

M-D Pneumatics®

Rotary Positive Displacement Blowers

M-D Pneumatics® Blower Solutions



Rotary Positive Displacement Blowers

CP Series

Our M-D Pneumatics rotary positive displacement blowers combine rugged performance with flexibility as drop-in replacements to fit a variety of applications. CP Series blowers can be field converted from horizontal to vertical flow, or vice versa, without any special tools or additional components. CP Series rotary blowers are designed to be interchangeable with equivalent sizes of Roots Universal RAI® and many Sutorbilt® Legend® blowers.

Constant Protection: Standard on all models, triple lip seals extend the life of the seal and have been shown to provide longer bearing life. Magnetic drain plugs keep particles from moving through bearings and seals.

Stronger Bearings: All CP Series blowers include double-row ball bearings at the gear end, stronger than single-row ball bearings offered by other manufacturers. Drive shaft bearing is cylindrical roller type for additional strength against side loading from V-belt drives. CP Series bearing life is as much as 50% greater than models offered by other manufacturers.

Helical Gearing: CP Series blowers are timed with precision helical gears keyed to the rotor shafts, not taper-fit spur gears as offered by other manufacturers which have greater backlash, can slip and lose timing. Helical gears are also quieter, reducing mechanical noise.

Metric Availability: CP Series blowers are available with metric drive shaft and process connections.

Lubrication: Many CP Series models include dual oil splash lubrication at both the gear end and drive end of the blower. Splash lubrication provides for longer bearing and seal life through improved heat dissipation versus grease lubrication.

Reduced Noise Versions Available: CP Series standard models feature a bi-lobe design with integral shafts. Many models are available with tri-lobe rotors and a specially tuned housing to reduce blower noise.

Product Key

16	AIR	GAS*	15
Vacuum Level "Hg vac	Process Medium		Pressure Level PSI



16	AIR	15
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Standard Models/6

Model	CFM / m³/h	HP / kW
2002	8-64 / 17-109	1-5 / 1-4
2004	24-137 / 41-233	1-6 / 1-4
3002	22-136 / 37-231	4-12 / 1-9
3003	30-181 / 51-308	1-12 / 1-9
3006	60-310 / 102-527	1-12 / 1-9
4002	18-184 / 31-313	1-15 / 1-11
4005	40-373 / 68-634	1-24 / 1-18
4007	54-492 / 92-836	1-18 / 1-19
5003	41-324 / 70-550	1-25 / 1-19
5006	68-543 / 116-923	1-5 / 1-4
5009	130-824 / 221-1400	1-6 / 1-4
6005	91-497 / 155-844	4-12 / 1-9
6008	146-798 / 248-1356	1-12 / 1-9
6015	273-1494 / 464-2538	1-12 / 1-9
7006	171-734 / 291-1247	1-15 / 1-11
7011	322-1356 / 547-2304	1-24 / 1-18
7018	560-2240 / 951-3806	1-18 / 1-19

Models with Splash Lubrication/7

Model	CFM / m³/h	HP / kW
3002	22-136 / 37-231	4-12 / 3-9
3003	30-181 / 51-308	2-15 / 9-11
3006	60-310 / 102-527	5-30 / 4-22
4002	18-184 / 31-313	2-15 / 9-11
4005	40-373 / 68-634	3-32 / 2-24
4007	54-492 / 92-836	4-43 / 3-32
5003	41-324 / 70-550	3-29 / 2-22
5006	68-543 / 116-923	4-50 / 3-37
5009	130-824 / 221-1400	6-49 / 4-37
6005	91-497 / 155-844	5-47 / 4-35
6008	146-798 / 248-1356	7-47 / 5-35
6015	273-1494 / 464-2538	14-54 / 10-40

Typical Applications

- Pneumatic Conveying
- Vacuum Excavation
- Dust Collection
- Carpet Cleaning
- Air Sparging
- Dairy Milking
- Wastewater Aeration

Equalizer RM

The M-D Pneumatics EQUALIZER RM rotary positive displacement blower offers many distinct advantages, such as a one-piece housing in a compact design, helical gearing to reduce noise, 4.5" & 6" gear diameters, bi-rotational rotors with integrally cast shafts, and field convertible flow configuration.

Helical Gearing: Blowers are timed with precision helical gears which reduces backlash and mechanical noise as compared to spur gears offered by others. Keyed interference fit reduces the risk of slippage of the gear on the shaft and loss of timing, one of the leading causes of blower failure.

One-Piece Housing: Blower includes a housing constructed of a single piece of precision machined cast iron, rather than a two-piece housing which is subject to misalignment and loss of operating clearances.

Rotors with Integral Shafts: Blowers include precision machined and dynamically balanced ductile iron rotors with large, integrally cast shafts to provide a single unitized rotor to prevent clash of the impeller moving on its shaft.

Metric Availability: Blowers are available with metric drive shaft and process connections.



Model	CFM / m ³ /h	HP / kW
4606	85-645 / 145-1097	2-58 / 2-43
4609	129-946 / 219-1608	2-82 / 2-61
4612	173-1253 / 294-2130	3-90 / 2-67
6012	350-1667 / 595-2834	4-119 / 3-89
6016	494-2232 / 840-3794	5-157 / 4-117
6024	830-3358 / 1411-5709	7-157 / 5-117

Typical Applications

- Pneumatic Conveying
- Dairy Milking
- Carpet Cleaning
- Compost Aeration
- Dust Collection
- Air Sparging

17

AIR

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Equalizer DF

The M-D Pneumatics Equalizer DF blower is designed to be interchangeable with equivalent models from competing manufacturers. This blower offers distinct advantages such as a one-piece housing in a compact design, helical gearing to reduce noise, higher pressure capability (18 PSIG on most models), drop-in replacement, and field convertible flow configuration simply by rearranging oil breathers, drains, and changing the mounting feet.

Higher Pressure Capability: Most models are rated to 18 PSIG discharge pressure. This provides you with an increased level of security due to built-in safety factors.

Designed for True, Drop-in Replacement: Dimensionally interchangeable with competing models, even to the point of matching the port connector bolt patterns.

Helical Gearing: Helical gearing reduces backlash and mechanical noise as compared to spur gears offered by other manufacturers.

Rotors with Integral Shafts: Precision machined and dynamically balanced ductile iron rotors with large, integrally cast shafts to provide single, unitized rotors to prevent clash as a result of the impeller moving on its shaft.

Positive End Clearances: End clearances are positively established (versus floating) at the blower gear end, eliminating the risk of shifting end clearances that reduce unnecessary rotor and end plate wear. This design improves flow performance and extends overall blower life.

Polished Sealing Surfaces: All shaft surfaces in contact with sealing members are polished to reduce seal wear and risk of leakage.



Model	CFM / m ³ /h	HP / kW
4504	39-416 / 66-707	2-39 / 1-29
4506	82-619 / 139-1052	2-56 / 1-42
4509	125-919 / 212-1562	2-80 / 2-59
4512	169-1226 / 287-2083	3-88 / 2-66

Typical Applications

- Pneumatic Conveying
- Dairy Milking
- Carpet Cleaning
- Compost Aeration
- Dust Collection
- Air Sparging

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AIR

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PD Plus

The M-D Pneumatics PD Plus is a long-established line of premium, high-pressure industrial blowers with heavy-duty models ranging from 3.25" to 12" gear diameter and 2.5" to 48" rotor length. These blowers are renowned for their quality, dependability, and outstanding performance. They are offered in air and gas configurations rated up to 18 PSI / 17" Hg vac.



17 AIR GAS* 18

Vertical & Horizontal Air Flow: This series has wide applications in pneumatic conveying, wastewater treatment, and the general process industry where high pressure, high volume air is required. Seal areas are vented to atmosphere to relieve process pressure against the internal lip seals, and to provide oil-free air.

Vertical & Horizontal Single-Envelope Gas Service: This series is utilized in such applications as closed loop pneumatic conveying, process gas handling, or elevated pressure applications up to 100 PSIG discharge. Vent openings are tapped and plugged to prevent gas leakage. These fittings can also accept an inert gas purge for positive containment of the process gas.

Vertical & Horizontal Double-Envelope Gas Service: This series is built to laboratory standards where virtually complete sealing is required. In addition to the features shown on the above series, the drive shaft is mechanically sealed and the oil sumps are plugged to provide an even higher degree of leakage protection.

Special Materials: Standard construction materials include cast iron housing, end plates, end covers with port fittings, and ductile iron rotors and shafts, while special materials available include stainless steel, carbon steel, or ductile iron models. Bi-Protec® is available as a Nickel/Armloy® special coating.

Special Testing: ASME PTC-9 (1 PSIG slip method), hydrostatic testing to 150 PSIG (10.35 bar g), pressure gas testing to 100 PSIG (6.9 bar g), and seal leakage testing.

Optional Cooling Coils: All vertical flow 5500 PD PLUS models are available with cooling coils to provide cooling of lubricating oil with less than 0.5 GPM cooling water for high performance applications.

Model	CFM / m ³ /h	HP / kW
3202	8-90 / 14-153	1-9 / 1-6
3204	12-146 / 20-248	1-13 / 1-10
3206	21-220 / 36-374	1-18 / 1-3
3210	37-368 / 63-626	1-28 / 1-21
4009	49-497 / 83-845	2-45 / 1-34
4012	87-682 / 148-1159	2-51 / 2-38
5507	99-794 / 168-1350	3-70 / 2-52
5511	152-1171 / 258-1991	3-96 / 2-62
5514	490-1522 / 833-2587	4-95 / 3-71
5518	350-1962 / 596-3335	4-94 / 3-70
7010	349-1690 / 593-2873	4-143 / 3-107
7013	445-2148 / 757-3652	6-183 / 5-136

Model	CFM / m ³ /h	HP / kW
7017	601-2807 / 1022-4772	7-226 / 5-169
7021	783-3478 / 1331-5913	8-244 / 6-182
7026	1052-4314 / 1788-7334	10-242 / 1-180
9016	354-3028 / 602-5148	6-215 / 4-160
9020	465-3986 / 791-6776	7-280 / 5-209
9027	620-5315 / 1054-9036	8-371 / 6-276
1215	284-3764 / 483-6399	6-271 / 5-202
1224	494-6036 / 840-10261	9-427 / 6-318
1230	618-7546 / 1051-12828	10-496 / 8-370
1236	771-9065 / 1311-15411	12-385 / 9-287
1248	1304-9273 / 2217-15764	15-267 / 11-199

Typical Applications

- Pneumatic Conveying
- Steam Compression
- Vapor Recovery
- Soil Vapor Extraction
- Process Gas Boosting

Qx

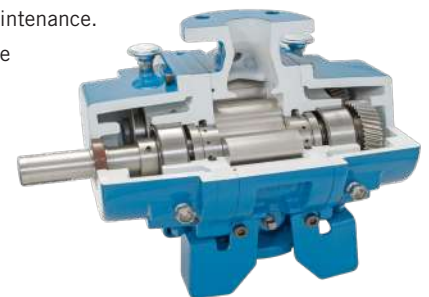
The M-D Pneumatics Qx is a high pressure, low noise industrial blower that provides high efficiency at high pressure and vacuum. Its bi-direction, tri-lobe rotor design offers reduced pulsation and lower noise levels while its large integral shaft rotors prevent loosening over time.

Helical Gearing: Qx blowers utilize precision helical gears, keyed to the rotor shafts. Helical gears are quieter reducing mechanical noise.

Stronger Bearings: QX has larger bearings than any other blower in same gear sizes which can lead to longer life, offering L10 bearing life of up to 200,000 hours. They include double-ball bearings on the timing gear end. For additional strength, single roller bearings are used on the drive shaft end of the machine.

Lubrication: Qx blowers have oil lubrication on both ends with easy to view sight glasses allowing quick maintenance.

Seals: Qx blowers are fitted as standard with piston ring labyrinth process/oil seals. Piston ring seals provide high efficiency, long life and reliability. The oil chamber is vented to atmosphere providing oil-free air.



17 AIR 18

Model	CFM / m ³ /h	HP / kW
3203	17-164 / 29-279	2-18 / 2-14
3205	21-255 / 36-433	3-27 / 2-20
3208	36-413 / 54-702	3-41 / 2-31
4606	98-540 / 166-918	4-42 / 3-31
4610	158-897 / 268-1524	7-67 / 5-50
6009	286-1059 / 486-1800	10-89 / 8-67
6015	460-1766 / 782-3002	16-176 / 12-131

Typical Applications

- Pneumatic Conveying
- Bulk Unloading/Loading
- Wastewater Aeration
- Compost Aeration
- Dust Collection

Transport Blowers

T855 | T1055

For pneumatic conveying of products, the M-D Pneumatics standard dry bulk transport blowers are proudly made in the USA with rugged construction that provides solid, lasting performance. They are able to unload a variety of products from fine powders to food products to pebbles.

Quiet: Transport blowers are engineered with built-in silencing chambers for noise reduction.

Capability: T855 & T1055 models include oil tanks at both ends, broad flow capabilities, large drive shaft and bearings, and up to 20 psi capability.

IP69K Rated Breather: Industry-leading breather designed to withstand high pressure cleaning to keep water out of oil.

Longest Bearing Life: The M-D Pneumatics design with larger bearings than competitive brands delivers a more reliable machine with a longer life cycle. The bearing load rating is significantly higher than the closest competitor, resulting in hundreds of dollars saved in maintenance costs over time.

Simple Design: The T855/T1055 design has fewer sealing surfaces which means there are fewer parts, fewer leak paths, and fewer areas that could allow salt or debris to collect and corrode.

Fewer Oil Changes: The largest transport blower oil sumps belong to M-D Pneumatics. Gain more efficiency with fewer oil changes and spend more time hauling. The larger sumps also mean better cooling than previous models.



T855 Specifications

Air Flow: 250-1000 CFM
Pressure: 20 psi continuous
Vacuum: 17" Hg continuous
RPM: 1000 - 3000
Blower Weight: 376 lbs
Dimensions: 22.7"L x 12.13"H x 17.97"D

T1055 Specifications

Air Flow: 450-1300 CFM
Pressure: 18 psi continuous
Vacuum: 17" Hg continuous
RPM: 1450 - 3000
Blower Weight: 446 lbs
Dimensions: 25.2"L x 12.13"H x 17.97"D

T855 with RS Advanced Technology™ | T855RS

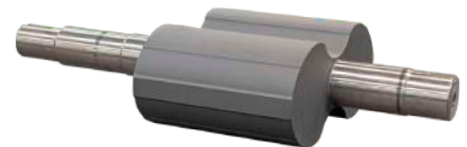
M-D Pneumatics' new T855 transport blower with RS Advanced Technology offers the most expansive range of flow than any blower in the transport market when it comes to pneumatic conveying of product. Able to operate at slower speeds while moving more product than its predecessors, the T855RS can reduce offload times by as much as 25%*. This results in significantly reduced fuel consumption, while offering all of the same enhanced features as our standard T855 transport blower.

Patent Pending Technology: Equipped with RS Advanced Technology, a patent pending, specialized coating applied to the rotors, the T855RS enhancement drastically reduces "slip", or air that is inefficiently trapped and recirculated in the blower rather than being pushed out through the discharge. With the T855RS, more discharge air is pushed out while cooler inlet air is being taken in, resulting in less torque required, more "useful" air being put to work, lower temperatures, and quieter operation.

Optional Adaptor Plate: The T855RS runs at similar speeds as other manufacturers' models, eliminating the need to change PTO. Our exclusive adaptor plate allows you to replace screw-style models and still use your existing bracket, significantly reducing maintenance downtime and costing less upfront than installing another screw-style blower. Available as a stand-alone item.

* Savings per truck, based on dry cement hauling field tests performed in 2020

RS Advanced Technology
Patent pending on rotor lobes for reduced slip



T855RS Specifications

Air Flow: 121-1010 CFM
Pressure: 20 psi continuous
Vacuum: 18" Hg continuous
RPM: 1000 - 3000
Blower Weight: 376 lbs
Dimensions: 22.7"L x 12.13"H x 17.97"D



Optional lightweight aluminum adaptor plate



Blower Packages

MD Blower Packages

Based on decades of building high quality blowers, M-D Pneumatics is proud to introduce the new MD compact rotary blower package. MD open (non-enclosure) pressure packages are a dependable and economical high-volume air source for many applications such as pneumatic conveying and wastewater aeration. MD blower packages offer many distinct advantages.

Shorter Delivery Timeframe: An efficient approach to manufacturing means no longer having to wait many weeks or months to receive your blower package. By standardizing open blower packages for common operating conditions, many MD blower packages can be quickly assembled and shipped.

Mounting Base with Integral Silencer: We now offer an integrated discharge silencer / base. Automatic belt tensioning means no downtime to tighten and re-tighten belts and minimizes the chances of unplanned downtime due to belt breakage.

Factory Built and Warranted: MD blower packages are built in our manufacturing facility in Springfield, Missouri, USA under rigorous quality standards. All rotary blower packages are covered by a factory warranty of 18 months after installation, not to exceed 24 months after shipment.

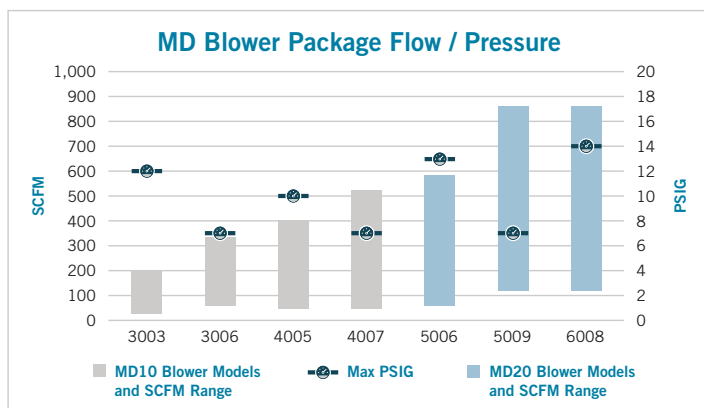


Typical Applications

- Pneumatic Conveying
- Wastewater Aeration
- Dairy Milking
- Air Sparging
- Compost Aeration

Optional Accessories

- Unloading valve
- Swing check valve
- Temperature gauge
- Single point oil drain kit



QUBE™ Blower Packages

Featuring the Qx blower, QUBE is the perfect, quiet solution for major industries including pneumatic conveying, wastewater aeration, plastics, cement and more.

- Maintenance-friendly noise enclosure with easy access
 - » Quiet operation
 - » Shaft-driven cooling fan does not require additional electrical service
 - » Instrument panel
- Compact footprint
- Oil drain/level gauge accessible from front for easy oil change
- Mounting base includes integral fork truck pockets for easy transportation and positioning
- Automatic V-belt tensioning system with visual indicator
- Factory assembled and factory warranted including:
 - » Electric motor
 - » Discharge check valve
 - » Relief valve
 - » Process gauges
 - » Optional accessories and controls available
 - » ANSI or DIN connections
 - » NEMA or IEC motor frames



Typical Applications

- Pneumatic Conveying
- Wastewater Aeration
- Vacuum Cleaning
- Mobile Vacuum Waste Removal
- Dust Collection
- Compost Aeration
- Dairy Milking
- Air Sparging
- Bulk Unloading/Loading
- Fluidization/Agitation of Dense Powders
- High Performance Industrial Applications

Engineered Solutions

For special applications requiring engineered blower packages, we can design and manufacture specifically to your requirements. Blower design, materials of construction, seals, and accessories can be selected to ensure performance to meet all operating conditions of your application. Testing and certification are available.

- Custom blower packages designed to meet your specific requirements
- Flow ranges to 9000 CFM (15300 m³/h)
- Approval drawings provided
- Multi-stage blower packages available for high pressure operation
- Control systems for automatic operation available

Typical Applications

- Process Gas Handling
- Vapor Recovery
- Steam Compression
- Process Gas Boosting
- High Performance Industrial Applications

Customer-specified instrumentation and controls



M-D Pneumatics can supply custom packages with two-stage blowers, high vacuum boosters, liquid injection systems, plus much more.

Single-Source Factory Warranty

Because we design, engineer and build our own blower packages, we warranty the entire package, including its components.

VBXpert Vacuum & Blower Sizing Tool

Gain access to the most useful tool available for blower sizing and selection! This easy-to-use interface prompts you to plug in technical specifications for your application and quickly calculates the best M-D Pneumatics product for you. Find out more at www.mdpneumatics.com.

Service & Repair

The **M-D Pneumatics CARE Center** in Springfield, Missouri, USA is here to help with start-up assistance, repair and warranty work, and remanufactured product sales. Call 1-800-825-6937 to be connected to a M-D Pneumatics CARE technician. M-D Pneumatics has a network of authorized CARE Centers offering local service to customers. All centers are staffed with factory-trained personnel to ensure that your equipment performs to factory specifications. A listing of authorized M-D Pneumatics CARE Centers is available at www.mdpneumatics.com.



M-D Pneumatics®

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