



# Material Handling Solutions & Services



# Optimised Custom Material Handling & Processing Systems

Experts in bulk handling equipment and systems. We provide turnkey solutions to optimise your industry and prioritise safety and operational efficiency. Backed by skilled professionals and global suppliers, we optimise raw material handling and design for customers with tailored solutions for outstanding results. Summit Dynamic Solutions is emerging as a key player in material handling, providing a diverse range of solutions and services tailored to meet the growing needs of raw and bulk material handling within all industries, with experience spanning over 35 years.

[www.summitdynamicsolutions.co.uk](http://www.summitdynamicsolutions.co.uk)



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## Conveying Systems

# Screw Conveyors

Our Screw Conveyors, or auger conveyors, are essential mechanical systems used to transport bulk materials efficiently. Anchored by a rotating helical screw blade nestled within a tube or trough, these conveyors seamlessly **facilitate the movement of an array of substances**, ranging from grains to semi-solid materials, across horizontal stretches, vertical inclinations, or as dictated by specific inclines. Their robust construction and adaptable design render them indispensable assets across a spectrum of industries, including aggregate, food processing, and industrial sectors.

- ▶ Customisable Design
- ▶ Control Material Flow
- ▶ Compact Design
- ▶ Enclosed Structure
- ▶ Minimal Spillage and Dust
- ▶ Flexible Design
- ▶ Precise Flow Control
- ▶ Versatile Operation
- ▶ Cost-Effective
- ▶ Clean and Safe Operation



## Material Handling Equipment

# Rip & Tip Stations

Our Rip & Tip Stations are **engineered for optimal performance, safety, and durability**. Our systems are designed with both efficiency and worker comfort in mind, ensuring seamless integration into your existing workflows. Whether you're dealing with packaged goods or bulk materials, our Rip and Tip Stations are built to enhance productivity and reduce operational costs.

- ▶ **The Rip Station** is used to remove packaging materials like boxes, wraps, and protective coverings, often feature cutting tools and waste collection areas for efficient disposal.
- ▶ **The Tip Station** facilitates the tilting or inverting of containers to transfer their contents, such as bulk materials or loose items, into storage bins or conveyors.

- ▶ Enhanced Efficiency
- ▶ Improved Accuracy
- ▶ Ergonomic Design
- ▶ Cutting Tools
- ▶ Durability & Customisation
- ▶ Tipping Mechanism





## Conveyor Systems

# Mechanical Conveying

We understand that each industry has unique requirements for optimal material handling. That's why we offer a diverse range of conveyor systems tailored to various applications and materials.

- ▶ Energy Efficient
- ▶ Durable and Reliable
- ▶ Customisable Designs
- ▶ Versatility Across Industries
- ▶ Space Optimisation
- ▶ Improve Workflow Efficiency
- ▶ High Temperature Resistance
- ▶ High Load Capacity
- ▶ Eco-Friendly Operation



Flat conveyor with food grade plastics belt & stainless-steel side panels



Stainless steel conveyors for food & pharmaceutical



Flat conveyor built into the loading hopper with stainless steel side panels



Conveyors with all round polycarbonate protection sides

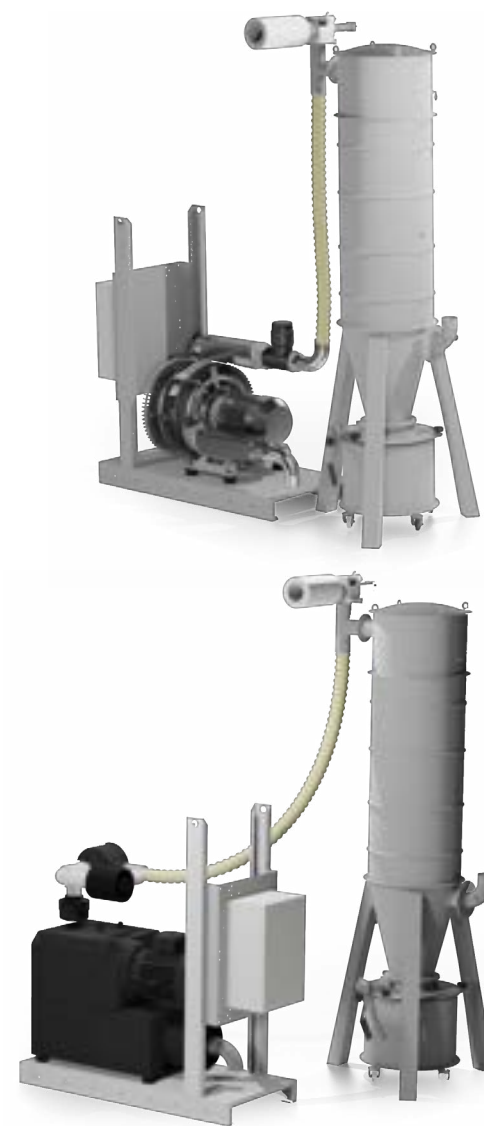


Conveyor with modular plastic belt complete with 90° curve



Conveyor with withdrawable compartment for quality control purposed





## Dilute Phase Pneumatic Conveying Systems

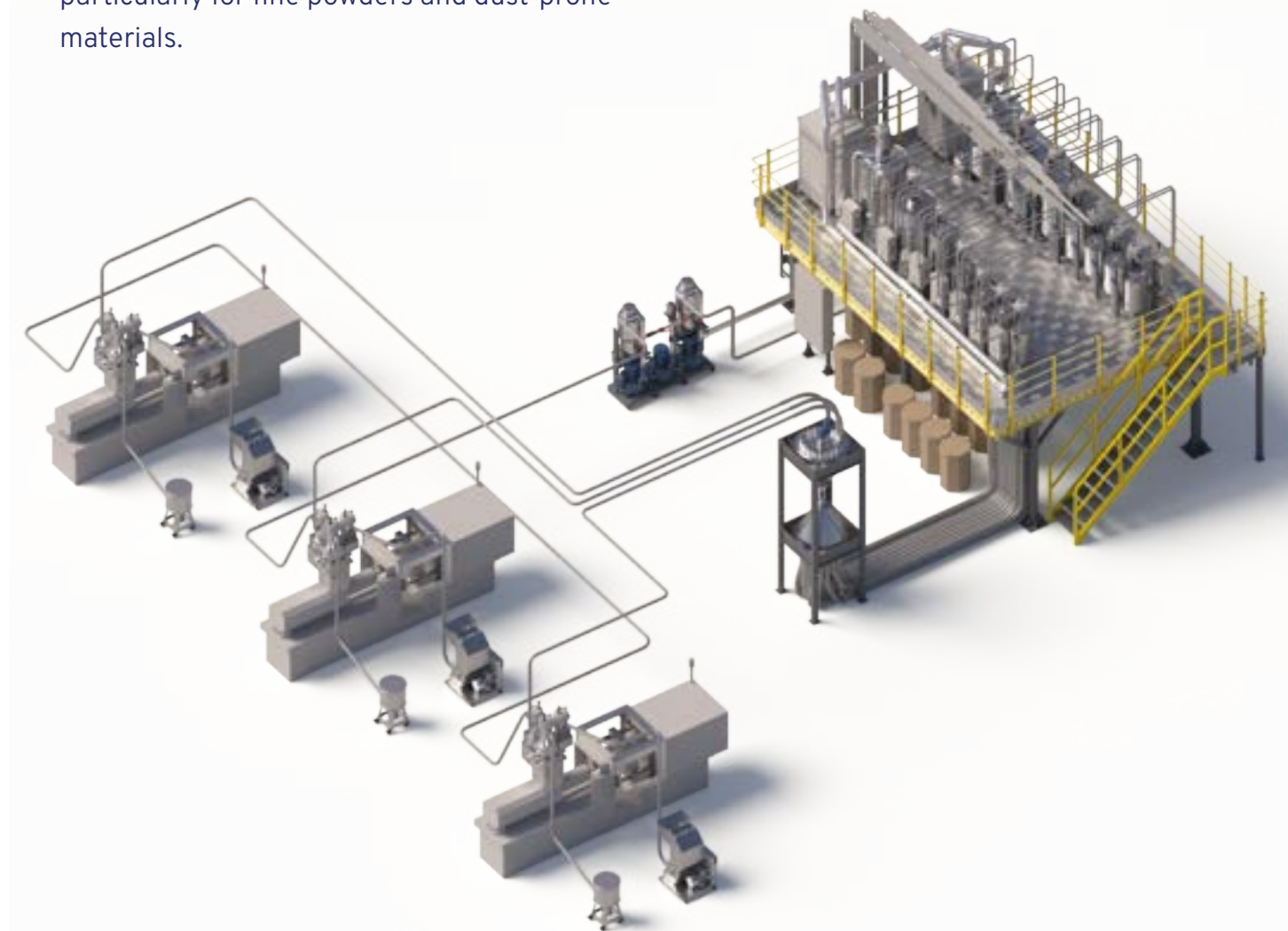
Dilute Phase Pneumatic Conveying systems utilise a continuous flow of air to suspend and convey materials through pipelines.

- **Versatility:** Ideal for a wide range of non-abrasive, non-fragile materials like sugar, flour, pellets, and low bulk density substances.
- **Efficient Material Transfer:** Prevents material settling, ensuring continuous transfer.
- **Reduced Maintenance:** Fewer moving parts and minimal wear lead to easier maintenance, lower costs, and longer system lifespan.
- **Clean and Safe Operation:** Enclosed pipeline design reduces dust and spillage, maintaining a clean and safe environment, particularly for fine powders and dust-prone materials.

## Dense Phase Pneumatic Conveying Systems

This method uses a high-pressure differential to gently push materials through the pipeline in plug or wave form.

- **Gentle Material Handling:** Dense phase systems use lower velocities and higher pressures, preserving the integrity of fragile or abrasive materials.
- **Reduced Wear and Impact:** High pressure differentials push materials in plug or wave form, minimising wear on materials and pipelines, extending equipment life and reducing maintenance.
- **Minimised Dust Generation:** The gentle conveying action reduces dust, creating a cleaner, safer environment, especially for dusty materials.



### Pneumatic Conveying

# Pneumatic Transfer Systems

These systems are highly efficient and versatile, ensuring hygienic handling of various materials across multiple industries. The enclosed design prevents contamination, maintaining the purity and quality of the materials being transported.

- **Contamination-Free Handling**
- **High Efficiency**
- **Versatile Application**
- **Low Maintenance**
- **Seamless Integration**
- **Flexible Design**
- **Material Compatibility**
- **Increase Productivity**
- **Cost-Effective**
- **Clean & Safe Operation**





## Storage Solutions

# Vessels, Hoppers & Silos

Our vessels, hoppers and silos represent the pinnacle of modern storage solutions, engineered to meet the highest standards of hygiene and preservation across multiple industries. Tailored to accommodate the specific characteristics of the stored materials, our storage solutions ensure optimal conditions, thereby extending shelf life and maintaining product integrity. From the food and beverage sector to the chemical and aggregate industries, our products are designed to deliver exceptional performance and reliability.

- ▶ **Customisable Design**
- ▶ **Optimal Storage Conditions**
- ▶ **Easy Access**
- ▶ **Versatile Applications**
- ▶ **Space-Saving**
- ▶ **Extended Material Shelf Life**

## Tower Silos

- ▶ **Gravity-Assisted Handling:** Simplifies loading and unloading.
- ▶ **Efficient Storage:** Gravity compression optimises space.
- ▶ **Automated Unloading:** Uses augers, air slides, or conveyors for quick access.
- ▶ **Space-Saving Design:** Ideal for limited ground space.
- ▶ **Versatile Storage:** Suitable for grains, cement, and granular materials.
- ▶ **Environmental Protection:** Shields contents from rain, wind, and pests.



## Material Day Bins

- ▶ **Contamination Prevention:** Secure construction safeguards materials from contaminants.
- ▶ **Customisable Options:** Features such as castors, sight glasses, and hinged lids are available.
- ▶ **Robust and Smart Design:** Durable build with a modern aesthetic.
- ▶ **Level Alarm Function:** Optional feature to monitor material levels effectively.
- ▶ **Versatile Outlets:** Available with single or multiple outlets to suit various needs.
- ▶ **In-House Manufacturing:** Designed and produced internally, ensuring high quality.







## Bulk Solids Handling Solutions

# Bulk Bags & FIBC Bulk Bag Stations

Our Bulk Bags & FIBC Bulk Bag Stations are engineered to provide a highly efficient and safe solution for handling and discharging bulk materials.

- ▶ **Product Integrity:** Maintains quality throughout emptying.
- ▶ **Versatile Design:** Handles various bulk bag sizes and weights.
- ▶ **Dust-Free Discharge:** Ensures a clean and safe operation.
- ▶ **Integrated Vibration Technology:** Promotes complete product release.
- ▶ **Conveyor Compatibility:** Works with multiple conveyor types for efficient transfer.
- ▶ **Seamless Integration:** Connects with volumetric feeders and dosing systems.

## Bulk Solids Handling Solutions

# Sieving & Dedusting Systems

Our Sieving and Dedusting Systems are meticulously engineered to enhance material quality and operational efficiency across various industries. Designed to effectively remove unwanted particles such as dust, fines, and oversized contaminants, these systems ensure the integrity and purity of your bulk materials throughout the handling process. Featuring a robust construction and advanced features like vibrating screens and efficient dust extraction mechanisms, our solutions are adaptable to suit different material types and processing requirements.

- ▶ **Custom Design**
- ▶ **Seamless Integration**
- ▶ **Adaptable to Various Industries**
- ▶ **Precision Sieving**
- ▶ **Contaminant Removal**
- ▶ **Optimised Dust Extraction**

Key factors to consider include material properties, required separation and dedusting levels, throughput capacity, and integration with existing equipment. Compliance with industry standards such as GMP, HACCP, and ATEX is also crucial, along with automation features for improved efficiency and reduced manual intervention. A custom-built system ensures seamless integration, enhances safety, minimises waste, and optimises long-term performance.







## Material Blenders

# Industrial Ribbon Blenders

Single-Shaft Ribbon Blenders deliver efficient, uniform mixing of dry materials in food, chemical, and pharmaceutical applications. Built for versatility, hygiene, and performance.

- ▶ **Gentle mixing preserves product integrity**
- ▶ **High mixing consistency and homogeneity**
- ▶ **Wide range of batch capacities (20–3,900 L)**
- ▶ **Hygienic stainless or coated steel construction**
- ▶ **Easy discharge and quick-clean design**
- ▶ **Low energy consumption, cost-efficient operation**

## Bulk Solids Handling Solutions

# Rotary Valves

Rotary valves, or rotary feeders, are essential for transferring dry bulk materials like powders or pellets between areas of differing pressure. They ensure consistent material flow while maintaining airlock integrity in pneumatic systems.

Built from durable materials with optional wear-resistant coatings, they suit demanding environments. With tool-free access and precision design, they offer reliable performance, easy maintenance, and versatility across industries such as food, cement, plastics, and chemicals.

Their ability to reduce energy loss and minimise system downtime makes them indispensable for efficient, controlled, and clean bulk material handling operations.

- ▶ **Consistent Metering:** Precisely controls material volume to avoid surges and ensure accuracy.
- ▶ **Maintains Pressure Integrity:** Acts as an airlock, sealing pressure zones and preventing leaks.
- ▶ **Energy Efficient:** Minimised air loss reduces blower demand and energy use.
- ▶ **Water Resistance & Durability:** Reinforced build extends service life and cuts downtime.
- ▶ **Operational Versatility:** Compact and modular, handles varied throughputs and pressures.
- ▶ **Maintenance-Friendly Design:** Quick-clean features and tool-free access ease servicing.





# Gearbox & Motors

Now available from Summit, these geared motors offer exceptional performance, reliability, and versatility across a wide range of industrial sectors. Built on decades of engineering expertise, their modular design and high-torque capabilities make them the ideal choice for everything from materials handling to heavy-duty process industries. These geared motors are trusted globally for their quality and reliability. Partner with Summit to access high-performance solutions backed by local support and technical expertise.

- **Modular Flexibility:** Wide range of configurations including foot, flange, motor-ready, and motor-integrated options. Compatible with both NEMA and IEC motors.
- **High Efficiency & Torque Output:** Advanced gear technologies (helical, bevel-helical, worm) ensure quiet, efficient, and powerful performance under continuous loads.
- **Heavy-Duty, Low-Maintenance Construction:** Robust cast-iron housings, oil-tight assemblies, and durable internals built for long service life with minimal downtime.
- **Easy Integration & Replacement:** Dimensionally interchangeable with major brands – ideal for upgrades, retrofits, and seamless integration into existing systems.
- **ATEX-Ready & Special Applications:** Available for use in hazardous environments (ATEX Zones 1/2/21/22) and tailored models for cranes, hoists, and screw-jack systems.



## Our Services

# Control Systems

We delivers cutting-edge control solutions tailored to the demands of modern material handling through our Supervisory Control System. Designed to integrate seamlessly across your entire automation setup, this advanced system enables real-time monitoring, control, and optimisation of your equipment and processes. Whether you're looking to enhance production efficiency, track energy consumption, or minimise downtime, Summit's Supervisory System provides the visibility and control needed to make smarter, faster decisions.

- **Real-time Monitoring:** Access live data from all connected machines
- **Centralised Control:** Manage your entire process from one intuitive interface.
- **Performance Tracking:** Gain insights into energy usage and operational efficiency.
- **Reduced Downtime:** System alerts help prevent failures before they impact production.
- **Custom Configuration:** Tailored setups to match your process requirements.





## Our Services

# Installation & After Sales Services

Our expert team of highly experienced engineers, based across the UK and Ireland, provides industry-leading installation and commissioning services. With direct access to technical teams from our global suppliers, we guarantee precision, efficiency, and reliability in every project, ensuring seamless system performance and long-term success.

With a comprehensive range of After Sales care solutions, Summit Dynamic Solutions ensures your operations run seamlessly. From Spares and Training to Service Packages, Refurbishments, Repairs, and Breakdown Cover, our offerings are tailored to meet your specific needs.

- ▶ **Nationwide Coverage**
- ▶ **Minimised Downtime**
- ▶ **Bespoke Training**
- ▶ **Expert Engineers**
- ▶ **End-to-End Support**
- ▶ **Support Packages**
- ▶ **Seamless Integration**
- ▶ **Spares Packages**
- ▶ **Repairs & Refurbs**

## Our Services

# System Design Services

The design engineering team at Summit Dynamic Solutions develops efficient solutions for even the most unique challenges, utilising highly customised equipment tailored to specific customer needs rather than relying solely on existing product lines.

- ▶ **Entirely customised designs for your process**
- ▶ **Highlight custom equipment complying with government standards**
- ▶ **Solutions based on unique customer requirements**
- ▶ **Designs suited to all industries**
- ▶ **Comprehensive support from consultation, design and installation**







Summit Dynamic Solutions delivers tailored engineering solutions that optimise material handling and drive innovation across all sectors.

**Speak to the experts today**

Summit Dynamic Solutions, a trusted member of the Summit Group, brings decades of proven expertise in the plastics industry to transform material handling across a wide range of sectors.

