



Elit Process[®]
Perfection in Engineering

Perfection in Engineering!

PRODUCT CATALOG

Your Trusted Partner in Bulk Material Handling for 17 Years

With 17 years of engineering expertise, we deliver turnkey, high value-added solutions for bulk material handling and storage processes.

By implementing rigorous quality standards and paying meticulous attention to every detail, we design industrial equipment that ensures long-term performance, reliability, and durability.

In bulk material handling and storage systems, our engineering solutions focus on process efficiency, operational reliability, and uninterrupted system performance. From initial design to final commissioning, we optimize production sustainably through turnkey systems tailored to each customer's unique process requirements.

Leveraging our internationally compliant production infrastructure, advanced engineering capabilities, and detail-driven design approach, we create industrial equipment that delivers exceptional performance, extended service life, and low operating costs even in the most demanding industrial environments.



Elit Process: Global Engineering Excellence in Bulk Material Handling

Elit Process is a world-class engineering company with **17 years** of expertise in bulk material handling, driven by a culture that never compromises on quality, durability, and sustainability. With our dedicated team, we deliver the right solutions at the right time in pneumatic conveying systems, screw conveyors, big bag discharge systems, and industrial material handling solutions. Our commitment to global engineering excellence ensures high performance and reliability in every project we undertake.

Innovative

Sustainable

Reliable

Superior
Quality



Our Vision & Core Values



Elit Process adopts a safe, sustainable, and ethical approach in all its operations, actively supporting its customers' environmentally friendly production goals.



Our passion is to leverage our expertise and quality to provide our global customers, on time, with some of the world's most reliable, high-quality, and sustainable process and machinery solutions.



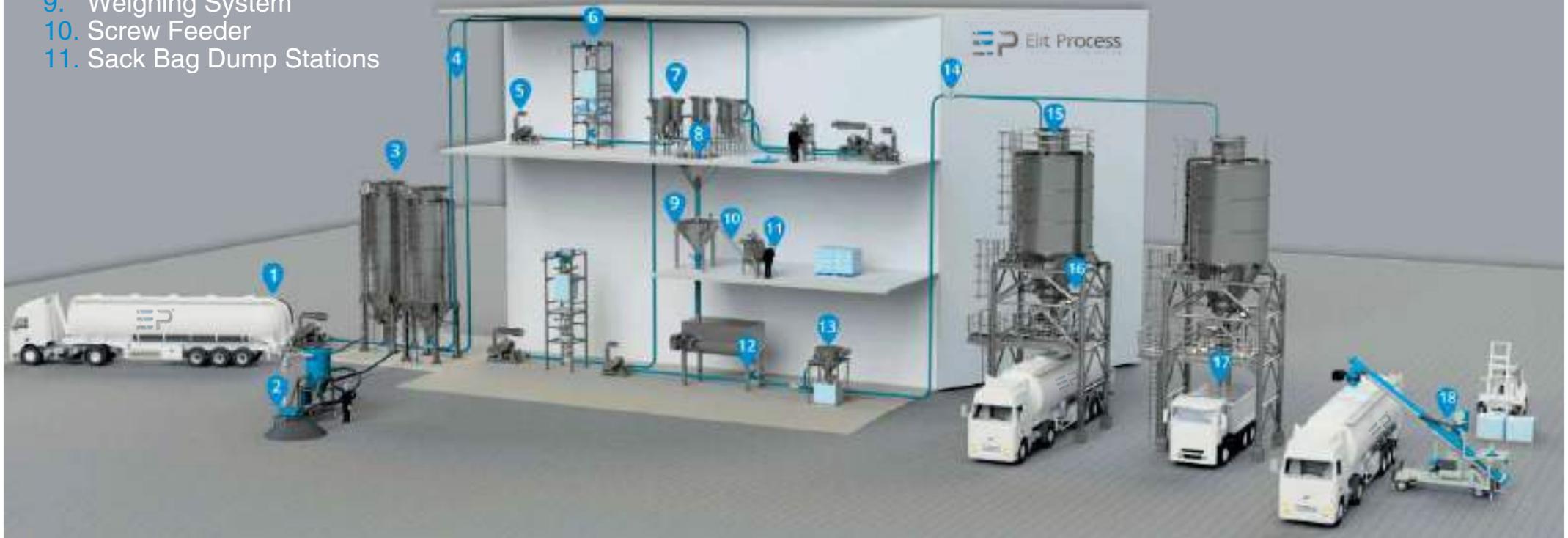
Our key suppliers and partners are essential to our success. That is why we strive to build long-term, collaborative, fair, and trustworthy relationships that benefit both parties.



Every product we design is engineered for exceptional quality and long service life. Our work is guided by two core principles: Excellence and Superior Quality.

1. Silo Filling from Silotanker
2. Mobile Pneumatic Conveying System
3. Silo
4. Pipeline for Pneumatic Conveying
5. Blower (Roots Blower)
6. Big Bag Discharge System
7. Filter Receiver
8. Batching and Dosing Systems
9. Weighing System
10. Screw Feeder
11. Sack Bag Dump Stations

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
- Weighing, Batching and Dosing Systems

BULK SOLIDS HANDLING EQUIPMENT

- Blower (Roots Blower)
- Rotary Valves
- Diverter and Flow Control Valves
- Silo Equipments
- Jet Filters
- Screw Conveyors
- Telescopic Loading Bellows
- Bin Activators

MOBILE BULK MATERIAL HANDLING SYSTEMS

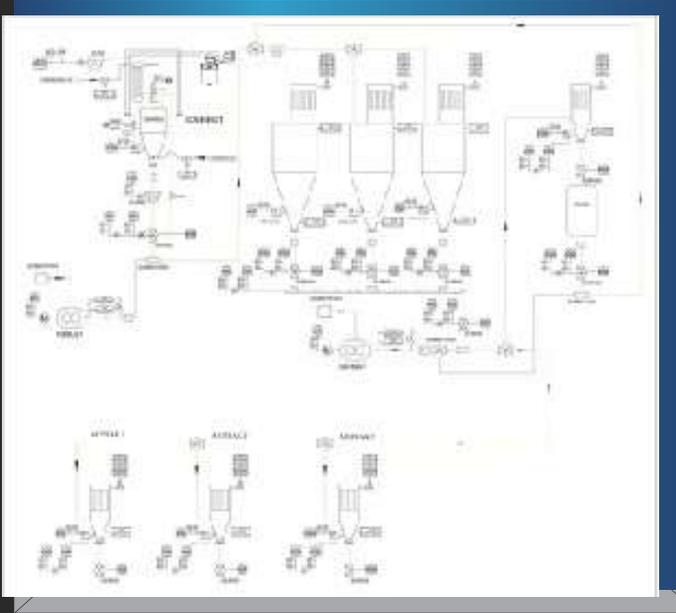
- Bulk Bag Discharge and Bulk Truck Loading Systems
- Vacuum Conveying and Bulk Bag Filling Systems
- Mobile Pneumatic Conveyors

SCREW JACK SYSTEMS

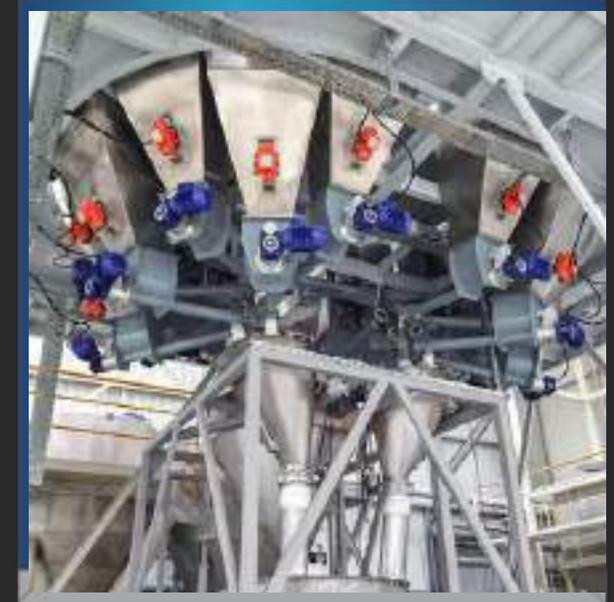
BULK MATERIAL CONVEYING SYSTEMS

With decades of expertise in bulk material handling systems and industrial automation solutions, Elit Process has become a trusted global partner for industries seeking efficient and reliable material handling equipment. Our extensive experience in designing, engineering, and implementing customized conveying, storage, and dosing systems ensures optimal performance for every application.

Driven by innovation and continuous improvement, we deliver tailored industrial process solutions that meet the unique needs of each customer. From bulk material conveying and dosing to storage and discharge systems, our advanced technologies and skilled engineering team provide seamless operations, maximum productivity, and long-lasting equipment performance.



Efficient and reliable bulk material handling is crucial for the success of industries dealing with a wide range of bulk solids, including grains, powders, food products, plastic pellets, and more. At Elit Process, we provide a comprehensive and innovative portfolio of bulk solids storage, transfer, and conveying solutions, designed to optimize productivity, ensure operational reliability, and meet the unique needs of each industry.



The manufacturing sector is undergoing a significant transformation, moving toward greater flexibility and adaptability, driven by the rise of Industry 4.0 technologies and smart industrial solutions.

The Fourth Industrial Revolution, Industry 4.0, is transforming various sectors of manufacturing in response to evolving consumer demands. Elit Process continues to monitor these advancements closely, adapting and enhancing its capabilities to deliver innovative and future-ready industrial solutions.

MOBILE BULK MATERIAL CONVEYING AND LOADING SYSTEMS

Bulk products are introduced into the system via big bags (FIBC), loaders, or flexible hoses and vacuumed into a cyclone or conveyed with screw conveyor. These materials can then be transferred efficiently, dust-free, and at high speed into bulk load trucks, ensuring safe and reliable bulk material handling operations.

These mobile bulk material transfer systems are not only compact but also easy to operate and transport, providing flexibility for use in a wide range of industrial scenarios.



Elit Process'in mobil big bag boşaltma ve yükleme sistemleri, big bag'lerin boşaltılması ve tanker kamyonlarının tozsuz yüklenmesi işlemlerini verimli bir şekilde gerçekleştirir. Bu mobil sistem, big bag boşaltıcı, vidalı konveyör, teleskopik şut ve toz toplayıcılı bir platform içerir ve tümü kolay taşıma için forklift veya çekme demiri ile çekilebilir. Yükleme sahasında, sistem silobas yanına yerleştirilir. Vidalı konveyör uygun yüksekliğe ayarlanarak teleskopik oluğu tankerin giriş portuna bağlar. Big Bag'ler bir boşaltma bunkerini kullanarak veya çözülmüş ağızlarla boşaltılır, ardından vidalı konveyör tarafından yükleme sırasında toz emisyonunu önlemek için otomatik olarak ayarlanan teleskopik şut aracılığıyla tankere doldurulur.



ADVANTAGES / FEATURES

Simple & Functional: Designed to be user-friendly, this system ensures smooth operation and efficient bulk bag (FIBC) handling and truck loading through local controls, providing reliable and seamless bulk material transfer.

Anywhere, Anytime: Equipped with a mobile chassis and tow bar, this system provides flexibility and ease in bulk material handling, allowing it to be easily transported to various locations regardless of the environment.

Safe & Dust-Free: The integrated dust collection system captures dust during operation, preventing its release into the atmosphere. This not only reduces material loss but also ensures a clean and dust-free working environment, enhancing safety and operational efficiency in bulk material handling.



PNEUMATIC CONVEYING SYSTEMS



Efficient, reliable, and sustainable bulk material handling systems form the backbone of operational success for industries handling a wide range of bulk solids, including grains, powders, food ingredients, plastic pellets, and more. Ensuring process continuity, maintaining product quality, and minimizing losses are achievable through the right engineering solutions.

At Elit Process, we provide comprehensive and innovative solutions for the safe storage, controlled transfer, and efficient conveying of bulk solids throughout process lines.

Leveraging our advanced engineering expertise, industry experience, and high manufacturing standards, we develop customized, durable, and high-performance systems for every project. With solutions tailored to specific needs, we enhance our customers' production efficiency while minimizing operational risks in bulk material handling processes.

ROOTS-BLOWER

For many years, Elit Process has been strongly focused on pneumatic conveying, producing durable Roots Blowers. These blowers are critical components for various industries, offering numerous advantages while ensuring reliable, high-performance operation in industrial material handling systems.



ROTARY VALVE (AIRLOCK)

Elit Process airlocks stand out as the pinnacle of engineering, meticulously designed with safety and quality in mind. They deliver reliable performance and are essential components in industrial bulk material handling systems.



Direct Flow Airlock

With vertically aligned inlet and outlet ports of similar size, bulk solids flow easily downward through the rotary valve. Direct Flow Airlocks are widely used for general-purpose bulk material handling applications.

Direct Blow (Plug) Airlock

Ideal for pneumatic conveying lines, these airlocks can be mounted directly onto a conveying line without any intermediate equipment. Material is fed straight into the conveying line via the pneumatic line connection on the valve covers instead of the discharge flange.

Offset Airlock

Designed for handling fragile bulk solids such as peanuts or sunflower seeds. Offset Airlocks allow sensitive materials to be transported without deformation or breakage, preserving the integrity of the particles.

Custom-Designed Airlock

Robust, high-quality custom airlock models are available to meet the most demanding applications. Elit Process manufactures non-standard, high-performance airlocks tailored to the specific needs of each customer.



BIG BAG DISCHARGE SYSTEM

Powdered, granular, and particulate materials contained in big bags can be efficiently, safely, and automatically discharged using a big bag unloading system.

Big bags are positioned either by forklift or using the integrated crane mechanism of the big bag unloading station. When the discharge spout is opened, any released dust is captured by high-efficiency filters. The system ensures controlled and safe transfer of materials to connected equipment such as pneumatic conveying lines, screw conveyors, and dosing devices.



SACK UNLOADING SYSTEMS

Bag discharge stations, also referred to as bag unloaders, are essential industrial equipment for safe and efficient bulk material handling. These stations enable operators to empty materials from bags, sacks, buckets, or similar containers and transfer them directly to conveyors, mixers, silos, or other processing equipment. During discharge, airborne dust is captured by the integrated extraction system, filtered, and returned to the process, ensuring a clean working environment. Bag discharge stations effectively prevent the spread of hazardous dust while minimizing material loss, making them critical for sustainable industrial operations.



FEATURES

- **Weighing and dosing system** for precise material measurement
- **Food-grade stainless steel construction** for hygienic and durable performance
- **Big Bag tearing device/blade** for safe and controlled discharge
- **Piston-operated Big Bag compaction and massaging mechanism** to optimize product flow rate



LOADING CHUTES

TRUCK LOADING BELLOWS

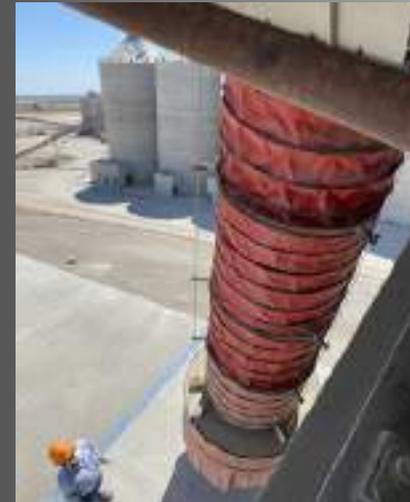
The truck loading bellows ensure dust-free transfer of powdered materials from equipment such as silos and screw conveyors to trucks. Material discharged from a screw conveyor or silo passes through the bellows and falls onto the truck bed. Flexible rubber seals at the discharge end prevent material from spreading into the environment. Dust generated as material flows along the inner wall is extracted from the outer wall and can be directed to a separate filtration unit. As the truck bed fills, the bellows automatically retract to accommodate the increasing material level.

SILO-TRUCK LOADING BELLOWS

The silo-truck filling bellows enable dust-free loading of raw materials into silo trucks. The bellows' discharge end, designed to fit the silo truck inlet, is positioned on top of the silo truck, allowing material to flow smoothly through the bellows into the silo. Sensors on the filling bellows automatically stop the loading process when the silo truck is full. Dust-laden air generated during filling is extracted by a fan system and filtered, ensuring a clean and safe operation.

HEAVY DUTY LOADING CHUTES

Heavy Duty Telescopic loading bellows are used for high-capacity loading of powders into trucks, ships, and storage facilities. They enable the dust-free filling, loading, or unloading of bulk powders, granules, and particulate materials in both open and enclosed areas within industrial plants and operations, ensuring clean and efficient material handling.



RAW MATERIAL STORAGE SILOS and EQUIPMENT

1. **SILO-TOP JET FILTER:** The silo-top jet filter is used for dust-free exhaust of pneumatic conveying air from silos, tanks, and containers during powder or granular material loading. **Elit Process** silo-top jet filters prevent dust emissions and raw material loss through dusting, enhancing operational safety.

2. **BIN ACTIVATOR:** Prevents material flow issues inside silos such as bridging, rat-holing, and segregation. Available in various sizes. Body options include carbon steel, stainless steel, and Hardox steel. The abrasion-resistant polyurethane flexible connection between the silo and the vibration cone protects both the silo and equipment. Compatible with different feeding and dosing systems. Easy to install, low maintenance, and high performance.

3. **SLIDE GATE VALVE:** This type of slide valve (blade valve, slide gate) is typically installed at the discharge points of silos, loading bellows, hoppers, bunkers, mechanical conveyors, or other gravity-fed outlets. A parallel-moving internal gate opens or closes the material flow.

4. **ROTARY VALVE (AIRLOCK):** Airlocks are essential components of pneumatic conveying systems. They regulate the flow of dust, granules, or other bulk materials from silos, bunkers, cyclones, or filters. Airlocks prevent air leakage between material inlet and outlet zones under pressure, vacuum, or gravity. By providing a consistent and steady material flow, airlocks ensure smooth and efficient process operation. Also referred to as rotary feeders, star feeders, rotary valves, cell wheels, or rotary airlocks.

5. **PRESSURE RELIEF VALVE:** Silo pressure relief valves are designed to balance positive and negative pressure inside silos and bunkers. These valves open when pressure reaches a critical point during silo filling, restoring the internal pressure to safe levels and protecting industrial storage units.

6. **SENSORS/SWITCHES:** Silo level switches transmit the minimum or maximum material levels of silos, bunkers, or storage units into electrical signals via rotary sensors. In industrial facilities, silo level sensors are selected based on the material and system requirements and can be rotary paddle, capacitive, or vibration type.

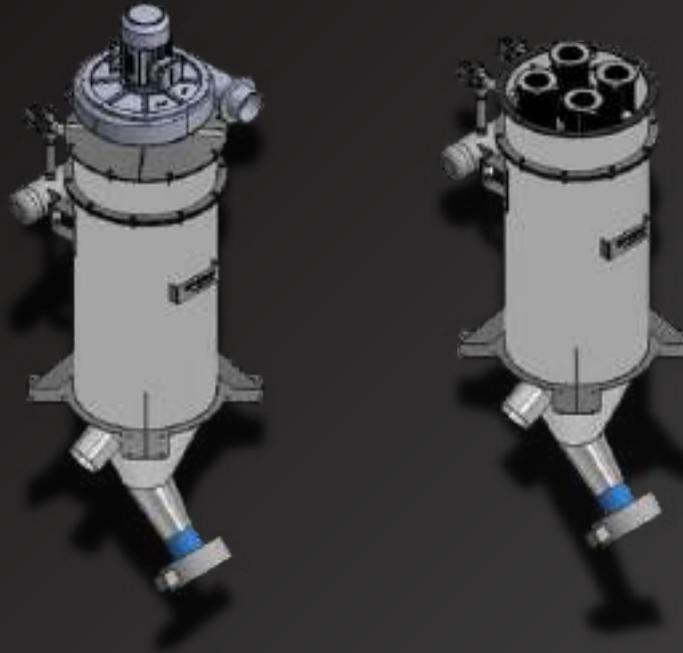


JET FILTER & DUST COLLECTION SYSTEMS and EQUIPMENT

Our jet filter and dust collection systems are engineered to capture fine and coarse dust particles generated in industrial processes with high filtration efficiency. These systems effectively separate dust as process air passes through the filter elements, reducing emissions released into the atmosphere well below national and international environmental standards.

The automatic jet-pulse cleaning mechanism periodically removes accumulated dust from the filter surface using compressed air pulses. This ensures continuous and stable air permeability across the filter elements, controls pressure drop, and guarantees uninterrupted system operation. Low maintenance requirements and long filter lifespan significantly reduce operating costs.

Systems are custom-engineered based on process capacity, dust load, particle size, and temperature parameters. Cartridge, bag, or specially coated filter media options provide solutions tailored for diverse industries and applications. ATEX-compliant design options enable safe operation in explosive dust environments. With robust steel construction, leak-proof housing, and high-quality components, our jet filter systems deliver long-lasting, reliable dust extraction performance even under the most demanding industrial conditions.



FLOW CONTROL & DIVERTER VALVES

Flow control and diverter valves enable efficient and uninterrupted regulation of granular, powdered, or pelletized raw materials. They are ideal for directing or stopping material flow in pneumatic conveying and gravity-fed applications.

Operation can be achieved via electric motor, pneumatic actuator, or manual lever, providing versatile control options for industrial processes.



ELASTIC VALVE



GRAVITY FLAP DIV. VALVE



SLIDE GATE VALVE



BUTTERFLY VALVE

DIVERTER VALVE for
PNEUMATIC CONVEYING
LINES



EP-DIV-P6-150/125

SCREW CONVEYORS

At Elit Process, we specialize in designing and manufacturing screw conveyors tailored to a variety of applications and material characteristics.

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



Screw conveyor solutions bearing the Elit Process signature!

High durability, long service life, and maximum process efficiency guaranteed!

DOSING & WEIGHING SYSTEMS

Our systems expertly manage the dosing of bulk materials, whether on a volumetric or weight-based basis. Leveraging advanced PLC or computer-controlled technologies, we enable precise feeding that facilitates the production of a wide range of end products with accuracy and efficiency.



The dosing bunker, specifically designed by Elit Process for sugar melting processes, provides precise and controlled feeding to enhance process stability. Its optimized bunker geometry and flow characteristics minimize the risks of bridging and irregular flow. The robust construction ensures continuous and reliable operational performance. Customizable to process requirements, the system delivers high efficiency and low operating costs.

Elit Process high-precision dosing bunker, specially designed for sugar handling processes.



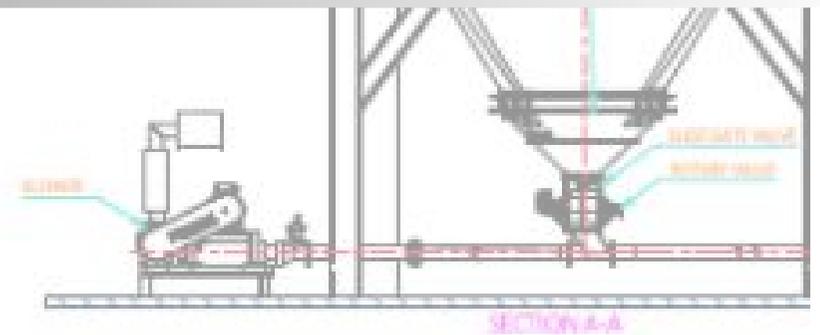
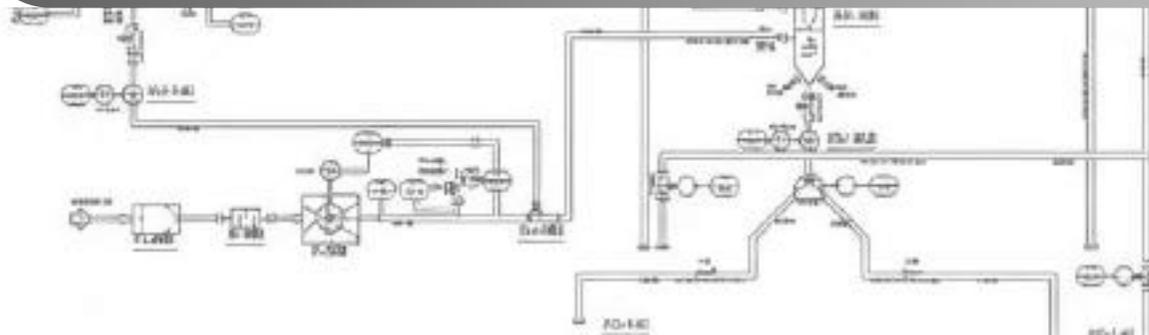
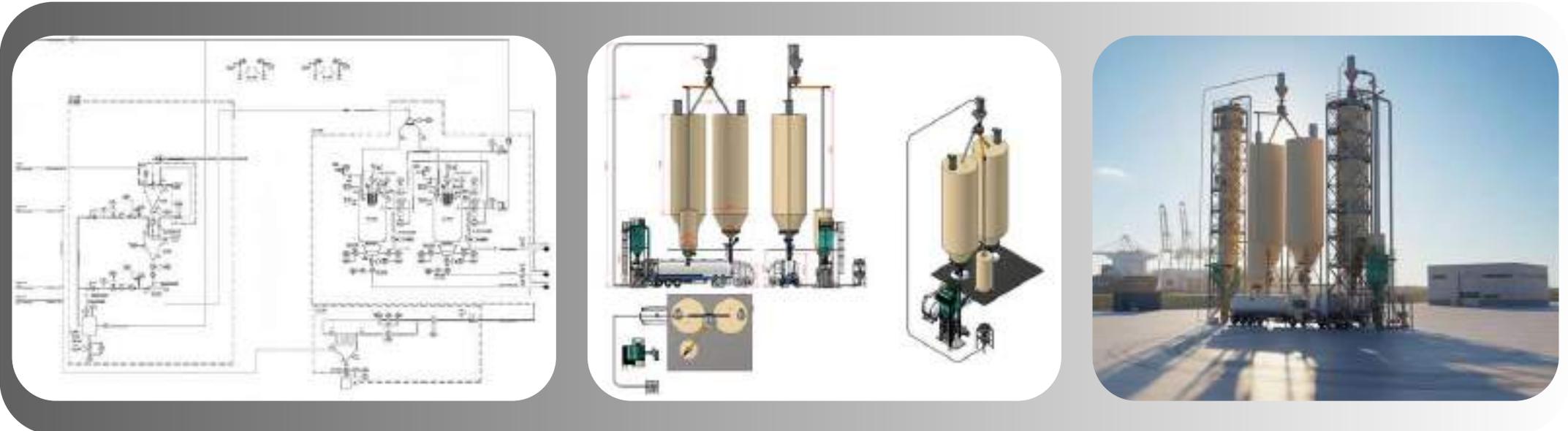
PROJECT ENGINEERING & DESIGN

Engineering-Focused Project and Design Approach

Elit Process designs industrial equipment and systems for the handling of powdered and granular bulk materials using an engineering approach centered on customer needs. Each project is thoroughly analyzed based on process requirements, material characteristics, capacity expectations, and operational conditions. System designs developed from this analysis are optimized with a focus on performance, reliability, and long service life.

Application-Specific, Reliable, and Efficient Solutions

Leveraging advanced engineering calculations and field experience, Elit Process solutions are tailored to each specific application. Critical parameters such as material flow, wear, and dust control are carefully evaluated, especially for dry and fine powders. The resulting systems deliver high process efficiency, low operating costs, and sustainable operational performance, providing long-term support for customers' production goals.



ELIT PROCESS INDUSTRIAL PROCESS SOLUTIONS



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Perfection in Engineering

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