

ENGINEERING, DESIGN AND MANUFACTURING TO KEEP THE LINE MOVING



MAGNUM
S Y S T E M S

Your single source for moving dry
bulk materials from rail to pallet
and everywhere in between.

A HISTORY IN PNEUMATIC CONVEYING WITH ROOTS IN PACKAGING.

**MAGNUM. TAYLOR PRODUCTS. SMOOT.
TRUSTED NAMES THAT KEEP YOUR LINE MOVING.**

Wipe the dust off your air packer, palletizer, pressure blower or control panel and you may just find a Taylor or Smoot label. For nearly a combined century, these Magnum names have kept lines moving and processes efficient for facilities across the country without much fanfare. After all, your best day is when you leave your shift on time with production goals met or exceeded. And, our best day is when your systems work so well you don't think about us.

In 2001, Smoot, a long-established pneumatic conveying systems, components and parts company, and Taylor Products, a well-known custom packaging and container handling equipment company, came together as two divisions under Magnum Systems. Until that time, companies either sold conveying OR packaging equipment, making Magnum the first to design, engineer, manufacture and integrate both processes into a reliable system to move dry bulk materials from rail to pallet and everywhere in between – efficiently day after day.

Whether you're replacing a specific production line component, searching for the right packaging or pneumatic equipment or needing an entire custom designed, integrated system, Magnum is your one source for all your material handling and packaging needs.



**MODERN ENGINEERING AND DESIGN.
OLD SCHOOL COMMITMENT.**

Whether it's one component or an entire system, Magnum Systems combines decades of knowledge and experience with the most contemporary technology in material management.

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Food grade pneumatic conveying system with an integrated bag filling line for food flavorings.

RAIL-TO-PALLET. IDEA TO INTEGRATION. THE TOTAL SOLUTION APPROACH.

With the thousands of parts that make up material handling systems, our total solution approach evaluates each one in unique relation to your material's properties, the application environment, your business objectives and financial goals.

Using your efficiency or cost reduction goals as parameters, Magnum Systems designs, engineers, manufactures and integrates stand-alone equipment or a rail-to-pallet solution. Either way, you make one call, write one specification and hold one company accountable at the end of the day for keeping your line moving.

Our approach results in engineered business solutions that are customized end-to-end to meet your end goals, giving you a measurable competitive edge whether you handle flour or coal.

NO TWO PLANTS ARE ALIKE INDUSTRY EXPERTISE MATTERS WHEN IT COMES TO DESIGNING, ENGINEERING & INTEGRATING SYSTEMS.

- Total System Design & Integration
- Facility Consulting & Planning
- Total System Implementation
- Custom Integration
- Production Line Automation
- Control System, Industrial Automation Development
- Mechanical & Electrical Installment
- Design & Spec Quality Equipment/Components
- Process-Driven Project Management
- Cross-Function Engineering
- Material Testing
- Field Support



Ag Feed & Seed



Animal Feed & Pet Food



Cement



Chemicals



Coffee



Food



Minerals



Plastics



Power Generation

**“ONE SIZE FITS ALL”,
DOESN'T FIT ANYMORE.**

Whether it's agricultural seed or asphalt, no two material handling systems should be treated alike. Truck or rail, chemicals or feed – the selection of equipment, parts, controls and components must be engineered as a total solution. This holistic approach to material handling is what we do best.



INTEGRATED SYSTEMS AND SOLUTIONS

PROBLEM IDENTIFIED. SOLUTION DESIGNED. SYSTEM ENGINEERED. EQUIPMENT DELIVERED & INSTALLED. THAT'S INTEGRATION.

When your plant moves dry bulk materials from point A to point B and beyond, Magnum Systems can help you design, engineer and integrate greater efficiency and cost savings for less downtime and better outcomes. On a good day, you won't need us because our OEM systems are humming away. On a great day, we find an innovative way to make your plant better through designed integration.

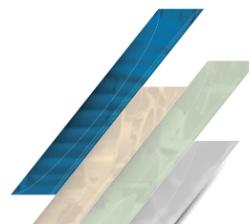
YOU CAN BUY COMPONENTS FROM ANYONE, BUT YOU CAN'T BUY CONFIDENCE IN EVERYONE.

Bulk material handling in any plant takes a complex network of people and machines. A simple misplacement of a machine or an error in calibration creates inefficiency, or worse stops the line. The more suppliers added to the mix, the more complicated your systems become.

While others sell parts and components, we engineer and integrate a single part or an entire system. Confidence comes when you work with our experienced project managers, the most important link between problem and solution. One supplier, one project manager means everyone and every machine work together in harmony.

THE VALUE OF A RELATIONSHIP ISN'T A COMMODITY

- Single Source Relationship Results in Better Understanding of Your Needs
- Industry Experts in Design, Engineering, Manufacturing & Service
- Oem & Integration All in One Engineering Solution
- Project Managers Who Are Design Engineers, Not Order Processors
- One Source to Hold Accountable, Depend On & Trust



OUR INTEGRATED SYSTEMS ARE MORE THAN JUST A COMMODITY. THEY ARE ENGINEERED BUSINESS SOLUTIONS.

PNEUMATIC CONVEYING

SYSTEMS &
COMPONENTS

EFFICIENTLY CONVEYING YOUR MATERIAL ADDS MONEY FASTER TO THE BOTTOM LINE.

New plant builds. Facility upgrades. Material composition changes. Labor shortages. Fulfillment accuracies. Whatever the situation, efficiency affects your bottom line.

Since we are the designer and the manufacturer, the system is engineered to your facility and type of material. Nothing canned. Nothing piecemealed. Your equipment is supported by one company, making service, support and upgrades far easier in the future.

Whether it's Dilute Phase, Dense Phase or Eco Phase, Magnum Systems understands that conveying materials is as much art as science.

Our experts understand the complete process from beginning to end. We've seen it. We've done it.

ART & SCIENCE COMBINED, ACROSS MANY INDUSTRIES.

Dilute Phase Conveying

- Pressure Systems
- Vacuum Systems
- Pressure/Vacuum Combination Systems



Convey Line, Material Flow Accessories



Railcar Unloading



Valves

Dense Phase Conveying

Eco Phase Conveying



Blower Packages & Components



Filter Bag Houses



Bulk Material Unloading



Airlocks

LEGENDARY ROTARY VALVES

When valves leave our manufacturing facility, they can be used as a feeder or an airlock. Your choice of valve and how we calculate the speed you need to turn it are different. Over 50 years of engineering and manufacturing rotary valve airlocks goes into how we match the right airlock to your needs and goals.

- Standard, Cast Iron & Mild Steel Construction
- Abrasive Resistant, Hard Chrome & Hardened Steel
- Super Abrasive Resistant Nihard Housings & Stellite Tipped Rotors
- Abrasive Resistant Ceramic Housings & Tungsten Carbide Tipped Rotors
- Corrosion Resistant Nedox® Coated Housings with Stainless Steel Rotors
- Food Grade
- Dust Collection Duty
- All Valves are NFPA Compliant

PACKAGING EQUIPMENT

PARTS &
ACCESSORIES

GAIN A COMPETITIVE ADVANTAGE MEASURE BY MEASURE, BEGINNING TO END.

Packaging starts with determining the best machine for your product and container. Delivering consistency, accuracy and repeatability is just the start. We look at your process as a whole for better-engineered solutions and can add technology for an automated packaging solution designed to your facility and workflow. With packaging components engineered to stand alone or in conjunction with a new or existing system, Magnum is your single source for your packaging measure by measure, beginning to end.

BAGGING EQUIPMENT & PACKAGING AUTOMATION

- Manual & Semi-Automatic Valve Bag Packers
- Manual, Semi- & Fully Automatic Open Mouth Bag Filling & Weighing Systems
- Manual, Semi- & Fully Automatic Bulk Bag/ Tote/ Drum Filling & Weighing Systems
- Robotic Bag Placers
- Robotic Palletizers
- Robotic Speed Box Denesting Systems



Checkweigh Scales



Bag Turners



Bag Flatteners



Sealing



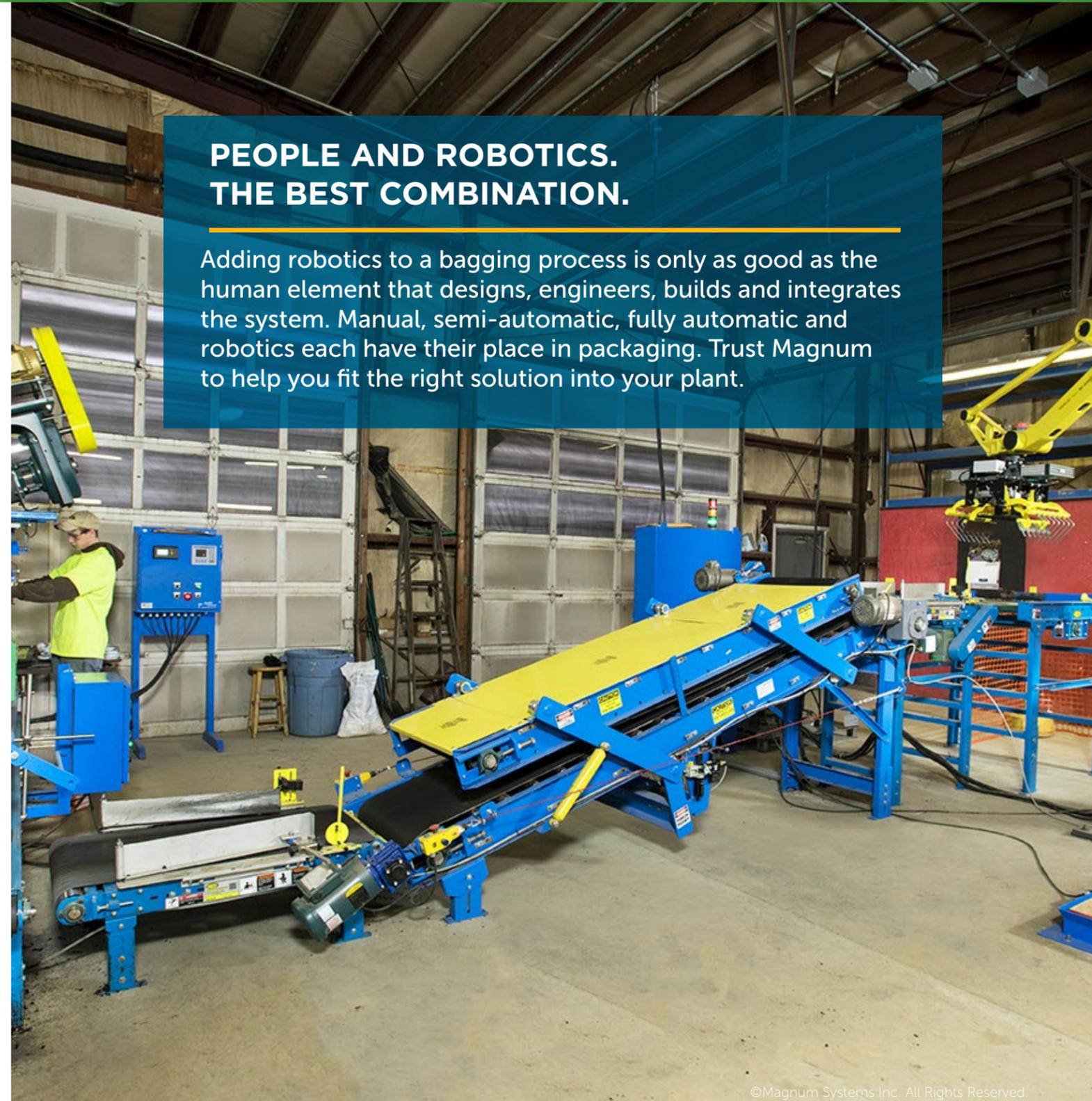
Conveyors



Pallet Dispensers

PEOPLE AND ROBOTICS. THE BEST COMBINATION.

Adding robotics to a bagging process is only as good as the human element that designs, engineers, builds and integrates the system. Manual, semi-automatic, fully automatic and robotics each have their place in packaging. Trust Magnum to help you fit the right solution into your plant.



INDUSTRIAL AUTOMATED

CONTROL
SYSTEMS

THE BRAINS FOR YOUR SYSTEM, COMPONENTS AND MACHINES.

The best control systems integrate components and machines across the process system. Enabling operators and personnel to access process data improves operations, safety, output and ultimately the bottom line.

At Magnum Systems, our responsibility is to integrate rapidly evolving instrumentation and process controls with established principles and years of industrial automation experience. We've manufactured premier bulk material handling equipment and packaging machines that last for decades. The need to incorporate the latest industrial control technologies into our process equipment and packaging solutions keeps our systems competitive and state-of-the-art.

INDUSTRY LEADING COMPONENTS, HARDWARE AND SOFTWARE.

We design, engineer and manufacture control systems using key components from the most recognized names in the industrial control and automation industry in the United States and globally. Magnum Systems has decades of bulk material handling and processing experience that complements our process logic for complex process systems. We know how to add the "brains" to your process and packaging systems.

BIG OR SMALL. NEW OR MIGRATING. COMPLEX TO SIMPLE. WE'VE GOT THIS.

From designing a brand new control system or migrating a legacy control system for an existing process or packaging system, our industrial automated control systems can be customized for small systems requiring a few I/O and motors to complex systems with high I/O counts and numerous motors. Our systems and controls can range from railcar or truck unloading, to in-plant transfer systems, batching and blending, to packaging line operations such as bag filling, sealing and robotic palletizing.

EVERYTHING IS UNDER CONTROL

BENEFITS

- Increase Efficiency, Consistency & Accuracy
- Reduce Downtime & Production Waste
- Process Data available to ERP systems
- Ease of Operating for Personnel

FEATURES

- Specification Development
- Control Panel Design, Fabrication & Assembly
- Robotic Integration & Control Design
- PLC Programming & HMI Development
- Simulation & Testing
- System Commissioning & Training

SERVICE AND SUPPORT

INTEGRATION AND INTEGRITY. WELL-BEYOND INSTALLATION, WE WILL KEEP YOUR SYSTEMS RUNNING THROUGH OUR LIFECYCLE SUPPORT.

Our customers depend on Magnum Systems to keep the manufacturing line moving, before and after the sale. Sometimes our greatest moments come long after we have manufactured and installed equipment bearing the Magnum, Smoot or Taylor Products name. Anywhere along the line, our experts have seen and solved most problems that can impact your bottom line.

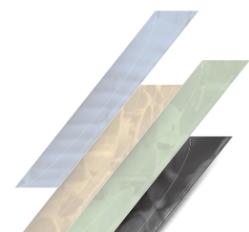
Our team of designers, engineers, installers and service technicians are as integrated as our material handling systems. From phone call to order fulfillment, problem identification to solution – you can rest assured the Magnum team is here to help you solve your business challenges.

Not only do we keep the line moving, we make the line more efficient, more profitable, more trusted and safer.



THE PEOPLE, PARTS
AND SYSTEMS THAT
KEEP THE LINE MOVING

- + PNEUMATIC CONVEYING
- + PACKAGING AUTOMATION
- + MATERIAL HANDLING





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