

PNEUMATIC SCREW PUMPS

The Meyer Pneumatic Screw Pump...

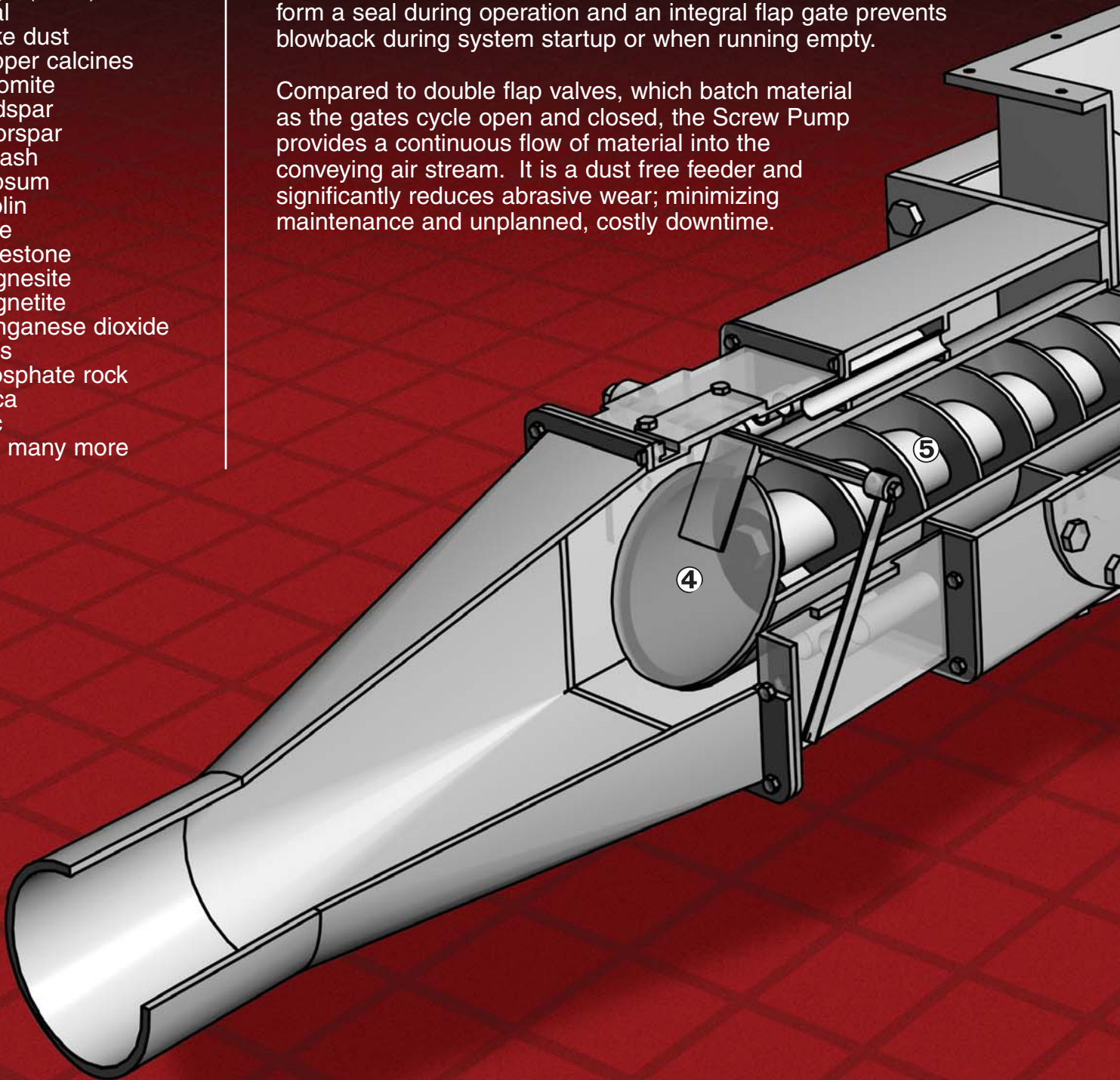
for dilute phase pneumatic conveying's most challenging applications

Typical Materials

Asphalt filter dust
Barytes
Bauxite
Bentonite
Catalysts
Cement
Clays (dried)
Coal
Coke dust
Copper calcines
Dolomite
Feldspar
Fluorspar
Fly ash
Gypsum
Kaolin
Lime
Limestone
Magnesite
Magnetite
Manganese dioxide
Ores
Phosphate rock
Silica
Talc
and many more

The Meyer Pneumatic Screw Pump is an airlock designed to feed dry pulverized material from a gravity feed hopper into a pneumatic conveying line by using a screw auger. It is engineered to perform in applications that exceed the abilities of typical dilute phase rotary feeders. It is an ideal replacement for airlock feeders that have failed to handle fine, abrasive or friable materials. Unlike rotary airlocks, which require tight clearances to seal against the conveying air, the Screw Pump utilizes the conveyed material to form a seal during operation and an integral flap gate prevents blowback during system startup or when running empty.

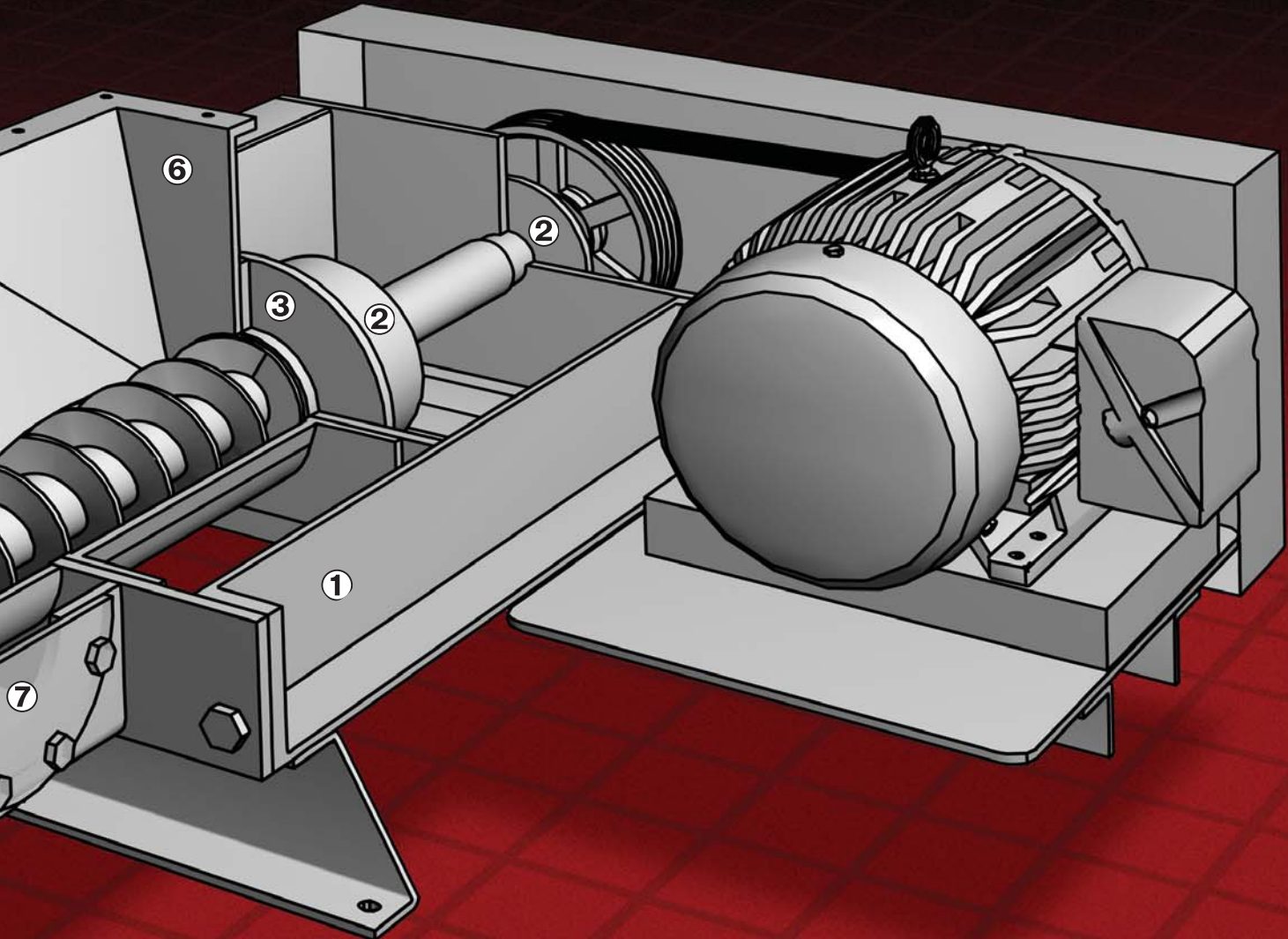
Compared to double flap valves, which batch material as the gates cycle open and closed, the Screw Pump provides a continuous flow of material into the conveying air stream. It is a dust free feeder and significantly reduces abrasive wear; minimizing maintenance and unplanned, costly downtime.





Meyer®

*Engineered Airlock
Technologies*

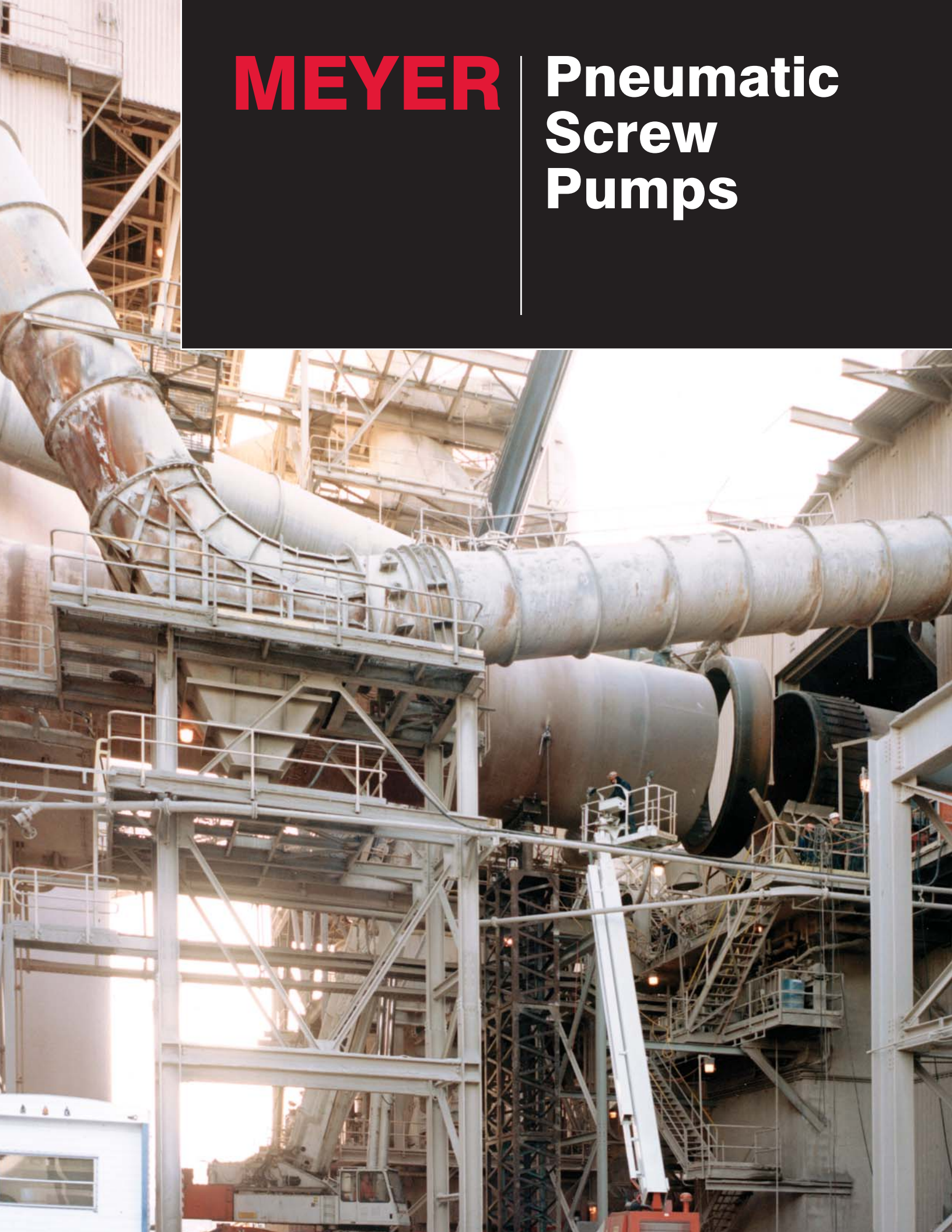


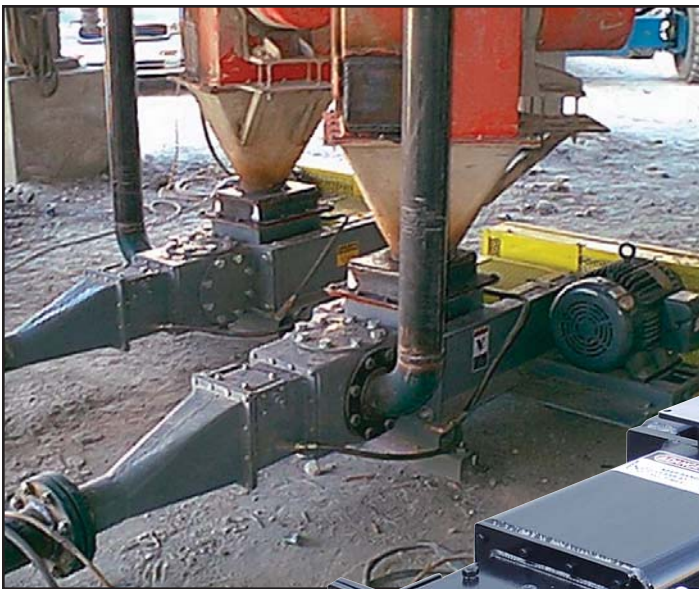
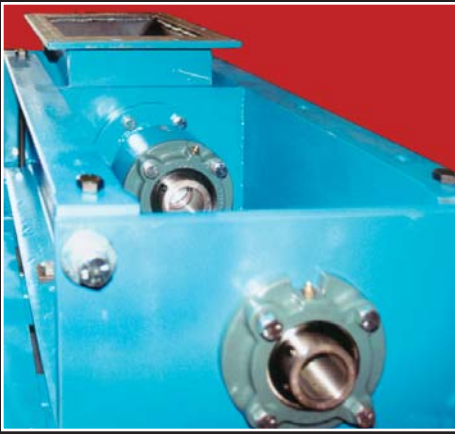
Features

- ❶ Heavy steel channel frame
- ❷ Oversize bearings
- ❸ Quad seal
- ❹ Integral check valve
- ❺ Hard coated shaft assembly with replaceable end adapter
- ❻ Low inlet hopper height
- ❼ Three conveying air inlet points - left, right, bottom
 - No product contact with bearings due to air flush seals
 - Temperatures up to 450°F
 - Low conveying pressures up to 15 PSI

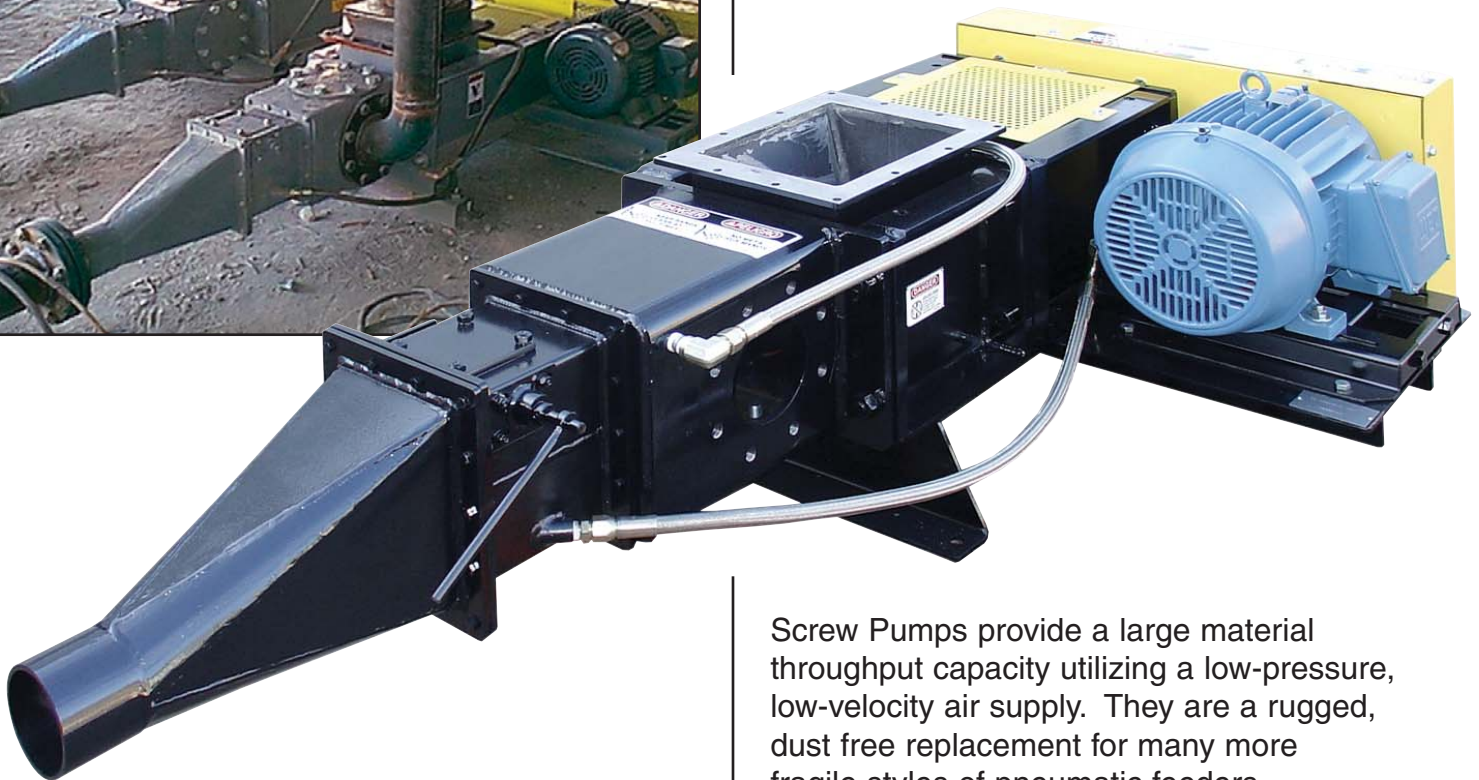
MEYER

**Pneumatic
Screw
Pumps**





**The Meyer Screw Pump
provides excellent efficiency...**



Screw Pumps provide a large material throughput capacity utilizing a low-pressure, low-velocity air supply. They are a rugged, dust free replacement for many more fragile styles of pneumatic feeders. Thanks to a low profile it is an ideal feeder for applications with restricted head room.

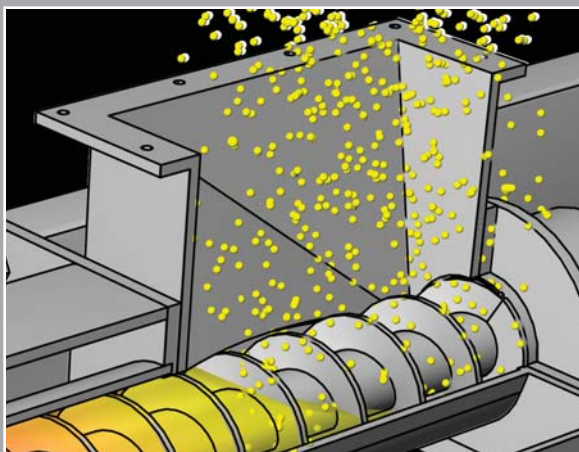
Benefits

- Dust free feeding for pneumatic conveying systems
- Increased conveying rates with less air
- No blowback, even when starting or running empty
- Increased resistance to abrasive materials
- Low profile
- Longer bearing life/fewer system shutdowns
- Reduced operating and maintenance costs

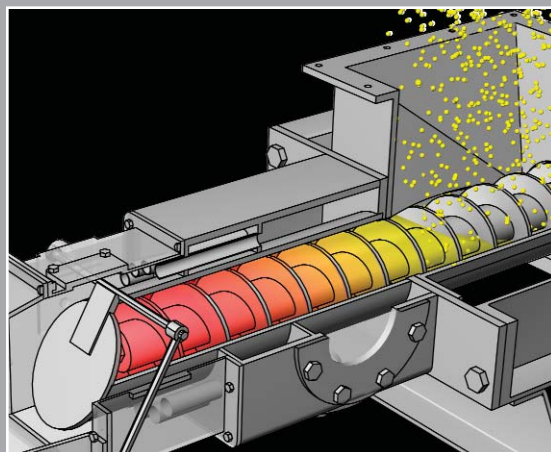


How it works

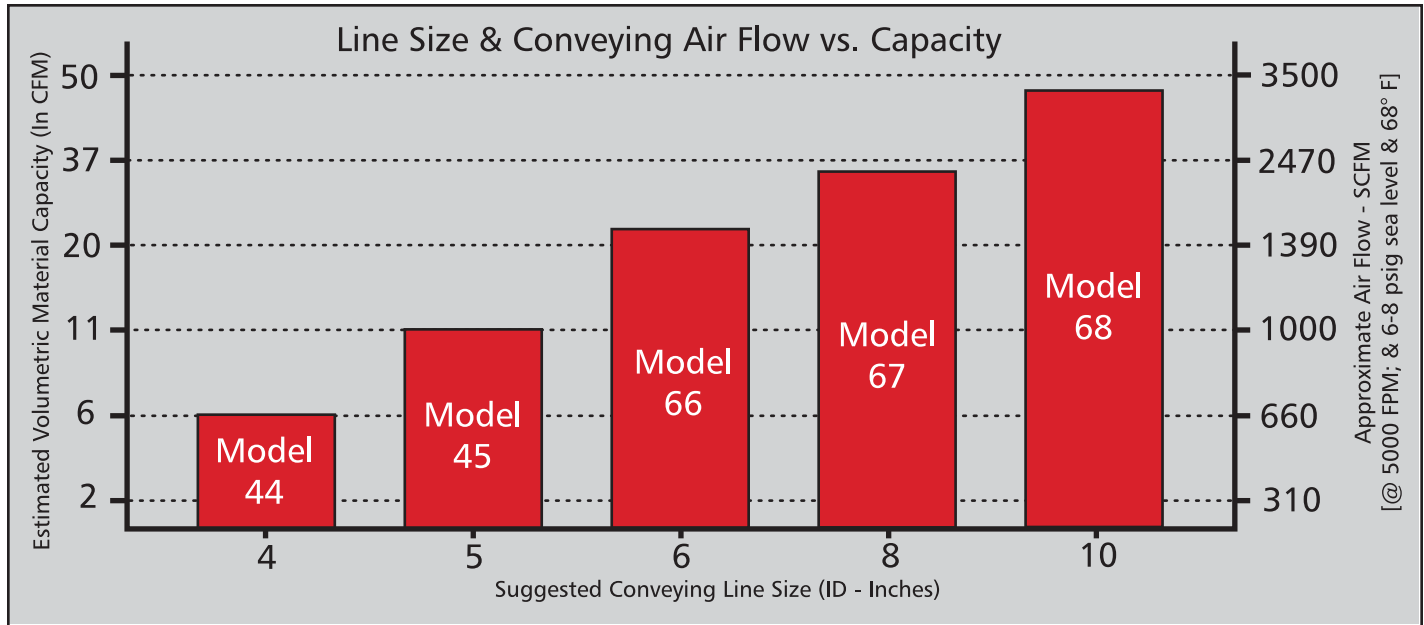
The inlet hopper's sloped walls direct the material to the rotating screw.



The screw compresses the material forming a seal as it moves through the barrel.

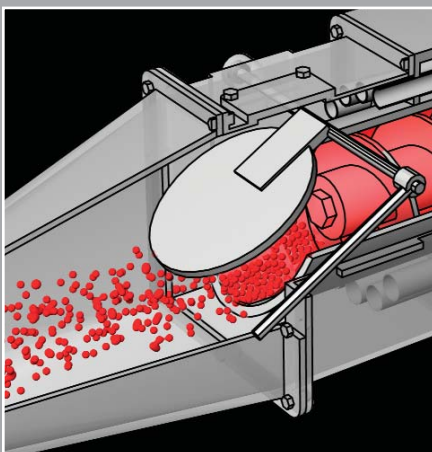


Specifications

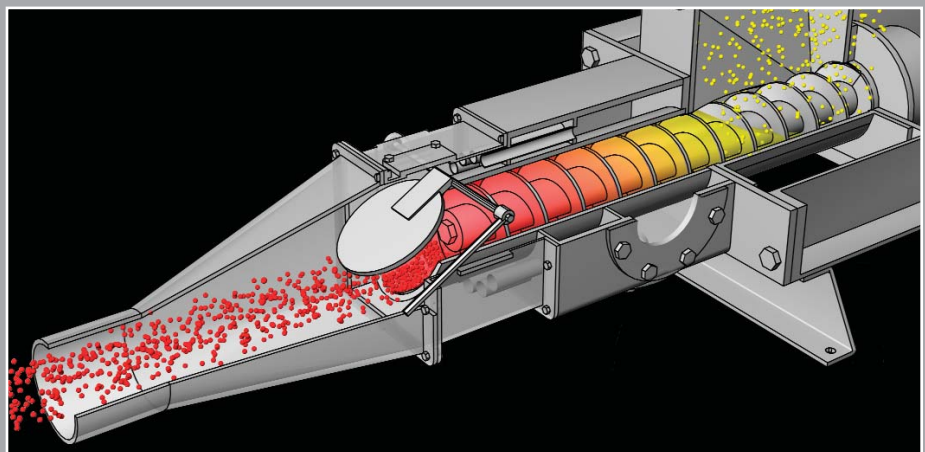


Model	Opening	Line Size	HP	Height	Length	Width	CFM
44	7-1/2 x 8	4	5	18	73-1/2	34-1/2	6
45	9-1/2 x 11-7/8	5	7.5	20-1/4	80	34-1/2	11
66	12 x 16	6	20	24-1/4	97-1/2	46	22
67	14-1/4 x 18	8	25	27-1/2	105	46	34
68	14-1/4 x 18	10	40	27-1/2	105	46	45

The compressed material presses open the flap gate and drops into the air stream.



The aerated material is fed into the dilute phase conveying system.



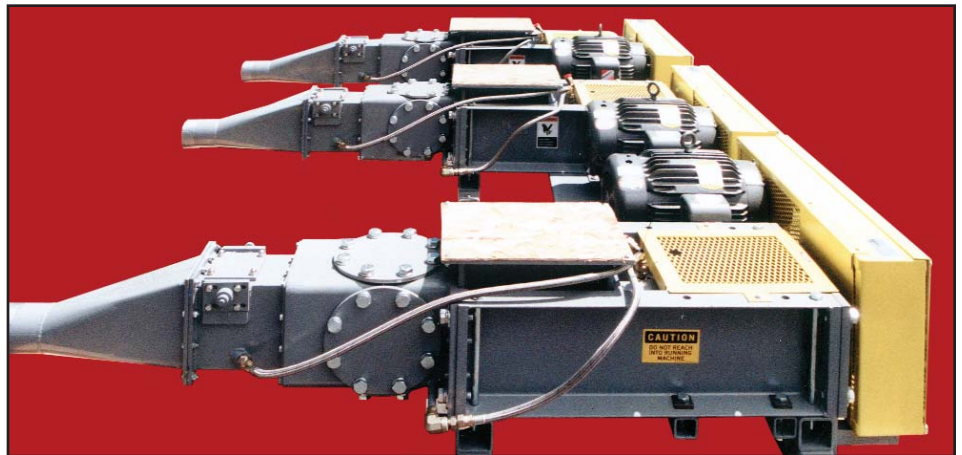
Meyer sales engineers work directly with you to tailor a custom solution for your problem.



Units are available in stainless steel.

UNIQUE FEATURES AVAILABLE:

- High Temperature Design
- Special Housings
- Steam Jacketing
- Special Paint
- Special Coatings
- Custom Transitions
- Special Drives
- Custom Guards
- Special Screws



Units available with right or left hand drives.



We have designed pneumatic screw pumps to handle extreme operating conditions and unique installation requirements.



Custom impellers and hoppers for problem materials.



ENGINEERED PERFORMANCE

FEATURES:

- Power Paks incorporate positive displacement lobe blowers. Built with precision and time tested quality. Pressures to 15 PSI.
- Ready to operate. All Power Paks are completely assembled and pre-piped to facilitate installation.
- All packages feature premium brand motors and top of the line silencer/filter components, controls and accessories.
- Pre-engineered drive selections deliver the most efficient operation possible without skimping on service factors.
- Sturdy elevated bases are of heavy gauge reinforced steel plate. Rugged ventilated drive guards are designed to withstand abuse.

PSS SYSTEM MODEL

FEATURES:

- Dependable positive displacement lobe blower
- Modular Base/Discharge Silencer
- Horizontal Inlet Silencer and Support
- Inlet Filter with Weatherhood
- V-Belt Drive System
- OSHA V-Belt Drive Guard
- Motor Slide Base
- Interconnecting Fittings
- Pressure Relief Valve
- Suitable for Indoor or Outdoor Installation
- Shipped Completely Assembled

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SYSTEM COMPONENTS

In addition to Pneumatic Screw Pumps and Blower Packages, Meyer designs, engineers and manufactures a wide variety of other products designed specifically for bulk processing applications. Like our pneumatic screw pumps and blowers, these products are designed and built to withstand the rigors of demanding applications. The next time you are in the market to repair, replace or upgrade your process system components, give us a call. We manufacture all the key components for pneumatic conveying, process metering and dust control.



Rotary Airlocks



Double-Flapgate Airlocks



Line Diverter Valves



Swing Gates



Slide Gates



Double Clam Shell Gates



Rotary Plug Valves



Knife Gates



Gravity Flow Diverter Valves

SERVICES & PARTS



Since 1946, Wm. W. Meyer & Sons has been delivering quick, conscientious service and superior craftsmanship on replacement parts to customers throughout the country. We understand the costs of downtime, and make it our highest priority to help you keep your plant running trouble-free. Our on-site preventative maintenance programs, responsive repair services and quick-ship replacement parts capabilities help us deliver the extra value customers need in today's competitive marketplace.

In addition to maintaining and repairing our own Pneumatic Screw Pumps, we also provide expert repair services on other manufacturers' products.

WE OFFER REPAIR SERVICES ON THESE AND OTHER SYSTEM COMPONENTS:

Rotary Airlocks

Double-Flapgates

Diverter

Slide Gates

Grinders

Compressors

Pumps

Blowers

Many times, repairs can be done right on the spot to minimize production disruption and speed startup. However, when it is impractical to repair a unit on site it will be shipped to our repair facility for immediate attention. It will be torn down, carefully inspected and restored to like-new condition, including a return to the original tolerances.

COMPREHENSIVE EVALUATION ON EVERY UNIT:

Complete disassembly

Inspection of each component

Comparison to original manufacturers' specs and tolerances

Repair or replacement of worn or damaged component parts

Genuine OEM Parts

Re-assembly

Final Testing

Service Warranty



If your equipment is beyond repair or it is not economical to repair it, Meyer will give you the option of choosing between a new or re-manufactured piece of equipment from available stock.

t r a d i t i o n
e x p e r t i s e
r e s p o n s i v e n e s s
l e a d e r s h i p



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