chamber
- Unequalled durability, even in dirty applications
- Triplex piston design for quiet, vibration-free operation



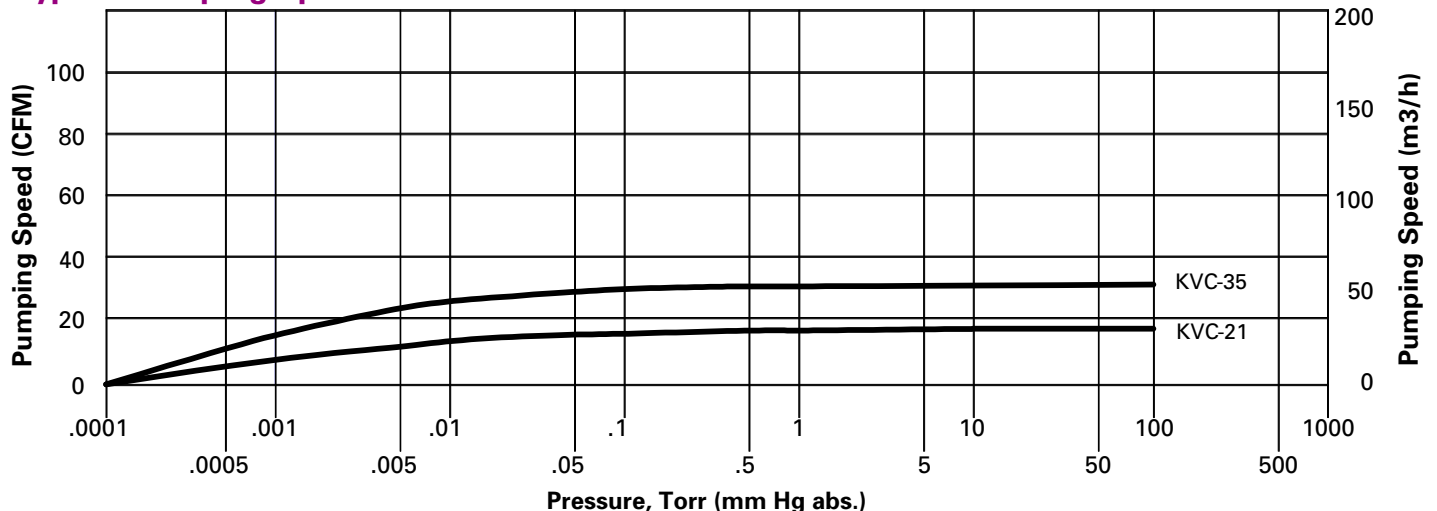
Specifications

	MODEL	VP-KVC-21	VP-KVC-35
• Displacement at Rated RPM	CFM / m ³ /h	21 / 36	35 / 59
• Motor	HP / kW	1.5 / 1.1	2 / 1.5
• Pump RPM	RPM	1725	1150
• Cooling Water Required	GPM / L/min	None	None
• Oil Capacity	Quarts / Liters	2.0 / 1.9	5.0 / 4.7
• Pump Weight	Lbs. / kg	170 / 77	355 / 161
• Maximum Gas Ballast Flow	%	10	10
• Gas Ballast Pressure	Torr (mm Hg abs.)	.020	.020
• Ultimate Pressure	Microns	.2	.2
• Noise Level at 0.1 Torr	dB(A)	72	70

Tuthill Rotary Piston Connections

Part #	Description
VP-KVC-21-BELT	Belt Connection
VP-KVC-21-DIRECT	Direct Connection
VP-KVC-35-BELT	Belt Connection
VP-KVC-35-DIRECT	Direct Connection

Typical Pumping Speed Curves



SINGLE STAGE VACUUM PUMPS

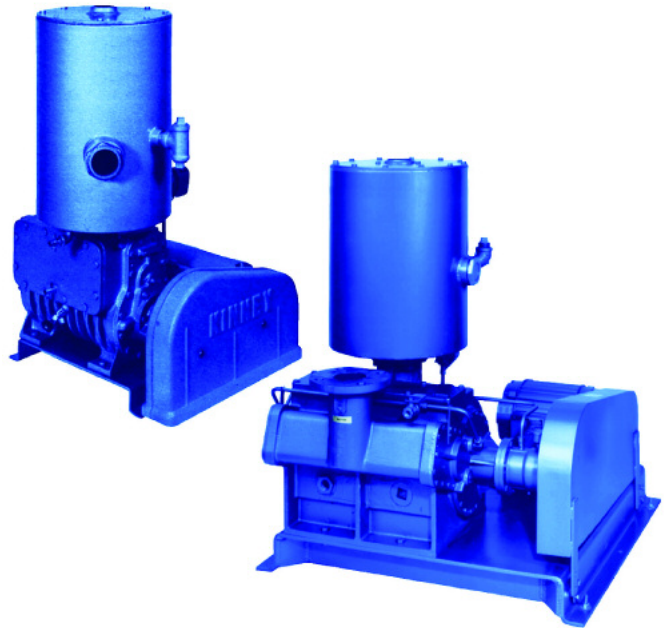
TUTHILL ROTARY PISTON SINGLE STAGE VACUUM PUMPS

Model *VP-KD-30*

has a single shaft and two sets of cams and pistons mounted 180 degrees apart operating in parallel

Features

- Absolute pressures down to the low micron range
- Full pumping speed down to 1 Torr
- Long-life operation due to no metal-to-metal contact in the pumping chamber
- High resistance to abrasion and corrosion
- No small orifices to plug up
- Includes integral oil mist eliminator
- Adjustable gas ballast permits handling of condensable vapors
- Designed to produce absolute pressures down to the low micron range, single stage rotary pumps are available in three sizes.



Tuthill Rotary Piston Single Stage Connections

Part #	Description
VP-KD-30-BELT	Belt Connection
VP-KD-30-DIRECT	Direct Connection

Specifications:

Model	Capacity CFM	HP	RPM	Oil Capacity Gal / Ltr	Water (80°F) GPM/ LPM	Weight Lbs / Kg	Gas Ballast Flow (Max)	Blank-off (5% Gas) Microns	Ultimate Pressure Microns
VP-KD-30	33	1 1/2	571	1 3.78	Aircooled	200 91	8%	1.5	10

*Air-cooling Optional

Typical Pumping Speed Curves

