



**Over**  
*45 Years*  
of Service

PNEUMATIC CONVEYING SYSTEMS BULK TRUCK LOADING SYSTEMS DUST COLLECTION SYSTEMS  
SILO LOADING AND DISCHARGING SYSTEMS PROCESS FEEDING SYSTEMS BIG BAG DISCHARGING  
SYSTEMS BAG DUMP STATIONS LINER BAG DISCHARGING SYSTEMS WEIGHING, BATCHING AND  
DOSING SYSTEMS INDUSTRIAL IOT SOLUTIONS POLITRACE BULK SOLIDS HANDLING EQUIPMENT  
BLOWER PUMPS ROTARY VALVES DIVERTER AND FLOW CONTROL VALVES SILO EQUIPMENT JET  
FILTERS SCREW CONVEYORS TELESCOPIC LOADING BELLOWS BIN ACTIVATORS MOBILE BULK  
MATERIAL HANDLING SYSTEMS LINER BAG FILLING SYSTEMS BIG BAG DISCHARGE AND BULK TRUCK  
LOADING SYSTEMS VACUUM CONVEYING AND BIG BAG FILLING SYSTEMS MOBILE PNEUMATIC  
CONVEYORS PNEUMATIC CONVEYING SYSTEMS BULK TRUCK LOADING SYSTEMS DUST COLLECTION

# 45 YEARS OF **MANUFACTURING QUALITY,**

DUST COLLECTION SYSTEMS SILO LOADING AND DISCHARGING SYSTEMS PROCESS FEEDING  
SYSTEMS BIG BAG DISCHARGING SYSTEMS BAG DUMP STATIONS LINER BAG DISCHARGING SYSTEMS  
WEIGHING, BATCHING AND DOSING SYSTEMS INDUSTRIAL IOT SOLUTIONS POLITRACE BULK SOLIDS  
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MOBILE BULK MATERIAL HANDLING SYSTEMS LINER BAG FILLING SYSTEMS BIG BAG DISCHARGE  
AND BULK TRUCK LOADING SYSTEMS VACUUM CONVEYING AND BIG BAG FILLING SYSTEMS MOBILE  
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HANDLING EQUIPMENT BLOWER PUMPS ROTARY VALVES DIVERTER AND FLOW CONTROL VALVES

**FROM INDIVIDUAL EQUIPMENT  
TO TURNKEY SYSTEMS.**



# ABOUT US

*Polimak is a solution provider in the bulk solids handling industry, specializing in designing and supplying bulk material handling systems for processing various dry bulk solids.*

Over four decades of expertise in the production of bulk solids handling systems for various industries has helped us establish ourselves as one of the most reputable process technology solution providers.

Polimak's wide range selection of versatile bulk material handling machinery is a perfect match for value-added logistics as well as handling powders, granules, and pellets in the food, chemical, plastics, minerals, and agriculture processing industries. Our systems provide solutions from demanding production lines to heavy industrial applications. We have passionate and talented experts to deliver exceptional, efficient, reliable, and value-driven solutions for our customers throughout the bulk solids processing industry.

## OUR CORE VALUES & MISSION

At the heart of our operations lie two foundational pillars: excellence and an unwavering commitment to quality. Our approach is distinctively customer-centric, ensuring we cater to the unique needs and aspirations of every client we serve. Each product we craft is a testament to our dedication, designed for reliability, sustainability, and a prolonged operational lifespan. Internally, we foster a collaborative culture among our employees and teams, nurturing innovation and mutual respect, ensuring that our commitment to excellence is echoed in every interaction.



**We believe that every product we design, every customer we touch, and every relationship we build carries the promise of trust, innovation, and enduring excellence.**

**RESPECT**

**QUALITY**

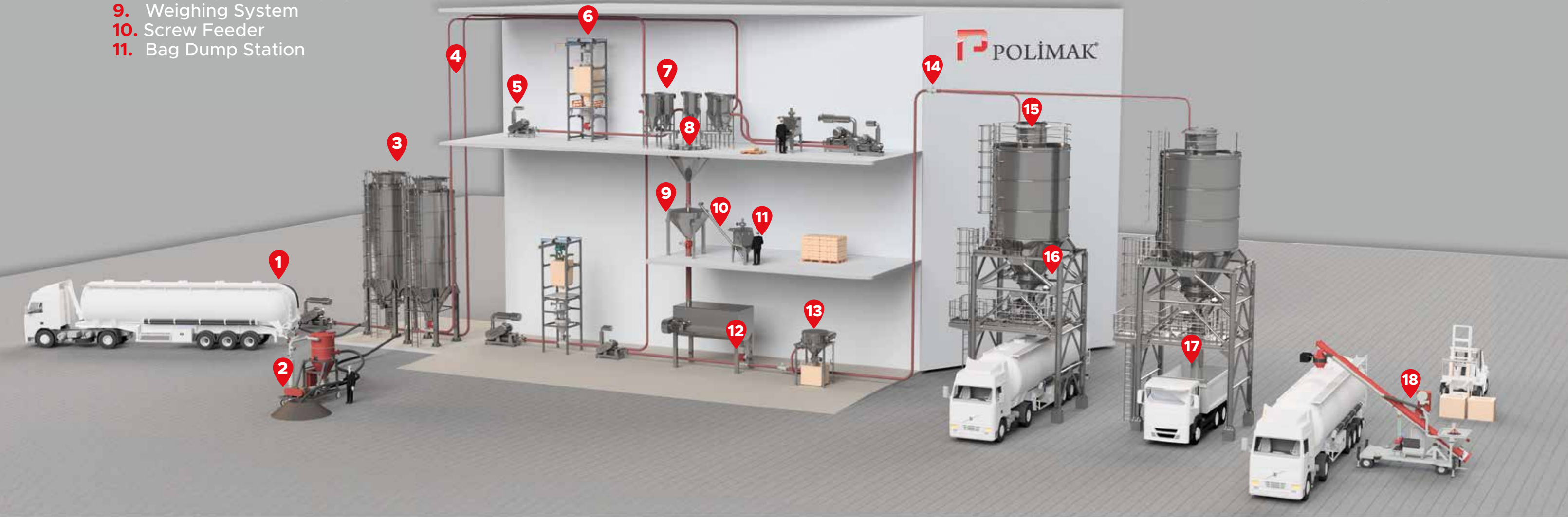
**RELIABILITY**

**SUSTAINABILITY**



1. Silo Filling from Bulk Truck
2. Mobile Pneumatic Conveying System
3. Silo
4. Pneumatic Conveying Pipeline
5. Blower
6. Bulk Bag Discharge System
7. Filter Receiver
8. Batching and Dosing System
9. Weighing System
10. Screw Feeder
11. Bag Dump Station

12. Rotary Valve
13. Bulk Bag Filling System
14. Diverter Valve
15. Jet Filter
16. Bin Activator
17. Bulk Truck Loading Bellow
18. Mobile Bulk Bag Discharge and Bulk Truck Loading System



# PRODUCTS AND SOLUTIONS

## BULK SOLIDS HANDLING SYSTEMS

- Pneumatic Conveying Systems
- Bulk Truck Loading Systems
- Dust Collection Systems
- Silo Loading and Discharging Systems
- Process Feeding Systems
- Bulk Bag Discharging Systems
- Bag Dump Stations
- Liner Bag Discharging Systems
- Weighing, Batching and Dosing Systems

## BULK SOLIDS HANDLING EQUIPMENT

- Blower Pumps
- Rotary Valves
- Diverter and Flow Control Valves
- Silo Equipment
- Jet Filters
- Screw Conveyors
- Telescopic Loading Bellows
- Bin Activators

## MOBILE BULK MATERIAL HANDLING SYSTEMS

- Liner Bag Filling Systems
- Bulk Bag Discharge and Bulk Truck Loading Systems
- Vacuum Conveying and Bulk Bag Filling Systems
- Mobile Pneumatic Conveyors









## INDUSTRIAL IOT SOLUTIONS

- Politrace

# POLITRACE: INDUSTRIAL IOT SOLUTIONS

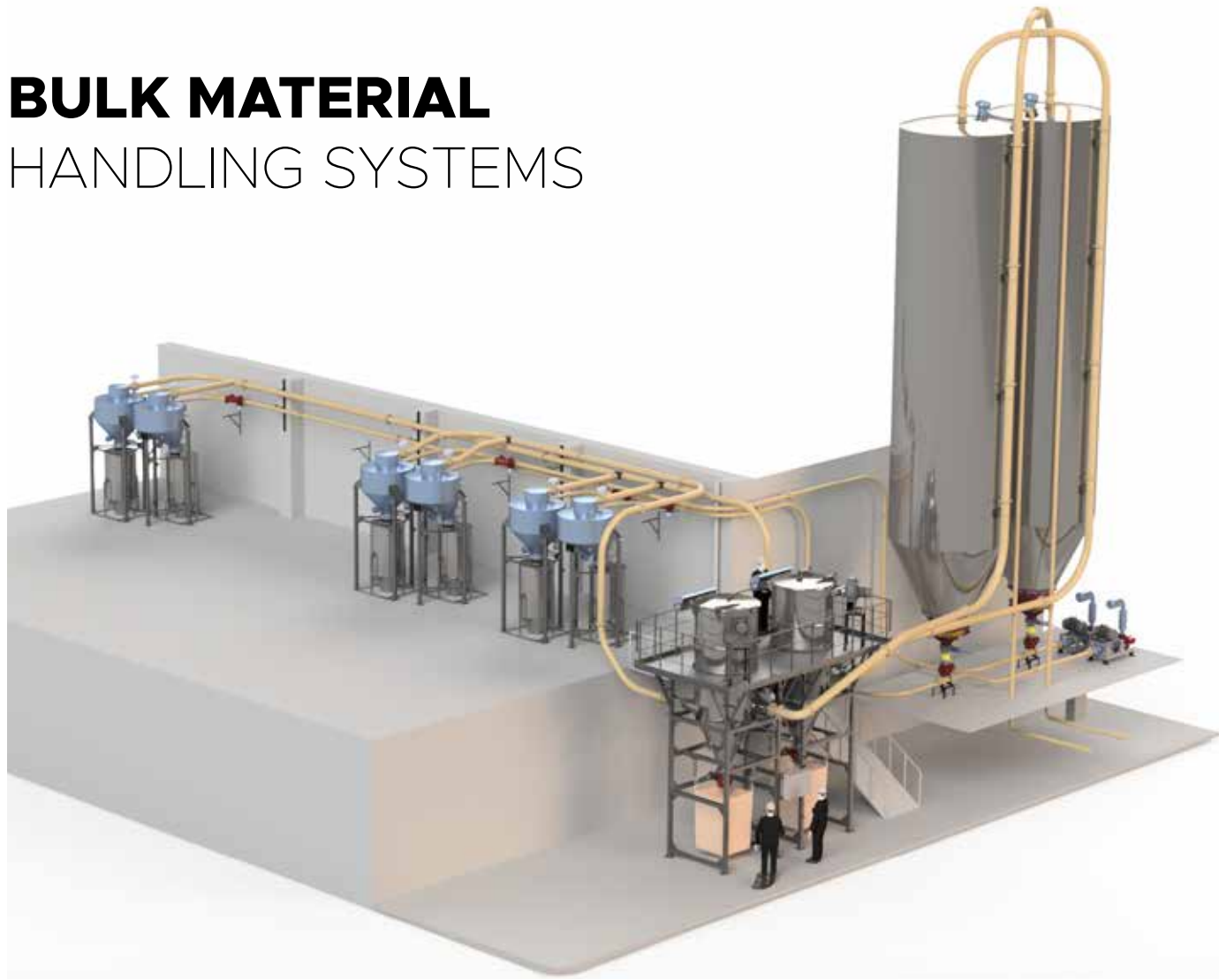
## FOR BULK SOLIDS HANDLING INDUSTRY

Politrace platform not only provides an industrial IOT service, but also provides extensive know-how based on long years of experience in industrial processes.

ALL IN ONE PLATFORM							
Process, Machine Health & Condition Monitoring		Inventory Monitoring & Management		Computerized Maintenance Management			
Energy consumption measurement and analysis		Silo & tank storage measurement		Scheduled maintenance planning			
Process measurements such as flow rate,temperature, pressure etc		Vendor managed inventory		Emergency maintenance handling			
Machinery vibration, overheating etc.		Logistics management		Asset documentation and management			
							
Computerized Maintenance Management	Silo, Tank Monitoring & Inventory Management	Energy Monitoring and Analysing	Dust Controller Condition Monitoring	Compressor & Process Air Monitoring	Electric Motor Condition Monitoring	Dust Emission & Air Quality Monitoring	Fan &Pump Condition Monitoring



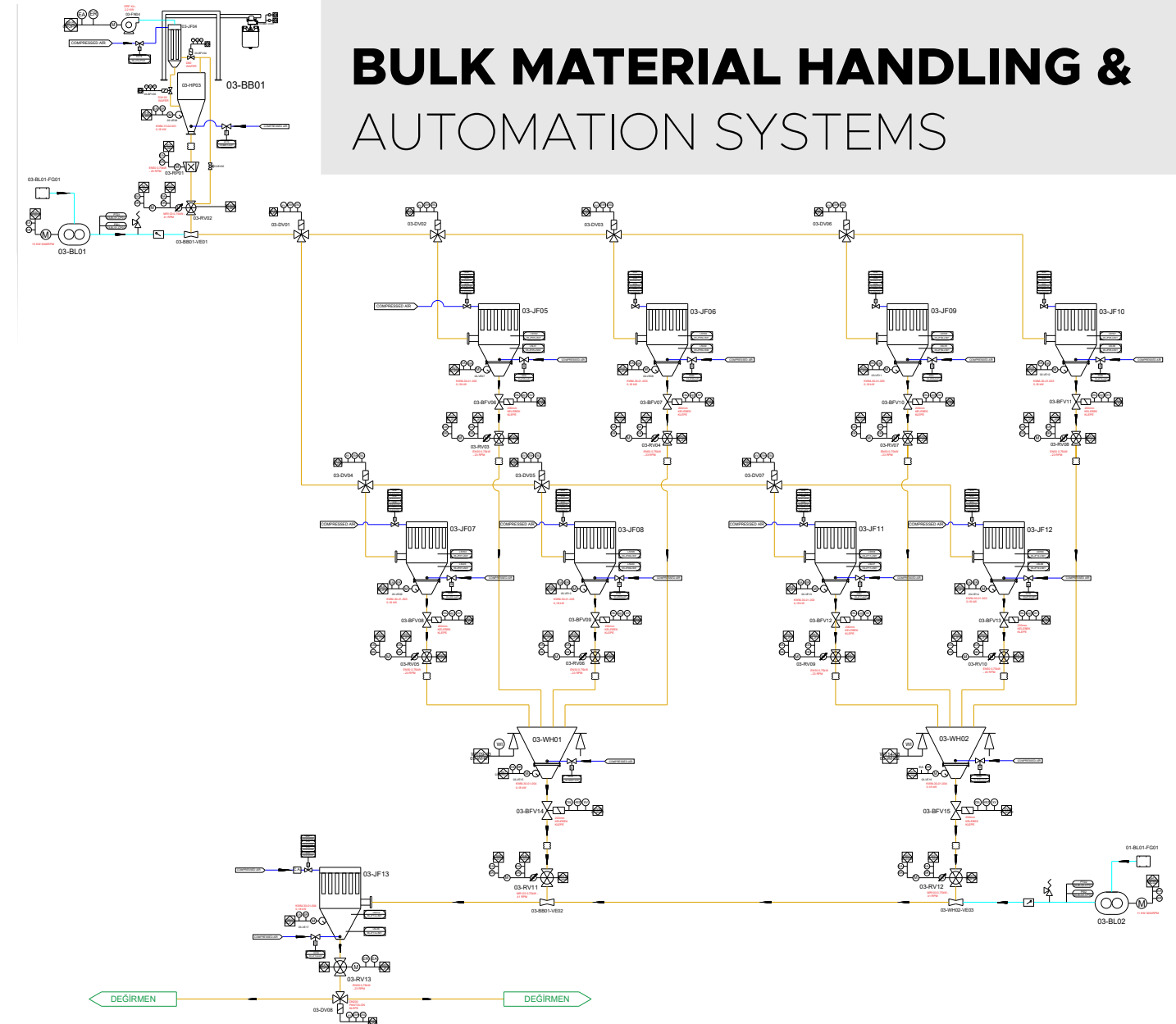
# BULK MATERIAL HANDLING SYSTEMS



Efficient and reliable bulk material handling is crucial for the success of industries dealing with a wide range of bulk solids, including grain cereals, powders, food, plastic pellets, and more. At Polimak, we offer a comprehensive range of innovative solutions for conveying, storing and transferring bulk solids.



# BULK MATERIAL HANDLING & AUTOMATION SYSTEMS



With years of expertise in the field, Polimak has been a leading force in the realm of bulk material handling and automation systems. Our extensive experience in designing and implementing these systems has made us a trusted partner for industries worldwide. With a focus on innovation and continuous improvement, we have honed our skills to deliver tailored solutions that meet the unique needs of each customer. From conveying and dosing to storage and discharging, our cutting-edge technologies and seasoned team ensure seamless operations and optimal efficiency.



## INDUSTRY 4.0

The entire manufacturing industry is embracing a shift towards greater flexibility and adaptability, leading to the rise of Industry 4.0. As the fourth industrial revolution, Industry 4.0 is a response to evolving consumer demands and is revolutionizing various sectors within manufacturing.



# SMART LOGISTICS

## CONNECTING CONTINENTS: EFFORTLESS BULK MATERIAL TRANSFER FROM ANYWHERE TO EVERYWHERE

In today's interconnected world, seamless bulk material transfer is imperative. At the forefront of this is our Smart Logistics solution, expertly designed for bulk solids loading, unloading, filling, discharging, and storage. Our systems, crucial for transloading materials between various transportation and storage mediums like bulk bags, containers, trucks, silos, and more, streamline global bulk solids handling logistics, bridging the gap between suppliers and processing facilities. By integrating our industrial IoT solutions with advanced transloading systems, we pledge to significantly reduce logistics costs, ensuring optimized, customer-centric services that champion sustainable growth.

## MOBILE MATERIAL TRANSFER: SEAMLESS TRANSLOADING, CONVEYING, FILLING AND DISCHARGING SOLUTIONS



### MOBILE CONVEYING SYSTEMS

Transporting bulk materials between any systems and trucks worldwide.

### CONTAINER FILLING SYSTEMS

Patented triple screw conveyor for efficient, safe and dust-free loading of containers.



### CONTAINER DISCHARGE SYSTEMS

Optimal emptying of containers and handling bulk materials.

### MOBILE BULK BAG FILLING SYSTEMS

Vacuuming from any location to fill bulk bags.



### MOBILE BULK BAG DISCHARGE SYSTEMS

Discharge bulk bags with ease into the bulk trucks.

# SMART LOGISTICS

## MOBILE BULK MATERIAL TRANSFER AND LOADING SYSTEMS

Bulk products are brought to the system either with bulk bags (big bags), a loader or vacuumed into the cyclone with flexible hose. Subsequently, these materials can be rapidly, dust-free, and efficiently conveyed into bulk trucks.

These mobile conveying systems are not only compact but also simple to operate and transport, ensuring flexibility in various scenarios.

### Stockpile to Bulk Truck by Wheel Loader



### Big Bag to Bulk Truck



### Stockpile to Bulk Truck by Vacuum



## BENEFITS / FEATURES

**Simple & Functional:** Designed to be user-friendly, ensuring hassle-free operation and efficient handling of bulk bags and truck loading with local controls.

**Anywhere & Anytime:** The mobile chassis is provided with a tow bar, and it can be easily deployed in diverse locations, allowing for flexibility and convenience in material handling operations, regardless of the environment.

**Safe & Dust Free:** The built-in dust collection system prevents dust release into the atmosphere and captures it during the operation, hence prevents material loss.







# PNEUMATIC CONVEYING SYSTEMS

Polimak stands as a trusted solution provider in pneumatic conveying systems, serving a diverse spectrum of industries from food and chemicals to cement, plastics, and energy. Our reputation has been built on providing both essential components and comprehensive turnkey systems tailored to our clients' needs. Drawing from deep expertise in the bulk solids handling industry, our team consistently delivers efficient, cutting-edge solutions to enhance operational excellence.



## BLOWERS



## POLIMAK ROOTS BLOWERS ADVANTAGES

At Polimak, we've been manufacturing durable Roots Blowers for many years, with a strong focus on pneumatic conveying. These blowers are crucial components for various industries, delivering reliable and high-performance results, while offering numerous advantages.



- Roots blowers provide both pressurized air (1000 mbar) and vacuumed air (500 mbar)
- Flow rate of air is between 20 m³/h to 20 000m³/h
- Provided air is oil-free so that no contamination risk for conveyed bulk solid occurs
- Suitable for heavy-duty work
- Provides greater efficiency and minimum noise with 3 lob rotor
- Reduced vibration with high efficiency by using heat treated timing gears
- Low maintenance needed



# ROTARY VALVES

Polimak rotary valves stand out as the pinnacle of engineering, meticulously crafted with safety and quality in mind, ensuring reliable performance.



# ROTARY VALVES



## FLOW-THROUGH

As the inlet and outlet ports are vertically aligned and tend to be the same size, bulk solids vertically flow down through the rotary valve easily. Hence, FT series are mostly used for general applications.



## BLOW-THROUGH

Ideal to be used in the pneumatic conveying lines, such that they are installed directly in a conveying line without any intermediate equipment. Bulk products are conveyed with conveying air.



## OFFSET

Suitable for handling delicate (fragile) dry bulk materials such as peanuts, sunflower seeds, etc.



## CUSTOM DESIGN

Robust and quality custom-designed models to meet most demanded applications.

## HEAT RESISTANT



Closed End Rotors

## ABRASIVE RESISTANT



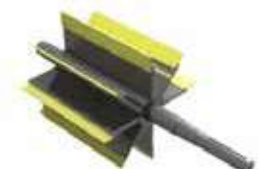
Adjustable Tips Rotors

## DOSING APPLICATIONS



Metering Rotors

## FOR FRAGILE MATERIALS



Adjustable Polyurethane Tips Rotors

## FOR FOOD-GRADE MATERIALS



Scalloped Rotors

## FOR POTENTIALLY EXPLOSIVE MATERIALS





## BULK BAG (BIG BAG) DISCHARGE STATIONS



### ADVANTAGES

- A secure working environment due to the rigid and steel construction
- Filter systems for preventing dust emission
- Simple handling of bulk bags by a built-in hoist
- An access door and locking system to easily open the bags
- Vibration motors and inclined hopper designs for better flow
- A little to no maintenance requirement

### EXTRA OPTIONS:

- Weighing and dosing system option
- Food grade stainless steel construction option
- Instant big bag cutting kit option
- Pneumatic actuator option to increase product flow rate



ATEX Certified Discharge Stations

## BAG DUMP STATIONS

Bag dump stations are also known as bag unloaders. Bag dump stations let the user empty the material in any bag, drum or any similar container and transfer it to another equipment like conveyor, mixer, silo etc. While unloading the bag, the emitted dust is vacuumed by the system. The air is filtered and dust is sent back to the process. Bag dump stations prevent any harmful dust spread to the environment.

### ADVANTAGES

- Safe and clean working environment
- Dust free environment air
- Easier discharging of bags, sacks and drums
- Applicable for different conveying and storage systems
- Wide range of models for different applications
- Easy to clean
- Maintenance free design

### FEATURES

- Rigid, steel construction
- Vibration motors for better product flow
- Filtering system
- Jet pulse system for automatic filter cleaning
- Cartridge type replaceable filters
- Powerful vacuum fan



## AUTOMATIC BAG DISCHARGE SYSTEM

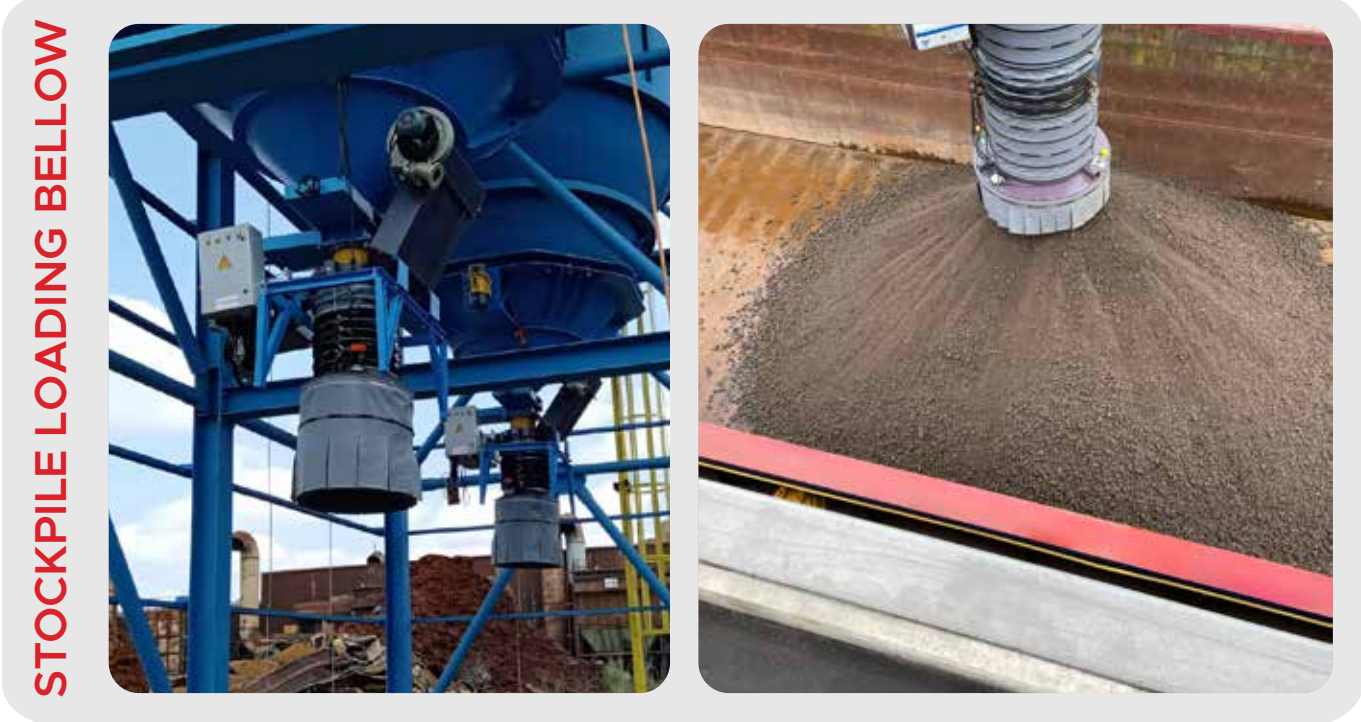
Automatic bag discharge system is used to empty bags that contain products in powder or granular form, with high capacity and convey them to the desired location in a dust-free environment.

- The bags loaded on the conveyor belt of the system are automatically cut.
- The contents of the bag are discharged from the machine with the help of a screw feeder or rotary valve.
- The waste bags are collected in another place





# LOADING BELLOWS



# SHIP LOADING BELLOWS



- BENEFITS**
- Dust-free bulk solids loading
  - Pollution prevention and assurance of pant and environmental safety
  - Suitable for various upstreams and downstream
  - No bulk material waste
  - Simple operation and easy maintenance
- OTHER FEATURES**
- Loading bellow with a rotating spoon
  - Handling of bulk materials up to 300°C temperature
  - Food grade option





# STORAGE SILOS

Polimak offers a wide range of silos designed for safe and efficient storage of bulk solids. Our silos are constructed with high-quality materials and are suitable for various industries including food, chemicals, plastics, and agriculture. Depending on your specific requirements, we provide customizable silos with various storage capacities, different types of discharge systems, and additional accessories such as level indicators, filters, and aeration systems. Our silos are designed with easy maintenance and cleanability in mind, making them a reliable and cost-effective solution for your bulk storage needs.

# SILO EQUIPMENT



## SILO TOP JET FILTER

Silo top jet filters are suitable for venting silos, containers, and mixing systems that are pneumatically filled with dry bulk solids. When pneumatically filling bulk materials in silos having just an opening above, the conveying air (including dust) goes out through the opening. Silo top jet filters effectively curb dust emission from silos and safeguard against loss of bulk materials.



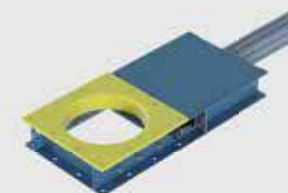
PRESSURE RELIEF VALVE



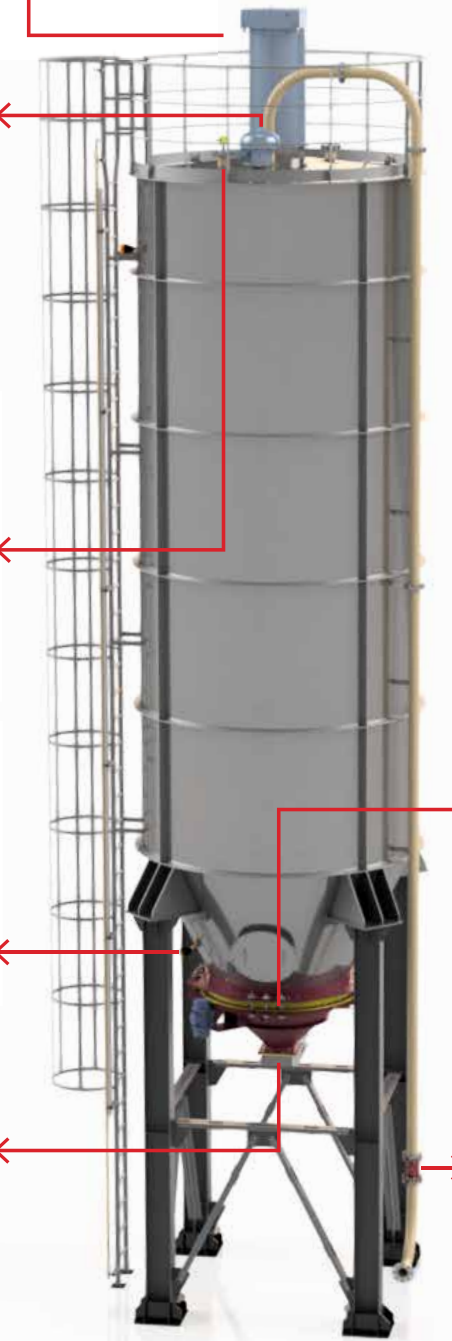
LEVEL SENSOR



LEVEL SWITCH

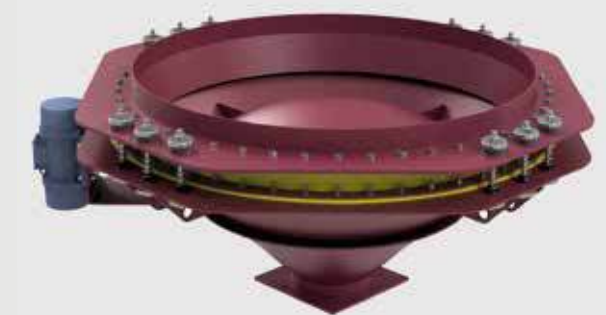


SLIDE GATE VALVE



## BIN ACTIVATOR

- Prevents material ratholing and bridging inside silo
- Steel construction body with wide range of dimensions
- Carbon steel, stainless steel, hardox steel body options
- High safety because of wear-resistant polyurethane seal between activator and the silo
- Suitable for connecting different types of feeding and dosing equipment
- Easy to fit, low maintenance, high performance



PINCH VALVE



ATEX Certified  
Silo Equipment



## DIVERTER & FLOW CONTROL VALVES

- Suitable for controlling the flow of bulk materials (granules, powders or pellets) in pipelines with minimal disruption
- Ideal for diverting bulk materials in gravity flow or pneumatic conveying applications.
- The valves can be manually controlled manually with pneumatic actuators or electric motors



Flap Type  
Pneumatic  
Conveying  
Diverter  
Valves



Butterfly  
Valves



Slide Gate  
Valves



Flap Type  
Pneumatic  
Gravity  
Diverter  
Valves



Flexible Tube  
Diverter  
Valves



Multiport  
Diverter  
Valves



Pinch Valves



Iris Valves



Custom  
Designed  
Valves



ATEX Certified  
Diverter and  
Flow Control  
Valves

## SCREW CONVEYORS

At Polimak, we specialize in designing and producing screw conveyors tailored to various applications and distinct material properties.



Our expertise ensures that each conveyor is optimized for performance, durability, and seamless integration into your operational flow. Whether handling delicate materials or robust substances, our solutions consistently deliver efficiency and reliability.



## BATCHING, WEIGHING AND DOSING SYSTEMS

Our systems adeptly manage the dosing of bulk products, whether by volume or weight. Leveraging advanced PLC or computer-controlled technologies, we streamline the creation of diverse end products through precise feeding.

### APPLICATIONS

- Construction chemicals
- Food and flour dosing systems
- Concrete plants
- Plastic raw material production plants
- Activated carbon and lime dosing for power plants and water treatment plants









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