



**PRECISION**  
PRECISION MACHINE & MANUFACTURING, INC.

# Cement

**EXTREME-DUTY BULK MATERIAL HANDLING**



**Extreme-Duty Bulk  
Material Handling**



## **Made in the USA**

Easy communications and fast delivery

## **Focused on Solutions**

Flexible and fast-moving

## **Custom Engineering**

Transitions and other modifications to replace existing equipment

## **Maximum Durability**

Materials, manufacturing techniques, and engineered surface treatments ensure longer life

## **Service**

Parts, technical service, and equipment rebuilding

LEARN MORE AT [PREMACH.COM/CEMENT](http://PREMACH.COM/CEMENT)

**Premach  
Specialty  
Cement  
Applications**



# Maximize Uptime

# Increase Throughput

# Improve Productivity

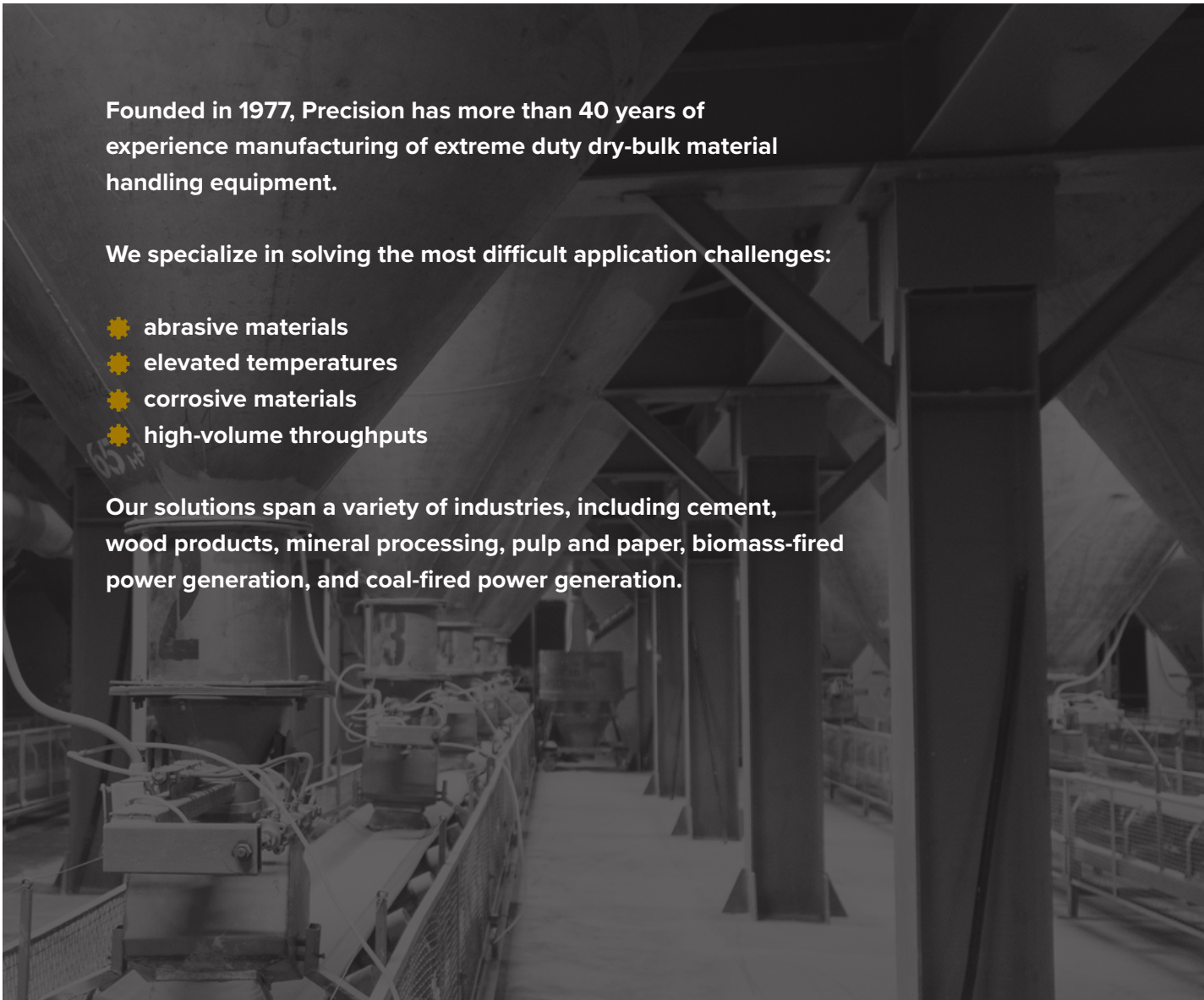
Manufacturing cement is a large-scale operation with huge volumes of material and long, outage-to-outage production plans. The materials are abrasive and the operating conditions are demanding. Precision's line-up of rotary equipment is designed for this extreme environment with a proven track record of reliable performance.

Founded in 1977, Precision has more than 40 years of experience manufacturing of extreme duty dry-bulk material handling equipment.

We specialize in solving the most difficult application challenges:

- ✱ abrasive materials
- ✱ elevated temperatures
- ✱ corrosive materials
- ✱ high-volume throughputs

Our solutions span a variety of industries, including cement, wood products, mineral processing, pulp and paper, biomass-fired power generation, and coal-fired power generation.



## Application

### Raw Material Feeders

### Finish Mill/ Clinker Feeders

### Alternative Fuel Feeders

### Rotary Valves for DSI/FGD Pollution Control Systems

## Requirements

Metering and airlock application for handling very large volumes of limestone and other raw materials. Typically used with a VRM (vertical roller mill).

Metering and airlock device to feed clinker and other materials into the ball mill or vertical roller mill.

Wood, tire or other alternative fuels fed via pneumatic conveying system to the main burner, or via direct injection into a separate or inline calciner.

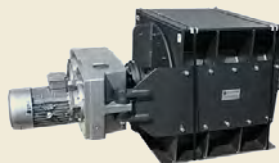
Systems injecting lime, trona, activated carbon, fly ash, bottom ash, or other sorbent for treating flue gas discharge for SOx or NOx.

## Precision Product

### PMCA ROTARY FEEDERS



### PMR ROTARY FEEDERS



### PMV MODULAR VALVES



## Precision Solution

Extreme-duty PMCA rotary feeders in sizes from 150 to 1000 TPH.

Constructed of Tri-Braze abrasion-resistant steel.

Hot-air design for raw material applications.

Transitions for slide-out/slide-in replacement of competitive feeders.

Stationary knife with helical rotor shears off oversize fuel.

Upgraded barrels and drive packages

Rebuildable

Severe-duty version of the PMV-8 or PMV-10

Pneumatic line injectors

Nord inverter-duty drive motors

Air purge kits

## Key Differentiators

Two years of operation between rebuilds

Reduced false air induction

Low or no recurring maintenance

Adaptable to unprepared or minimally prepared fuel

Outage-to-outage durability

Compatible with many types of fuels

Durability that handles lime, trona, or activated carbon

Tight tolerances minimize blow-by and maintain pneumatic system performance

## Dust Collector Rotary Valves

Airlock application handling dust, commonly discharging to a screw conveyor.

## Pulverized Coal Rotary Valves

VFD-controlled metering device handling pulverized coal feed to the Pfister Feeder.

## Silo Discharge Rotary Valves

Withdrawing finished cement or additives from a silo and discharging to screws or air-slides.

## Coal Mill Feeders

Feeding wet, sticky raw coal into a coal mill: including VRM, ball and Raymond mills.

## Raw Meal/Kiln Feeders

A high temperature application feeding ground raw materials, usually located at the top of the preheater tower.

### PMV MODULAR ROTARY VALVES



Severe-duty version of the PMV-8 to PMV-12

Dependable Nord drives

Transitions for slide-out/slide-in replacement of competitive valves

Ultra-duty version to combat abrasive wear

Inverter-duty Nord drives

MSHA/OSHA guards and zero speed sensors

Severe-duty version of the PMV, from PMV-8 to PMV-28

Air purge kits and/or upgraded shaft seals

Transitions for slide-out/slide-in replacement of competitive valves

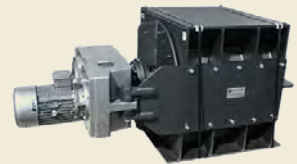
### PMDS SELF-CLEANING VALVE



PMDS Self-Cleaning valve

Dual-rotor design that mechanically "sweeps" the rounded pockets on the upper / product roller.

### PMRD ROTARY FEEDERS



Modified version of the PMR feeder with no knife

Rounded rotor pockets

Normally installed in pairs for redundancy

Tight tolerances minimize fugitive dust

Configurable to fit into existing dust collectors

Maintenance free

Reliable, outage-to-outage operation

Consistent, responsive feed rates keep the Pfister fully-charged

Low maintenance and easily rebuilt

Leak-free, dust-free operation

Sizes for every application

Configurable to replace any existing rotary valve

Handles high-moisture coal without costly operator intervention

Maintains consistent feed rates to the mill

Lower-rank coal becomes economically viable

Years of operation between rebuilds

Reliable, trouble-free operation

Engineered for high temperatures



**Precision Machine and  
Manufacturing, Inc.**

1290 S. Bertelsen Road  
Eugene, OR 97402

541-484-9841

[premach.com](http://premach.com)

[info@premach.com](mailto:info@premach.com)

