

METALS & MINERALS EQUIPMENT

METALS & MINERALS

Processing minerals and heavy metals requires the heaviest duty, wear, and abrasion-resistant material handling components. Here at Precision Machine & Manufacturing, we are the only heavy duty rotary airlock manufacturer, who not only builds heavy duty material handling components specifically for these tough applications....

WE WELCOME IT!

Eliminate downtime by investing in the heaviest duty material handling components in the industry!



HEAVY DUTY
ROTARY VALVE
AIRLOCK



HEAVY DUTY &
HIGH-VOLUME
ROTARY AIRLOCK
FEEDER



ALTERNATIVE
FUEL FEEDERS



SELF-CLEANING
ROTARY VALVES



OFFSET ROTARY
VALVE AIRLOCK



SCREW
CONVEYORS



1



2



3



4



5



6



Precision Machine & Manufacturing's Heavy-Duty Rotary Valve Airlocks and Screw Conveyors are precisely manufactured from a specially formulated, abrasion-resistant steel alloy that is sourced right here from the United States of America!

**Quality, Durability,
and Functionality
you can count on!**

CONTACT PRECISION TODAY!

541-484-9841
sales@premach.com
premach.com

P premach.com



**HEAVY
DUTY**

**FEEDERS • VALVES &
SCREW CONVEYORS**



PRECISION
MACHINE & MANUFACTURING

Processing minerals and heavy metals, requires the most durable, abrasion and wear resistant material handling components. **Precision Machine & Manufacturing is the ONLY manufacturer who builds HEAVY-DUTY Rotary Airlocks and Screw Conveyors specifically for these tough applications!**



HEAVY DUTY & HIGH-VOLUME ROTARY AIRLOCK FEEDER

The most durable "big volume" Rotary Airlock in the material handling industry!



METALS & MINERALS EQUIPMENT

SELF-CLEANING ROTARY VALVES

When it comes to moving the most difficult materials, PMM has the equipment that will eliminate downtime. Hot, abrasive, sticky, and high-moisture. The more difficult the better!



OFFSET ROTARY VALVE AIRLOCK

Eliminate material degradation by removing "impact zones."



HEAVY-DUTY SCREW CONVEYORS

When all others continue to prematurely fail, it is time to call Precision Machine & Manufacturing!

Precision Machine & Manufacturing's components are 100% manufactured in the United States of America!

- ▶ Manufactured with 500 Brinell through hardened abrasion resistant steel.
- ▶ Capable of delivering massive volumes of material.
- ▶ Wide range of operational temperatures.
- ▶ Rebuildable!

2.

- ▶ Manufactured with a U.S. sourced, abrasion-resistant steel alloy.
- ▶ Rounded pockets to promote material release
- ▶ Easily process low quality coal
- ▶ Eliminate blockages!

3.

- ▶ Perfect for precise metering of materials.
- ▶ Extremely durable, U.S. sourced abrasive resistant steel alloy. Through hardened and surface treated pushing the hardness to an industry leading 60 Rockwell.
- ▶ Super tight rotor to housing clearances, maximizes airlock functionality!

4.

WHY PRECISION?

Made in the USA!
Quality, Durability & Functionality!
Strong Warranty!
WHEN ONLY THE BEST WILL DO!

5.

- ▶ Manufactured to meet the unique and very specific needs of the application!
- ▶ We utilize the perfect combination of abrasion-resistant steel alloys and surface treatments to build a robust and functional screw conveyor.
- ▶ Will outlast the competition 3-4 times to 1!
- ▶ Rebuildable! Much lower cost of ownership by rebuilding versus replacing!



HEAVY-DUTY ROTARY VALVE AIRLOCK

The last rotary airlock you will ever buy! Designed specifically to efficiently move highly abrasive and corrosive materials!

1.

- ▶ Simply the most durable, wear and abrasion resistant rotary valve airlock in the industry.
- ▶ Will outlast competitive airlocks 3 to 1!
- ▶ The perfect solution for moving highly abrasive granules and powders.



ALTERNATIVE FUEL FEEDERS

Equipped with an ultra-sharp hardened tool steel knife, which ensures only precisely sized materials are metered into the operation!

6.

- ▶ Perfect for organic material & alternative fuels.
- ▶ Ultra-sharp hardened tool steel knife shears material with ease!
- ▶ Extremely durable.
- ▶ A metering device and an airlock!
- ▶ Rebuildable

 premach.com

1.

HEAVY-DUTY ROTARY VALVE AIRLOCK

Industry leading Rotary Valve Airlocks specifically manufactured for the most difficult mineral and heavy metal processing applications.

- ▶ No other Rotary Airlock in the industry is built as robust and with as much functionality as PMM's Rotary Valve Airlock. It is the "go to" when all others have failed!

2.

HEAVY-DUTY & HIGH-VOLUME AIRLOCK

Manufactured to perform in the most challenging applications while moving massive amounts of the most abrasive material types.

- ▶ Manufactured with a special U.S. sourced, 50 Rockwell, abrasion and wear resistant steel alloy.
- ▶ Perfect for high-volume material handling applications moving fly ash, coal, or limestone.

3.

SELF-CLEANING ROTARY VALVE

Eliminate downtime due to airlock clogging issues and install PMM's Heavy Duty Self-Cleaning Rotary Valve Airlock.

- ▶ Manufactured to "self clean" sticky materials from the rotor's pockets and keep the material flowing.
- ▶ Just like the popular Rotary Valve Airlock, manufactured with a special through hardened, 500 Brinell steel alloy and surface treated to push the hardness to 60 Rockwell.

4.

OFFSET ROTARY VALVE AIRLOCK

Maintain material attributes and eliminate degradation by removing "impact zones" within the airlock. This unique design allows the material to gently fall into the rotor's pockets, which eliminates the rotor shearing action and maintains the materials shape and size.

- ▶ The perfect airlock when moving fragile and/or delicate materials.
- ▶ Totally rebuildable including easy onsite maintenance!
- ▶ Extremely durable! Built with 500 Brinell wear parts and surface treated to 60 Rockwell!
- ▶ Outlast cast iron rotary valves 3 to 1!!

5.

HEAVY-DUTY SCREW CONVEYOR (AUGERS)

Designed and custom engineered to meet the specific needs of the operational environment.

- ▶ Replaces failed augers in high-wear, high-abrasive applications.
- ▶ Handles the most difficult materials with ease!
- ▶ The last screw conveyor you will ever buy!

6.

ALTERNATIVE FUEL ROTARY AIRLOCKS

PMM's Rotary Airlock is the optimum airlock when moving a wide array of alternative fuels, from wood and biomass materials to tires, plastics, and carpet.

- ▶ All Rotary Airlock Feeders are equipped with a special U.S sourced, ultra-sharp, hardened tool steel knife, which shears material into uniform sizes prior to delivery into the boiler.
- ▶ A heavy-duty airlock and metering device in one!

CONTACT PMM TODAY!

541-484-9841 sales@premach.com

\$20,000 PER HOUR

This is the estimated average hourly **cost** for a mineral processing plant to be shut down for one hour. For a single 8-hour shift, this cost equates to

\$160,000+

This lack of production and the associated costs is what fuels **Precision Machine & Manufacturing** to build the highest quality material handling components in the industry!

Made in the USA and built with special wear-resistant alloys solely intended to provide heavy metal and mineral processing plants with outage to outage reliability.



\$20,000+ per hour is too much to ask anyone to pay for faulty components, so the question isn't "**Can you afford Precision Machine & Manufacturing?**" it is "**Can you afford COSTLY downtime?**"



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