

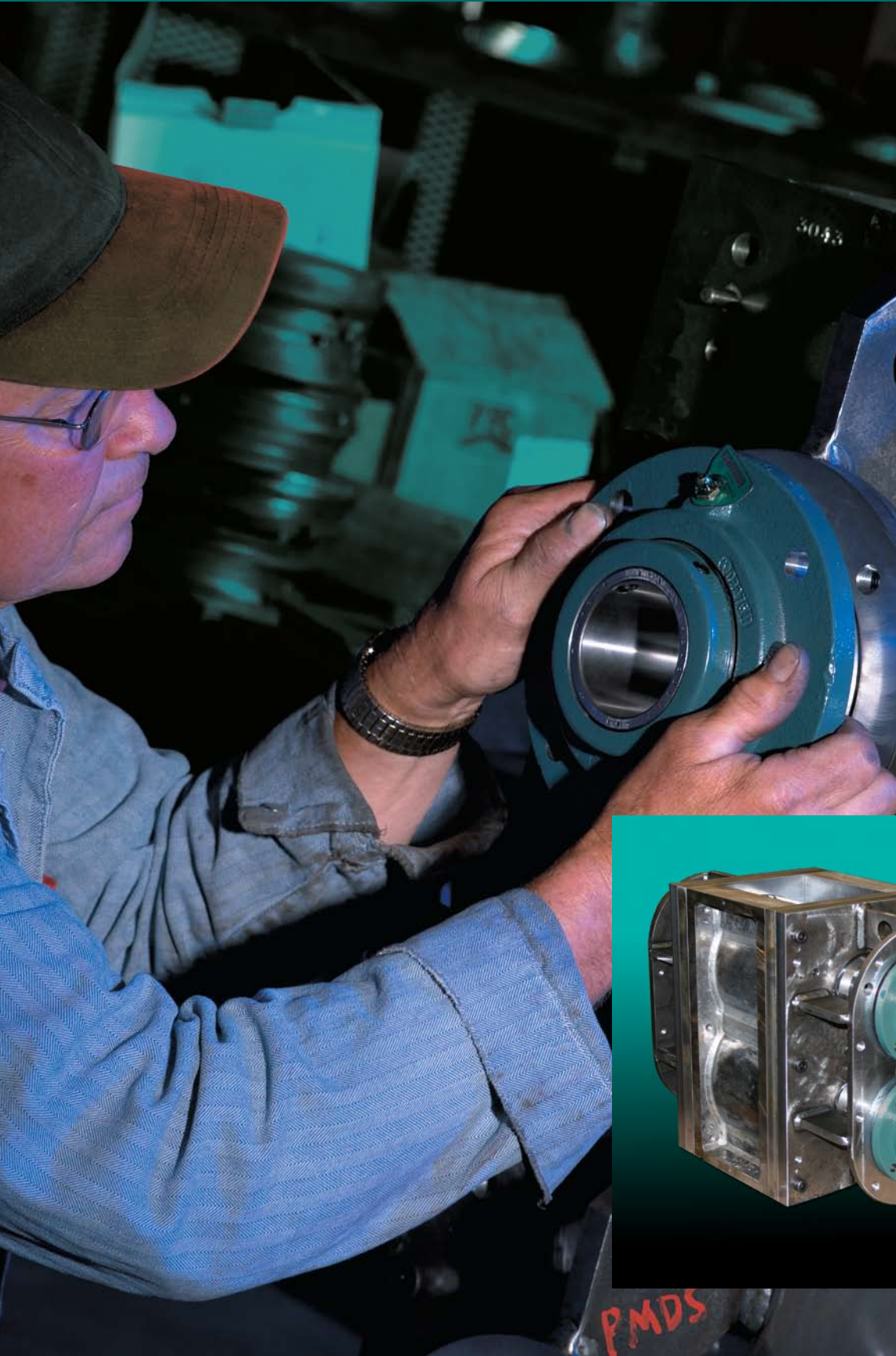
PMDS DOUBLE-ROTOR VALVE

BUILT PRECISELY FOR MAXIMUM UPTIME™



PRECISION

PRECISION MACHINE & MANUFACTURING, INC.



Designed to overcome your most troublesome material handling problems: corrosives, abrasives, and adherents.

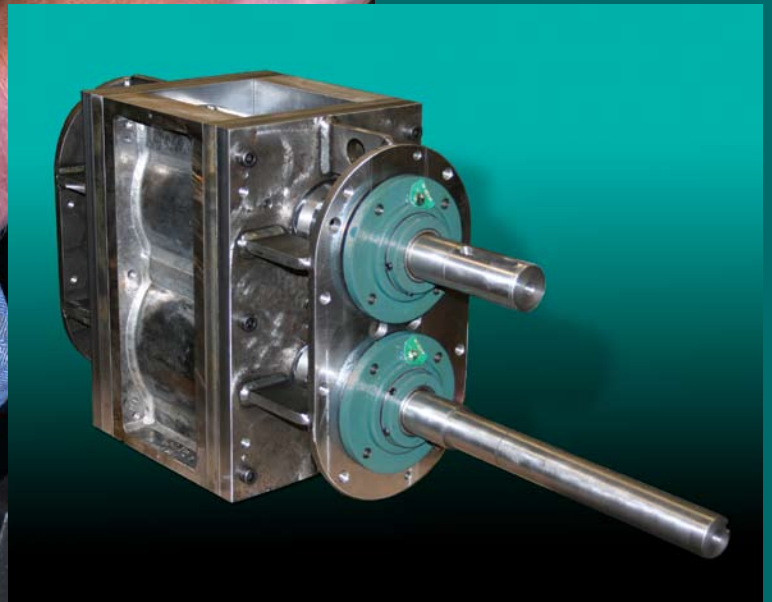
Self-Cleaning

Durable, Reliable, Adaptable

Rebuildable on site

Available as:

- Standard-Duty
- Severe-Duty



SOLVE YOUR STICKEST MATERIAL HANDLING PROBLEMS WITH PRECISION'S SELF-CLEANING, DOUBLE-ROTOR VALVE.

THE MOST ABRASIVE, CORROSIVE, AND STICKY MATERIALS LOSE THEIR HOLD ON PRODUCTIVITY WITH EVERY TURN OF OUR DOUBLE ROTOR VALVE.

Problem bulk materials will pack up, wear down, and eat up rotary valves.

Finding a long-lasting metering device to properly handle these materials so they pass through freely has been a problem for many companies, until now.

If you want a year of uptime, cast out cast valves, dump your double-dumpers, and install a self-cleaning, double-rotor valve from Precision. The Precision double-rotor, self-cleaning rotary valve, or PMDS is modular, not cast, and precisely engineered in the same manner as our unique PMV® modular rotary valve, introduced by Precision 20 years ago to maximize productivity. The PMDS has two rotors; a six-vane, closed-end rotor and a second rotor which is synchronized and gear-driven to scrape the primary rotor clean on each revolution, eliminating product packing. The PMDS' primary rotor has rounded pockets, too, making clean out easy. To deliver maximum productivity and uptime, the PMDS Rotary Valve is machined to our uncompromising tight-tolerances. It is durable, dependable, adaptable – and it can be rebuilt on-site by your millwright.

The PMDS combination of machined modularity, hardened alloys, and self-cleaning, dual-rotor design solves the toughest problems associated with abrasive powders such as cement, corrosive chemicals such as dry acids, and sticky materials such as lignite coal.

CUT LINE DOWNTIME TO 2 HOURS

Unlike cast rotary valves, the PMDS is a completely bolt-together unit. Individual, interchangeable components make ease of service and repair unparalleled. Simply remove a few bolts, replace the worn piece, and re-bolt. This includes the rotor, wear plates and even the barrel sides, which can be inverted and switched around to quadruple PMDS functional life. Pieces are dowel pinned for alignment so re-bolting is easy. An optional knife gate assembly permits service with the valve in position on the line.

ROBUST AND BUILT TO LAST

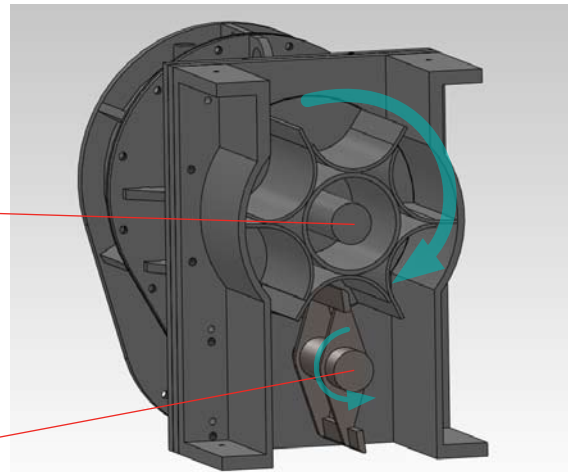
The PMV thrives in the harshest industrial environments handling the most abusive materials. Made from a hardening alloy, it's ready for severe duty. The barrel sides and rotor are precision machined to three-decimal place tolerances. The barrel sides and end wear plates may be coated with RW-90, exclusively formulated for Precision Machine, to extend life with superior wear protection. Piloted, flanged roller bearings ensure longer life and withstand radial thrust loading. High-temperature paint protects the exterior.

TWO ROTORS

The PMDS has two rotors rotating in opposite directions.

A six-vane, closed-end rotor.

A second rotor is synchronized and gear-driven to scrape the primary rotor clean on each revolution, eliminating product packing.



PMDS SELECTION GUIDE

MODELS TO FIT YOUR APPLICATION, MATERIAL, AND GOALS PRECISELY.

The PMDS is manufactured in standard (mild steel) or severe duty (500 Brinell alloy) models. Optionally, it can be manufactured from stainless steel.

All parts in the PMDS are interchangeable within the same size unit. You inventory a minimum of spare parts, not back-up valves.

STANDARD DUTY

The PMDS rotary valve is available in a Standard Duty model of mild steel or stainless steel for less demanding applications in agriculture, mining, paper, and wood products industries.

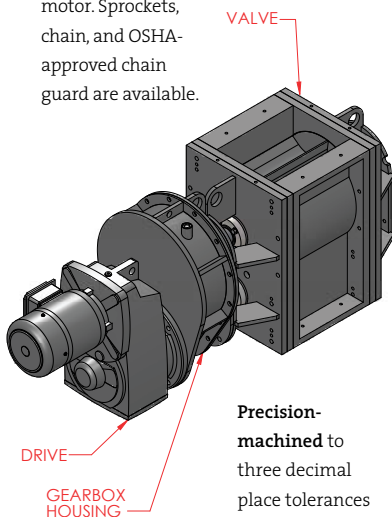
SEVERE DUTY

A 500 Brinell hardening alloy makes up the barrel sides and rotor. The barrel sides and end wear plates are coated with RW-90 to extend life. RW-90, exclusively formulated for Precision Machine, is chrome-like in appearance and hardness, but has superior wear characteristics compared to chrome.

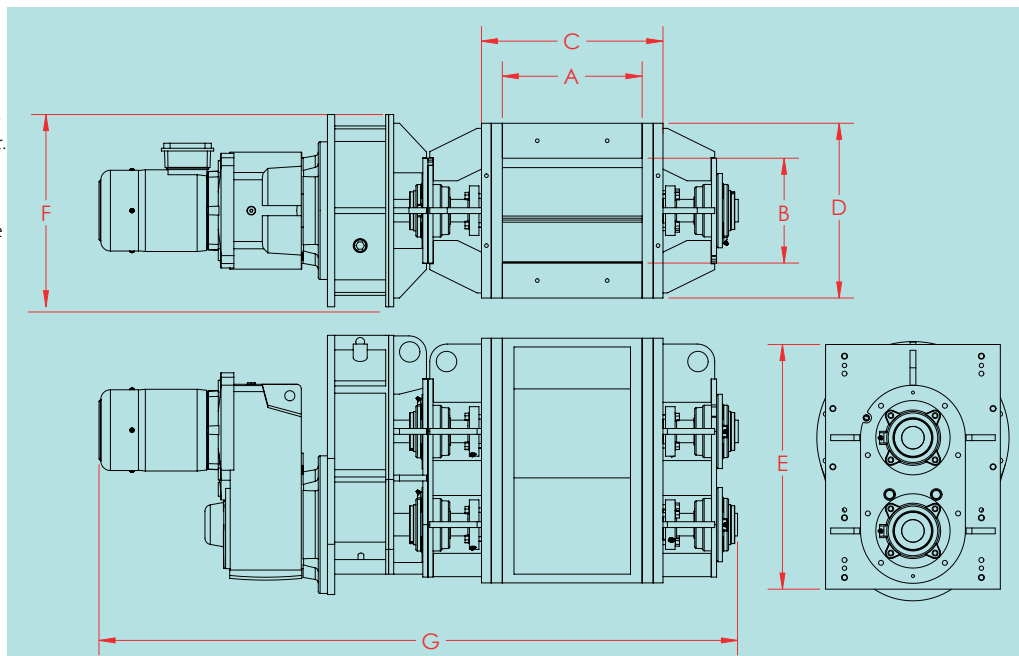
CHOOSE THE CAPACITY IN CUBIC FEET PER ROTATION THAT'S RIGHT FOR YOUR APPLICATION.

Custom inlet and discharge transitions allow a PMDS to fit any existing system. The sides of the unit are drilled to allow 3 or 9 o'clock drive-mounting positions. Shaft-mounted drives are available with motor. Sprockets, chain, and OSHA-approved chain guard are available.

The standard reducer package is a shaft mount gear motor with an inverter duty motor. Other drive options are available. Please contact us for information.



Precision-machined to three decimal place tolerances to maintain efficiency unmatched in the industry.



CAPACITY - POWER - DIMENSIONS

SIZE	CFR	HP	MAX-RPM	A	B	C	D	E	F	G
PMDS-8	0.14	1	48	8.00	6.50	11.875	11.00	17.00	14.50	51.00
PMDS-10	0.30	1.5	48	10.00	7.00	13.75	12.00	18.00	13.75	46.50
PMDS-12	0.50	2	32	12.00	9.00	15.50	15.00	21.00	16.50	54.75
PMDS-14	0.90	2	30	14.00	9.625	18.00	18.00	24.00	16.50	59.50
PMDS-16	1.5	2	25	16.00	12.00	20.75	20.00	28.00	22.00	73.00
PMDS-20	3.0	5	22	20.00	20.375	24.00	26.00	36.00	27.50	89.00

PRECISION MACHINE & MANUFACTURING, INC.

Founded in 1977, Precision Machine & Manufacturing, Inc. has grown steadily into a modern, complete OEM facility. Today, Precision Machine is recognized as one of the nation's leading designers and manufacturers of rotary valves, rotary feeders and screw conveyor material handling systems and components that deliver maximum uptime to its customers.

Precision Machine's products are designed and fabricated in the USA using the latest CNC and robotic equipment to handle virtually any dry, granular or powdery material. Precision's tight tolerances and high quality construction materials and finishes ensure maximum uptime, especially for customers handling abrasive substances such as fly ash, coal, coke, volcanic cinders, diatomaceous earth and pebble lime.

PRECISION PRODUCTS OF UNMATCHED VALUE

ROTARY VALVES The company's flagship product, the PMV® modular rotary valve, is unique, heavy-duty and precision-built, using modular construction instead of a cast housing. Machined to the tightest tolerances, the PMV modular rotary valve operates more efficiently for longer periods. Worn parts are simply unbolted and inverted or replaced enabling the PMV to be rebuilt in place, cutting downtime and extending useful life to over four times the life of cast valves.

FEEDERS Precision Machine's rotary feeders are precisely engineered with heavier barrels and can be rebuilt many times before needing replacement. The rotor blades are hard surfaced to give extended life, and the barrel material can be manufactured from mild steel, stainless steel or alloy steel up to 500 Brinell to meet harsh application requirements.

SCREW CONVEYORS Precision manufactures its screws to any specified size using virtually any commercially available material. Standard screw configurations include variable pitch, tapered flights, cut flights, screws with integrated mixing paddles, and ribbon screws. The company is the leader in custom screws for challenging applications.

CUSTOM PRODUCTS The company's innovative engineering department transforms customer ideas into new long-lasting, hard-working material handling products for special needs – all designed to increase throughput, improve efficiency, and maximize uptime.

BUILT PRECISELY FOR MAXIMUM UPTIME™

There are rotary valves, feeders, or screw conveyors that are priced less than Precision, but none that make you more efficient, more productive, or more profitable. For moving virtually any dry, granular or powdery material smoothly in measured amounts, nothing performs better. All designs are available in left- or right-hand flow directions. All machining, welding, and manufacturing services are performed in the USA.

We've been designing and manufacturing smarter products of unmatched value for over 30 years. Our innovative engineering department and skilled craftspeople work with customers to create unique solutions that give them a competitive edge by increasing throughput, improving efficiency, and maximizing uptime. Are you pushing productivity? We can help. Call us.

For more information or a quote,
call toll free 1-800-722-9841
or email sales@premach.com.

SERVING MATERIALS HANDLING MARKETS

The company works closely with biomass power cogeneration, mining, cement, chemical, wood products and pharmaceutical customers throughout North America to create unique solutions that maximize uptime and handling efficiency in order to give customers a competitive edge in their markets.



PRECISION

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PMV® MODULAR ROTARY VALVES



ROTARY FEEDERS



SCREW CONVEYORS



CUSTOM MACHINING
& FABRICATION