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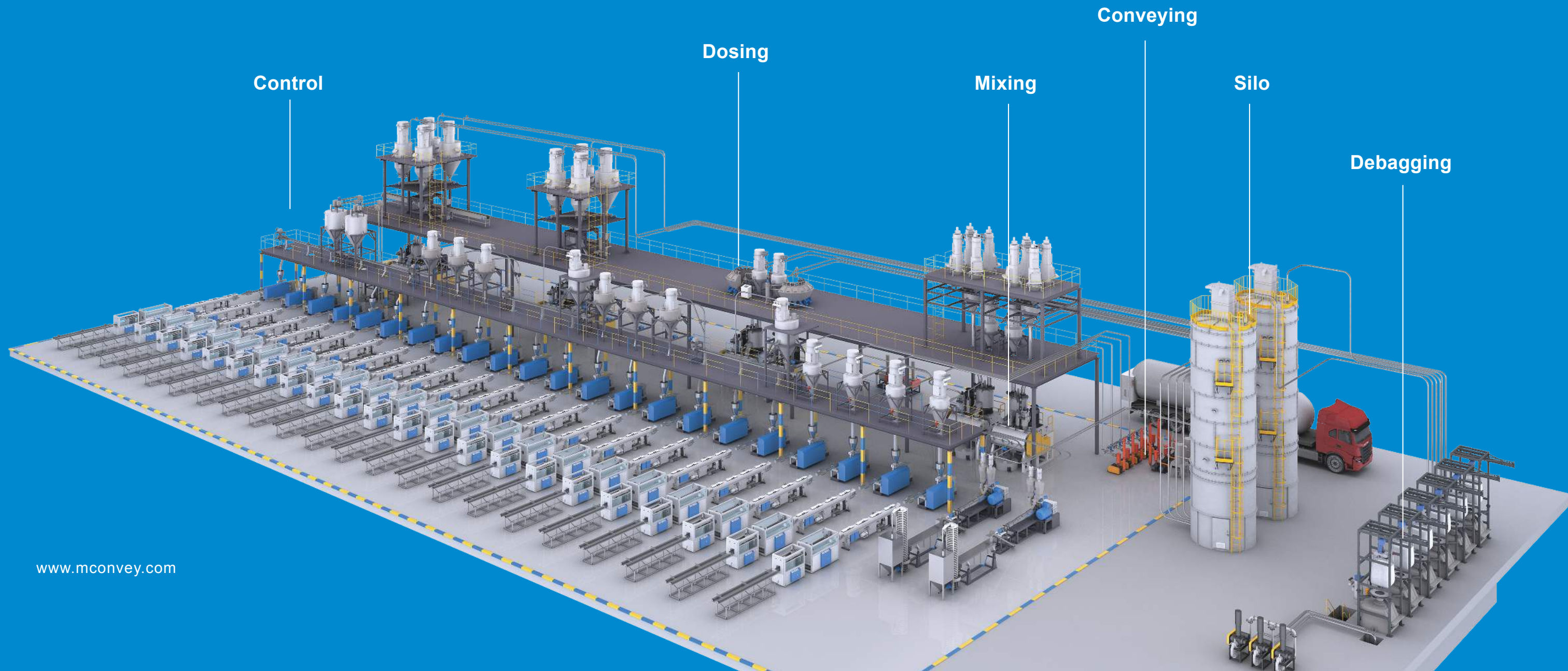
Website: www.mconvey.com / www.ls-extrusion.com



Material Automation Handling Solution

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Company Profile

Mconvey, a brand of Liansu, a material handling solution provider integrating R&D, production, sales, installation and service. Mconvey engages in the R&D and manufacturing of Silo, Automatic Dosing, Mixing and Conveying equipment in the plastic industry over 10 years . At present, Mconvey products cover a full range of silo storage, dosing, mixing, and conveying equipment , which are widely used in the processing of various raw materials such as powder, granular and liquid materials in the extrusion and injection molding industries.

Mconvey has a technical development team composed of more than 60 engineers with rich experience, strong technical research and development capabilities, and independent innovation capabilities. Mconvey provides customized automated material mixing and conveying solutions according to customer needs.



The workshop is equipped with automatic laser cutting, robot welding workstations and other automated processing equipment to ensure the quality and efficiency manufacturing. Mconvey introduces and applies digitalized manufacturing management system to realize digital production management.

Mconvey has an experienced project construction team to ensure the projects are delivered efficiency and on time, providing customers with reliable and comprehensive services.



Debagging

Mconvey provides 25kg Automatic Debagging System, and Jumbo Bag Discharging Station for powder and granular materials, which effectively reduce labor strength and cost, reduce dust pollution, improve efficiency.

25kg/bag Material Automatic Robot Debagging System

A robot is used to unpack raw materials at multiple stations. The 6-axis robot walks on a long ground track. When raw materials at different stations need to be unpacked, the robot automatically moves to the corresponding station. It is suitable for multiple kinds of raw materials unpacking at the same time.



For granules material debagging(Multiple station)

The machine has high output and can grab 5~6 packages of 25 kg of raw materials at one time and open at one time. It is suitable for single raw materials and high output demand.



For large capacity granules material debagging(Single station)

It can open bags continuously with high output, material residue, bags automatic collection and low dust emission.



For powder materials(Continuous debagging)

Jumbo Bag Discharging Station

Remote control unloading is simple to operate, convenient and efficient, and can be used for unloading powder and granular materials.



Silo

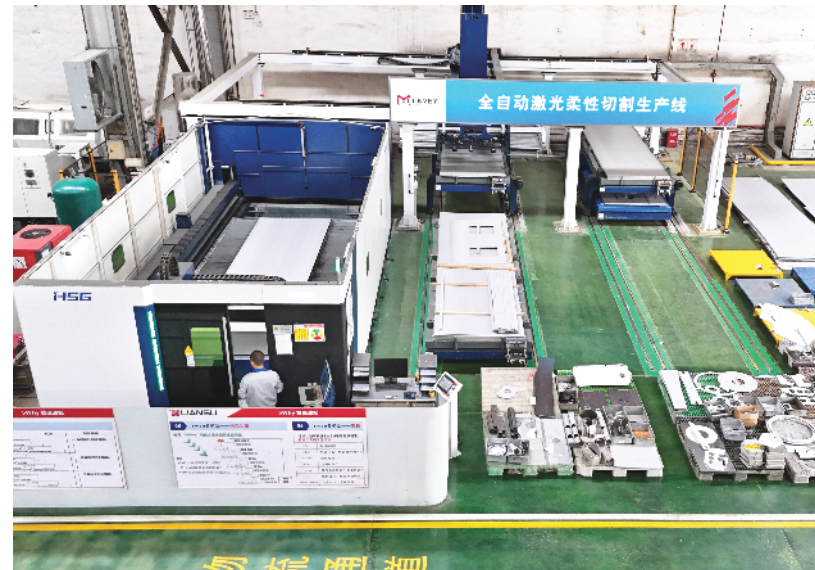
Mconvey offer different type of silo to meet different needs, metal material like 304 stainless and Magnesium aluminum alloy silo, also Fabric silo. The workshop is equipped with a variety of automatic welding robot workstations (CO2, laser, argon arc welding) for the production of large silo with a volume of up to 1000m³, designed for the storage and transportation of powder, granular and liquid materials. The large silos have passed the authoritative earthquake and typhoon resistance verification, with excellent structural stability and sealing, to achieve efficient and safe raw material storage. The silos can be directly welded or assembled, and through simulation design, welding stress and deformation are reduced, creating the industry's first "disordered" assembly technology for stainless steel super-large silos.



304 stainless silo



Aluminized Magnesium Alloy Silo



Automatic flexible Laser cutting machine



Automatic welding robot workstation



Dosing

- ▶ For **Powder Dosing**, Mconvey provides multi-component powder formula weigher, powder loss-in-weight feeder, pigment doser and other products to achieve accurate dosing, especially for powder materials with poor fluidity, and can provide effective solutions.



- ▶ For **Granular Dosing**, Mconvey provides a full range of multi-component gravimetric blender, self-mixing gravimetric blender, loss-in-weight doser, gravimetric doser, etc., which are suitable for accurate dosing and mixing of various granular materials.



Dosing

- ▶ For **Liquid Dosing**, Mconvey offers "batch" way and "continuous loss-in-weight" liquid doser device in compact size and accurate dosing.



Flexible processing solutions:

For powders, granules and liquids, Mconvey can provide system solutions. The dosing of various raw materials can be flexibly and customized combined to meet diversified demands, achieve accurate online proportioning, flexible color switch and formula adjustment, and ensure efficient, stable and flexible production.



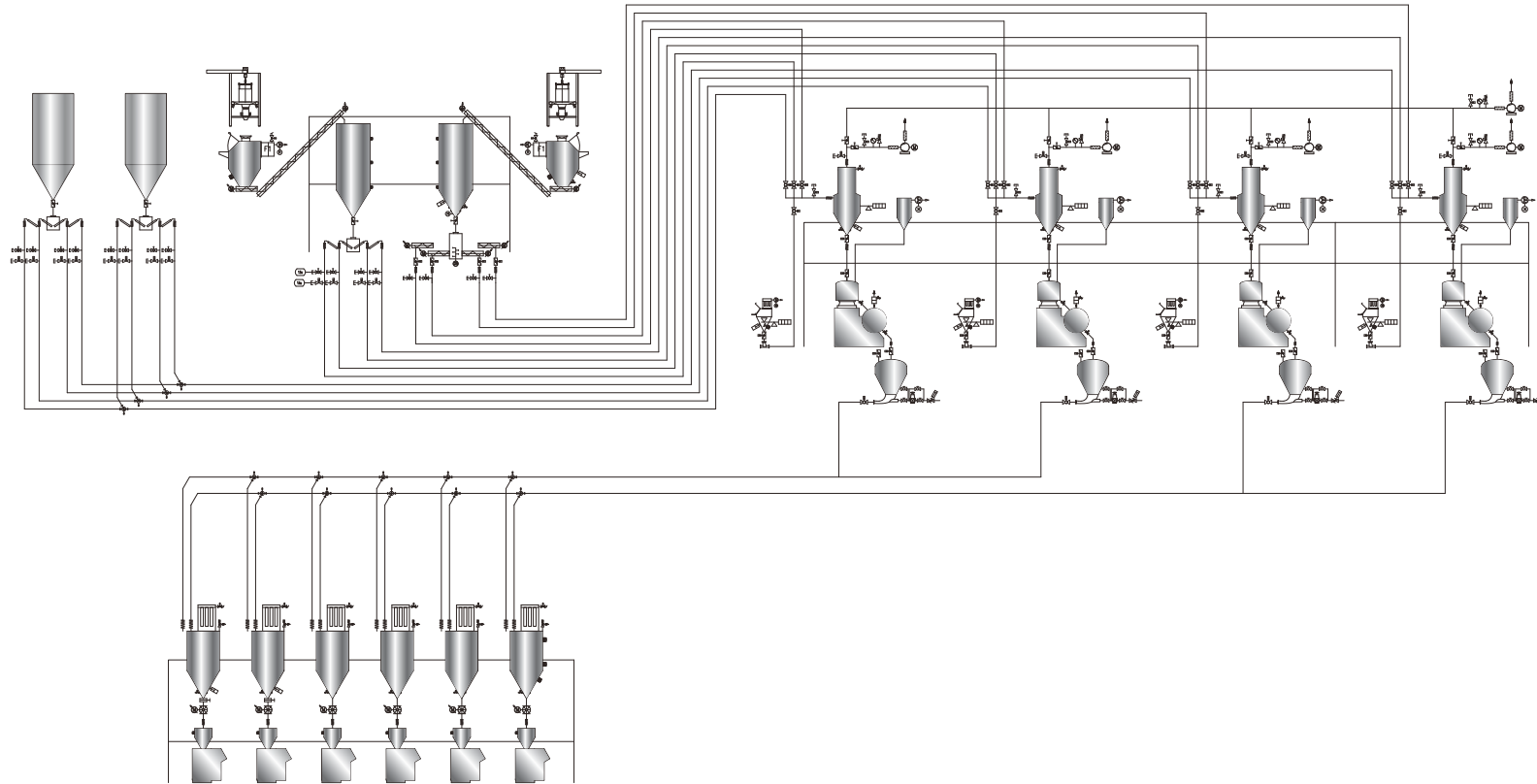
Mixing

Mconvey provides high-speed mixers and various mixers (ribbon mixers, horizontal coultter mixers) to ensure efficient and uniform mixing of materials. The high-speed mixer adopts permanent magnet motor dedicated to ultra-efficient mixing, with a heavy-duty structural bearing and special wear-resistant high-speed dynamic balancing blades, which ensures high production while leading the industry in energy saving by more than 20%. In addition, Mconvey also produces various types of ribbon mixers and horizontal coultter mixers to meet the mixing and stirring of a variety of materials online or offline.



Conveying

Powder conveying: conveying of various compound materials, With accumulated experience in hundreds of solutions for more than 10 years, Mconvey adopts a combination of physical conveying, negative pressure vacuum conveying and positive pressure dense phase conveying, which can effectively solve the problems of blockage in long-distance conveying and stratification of mixed conveying of various materials with different densities.



Vacuum conveying: centralized conveying of materials, Mconvey has deeply developed a permanent magnetic vacuum pump group with multiple invention patents, which has significant advantages in energy saving. The energy saving effect is over 50%. Vacuum pump group has low maintenance costs and significantly reduced noise.



Control

SCADA

It can monitor and control on-site operating equipment, and realize data collection, data analysis, equipment control, measurement, parameter adjustment, and various signal alarms.

Recipe Storage

Store production recipes and count production data.

Data collection and traceability

Real-time collection and archiving of key parameters such as dehumidification, drying, weighing, and pneumatic conveying of the feeding system for quality traceability.

Raw material usage statistics

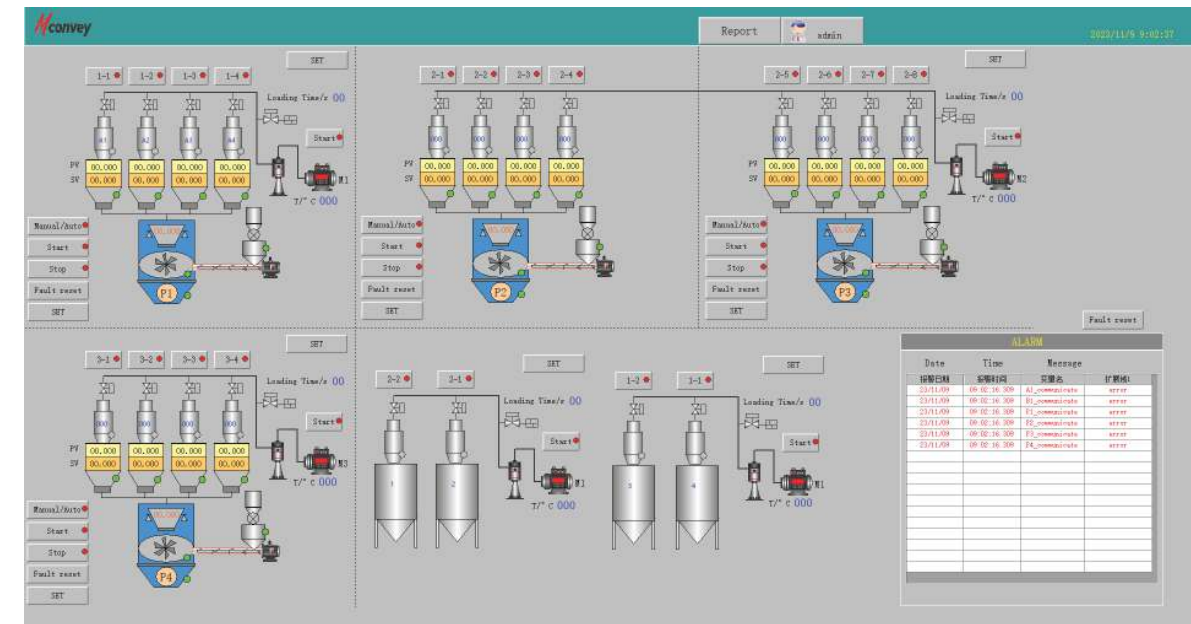
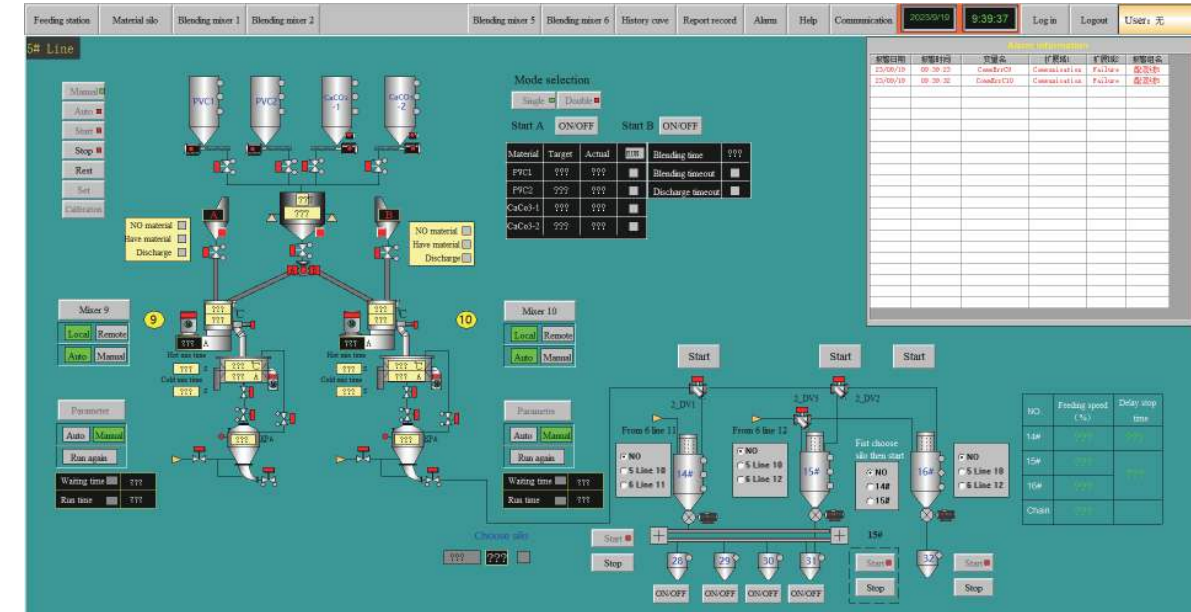
Count the usage of various raw materials and generate reports.

Data recording and query

Record information such as production material type, time, and material change nodes, and query historical data by date.

Fault alarm

Alarm and archive faulty equipment for daily equipment maintenance.



Control

IoT

It can realize the networking, communication, data collection and analysis of equipment, so as to digitize production equipment and visualize the production process.

Data Browsing

Display historical equipment data through charts, curves, lists, and other methods

Message Reminder

Equipment alarm, maintenance reminder, process parameter abnormality reminder.

Production Management

Equipment raw material consumption, production, input-output analysis, multi-dimensional data analysis, etc.

Equipment Maintenance

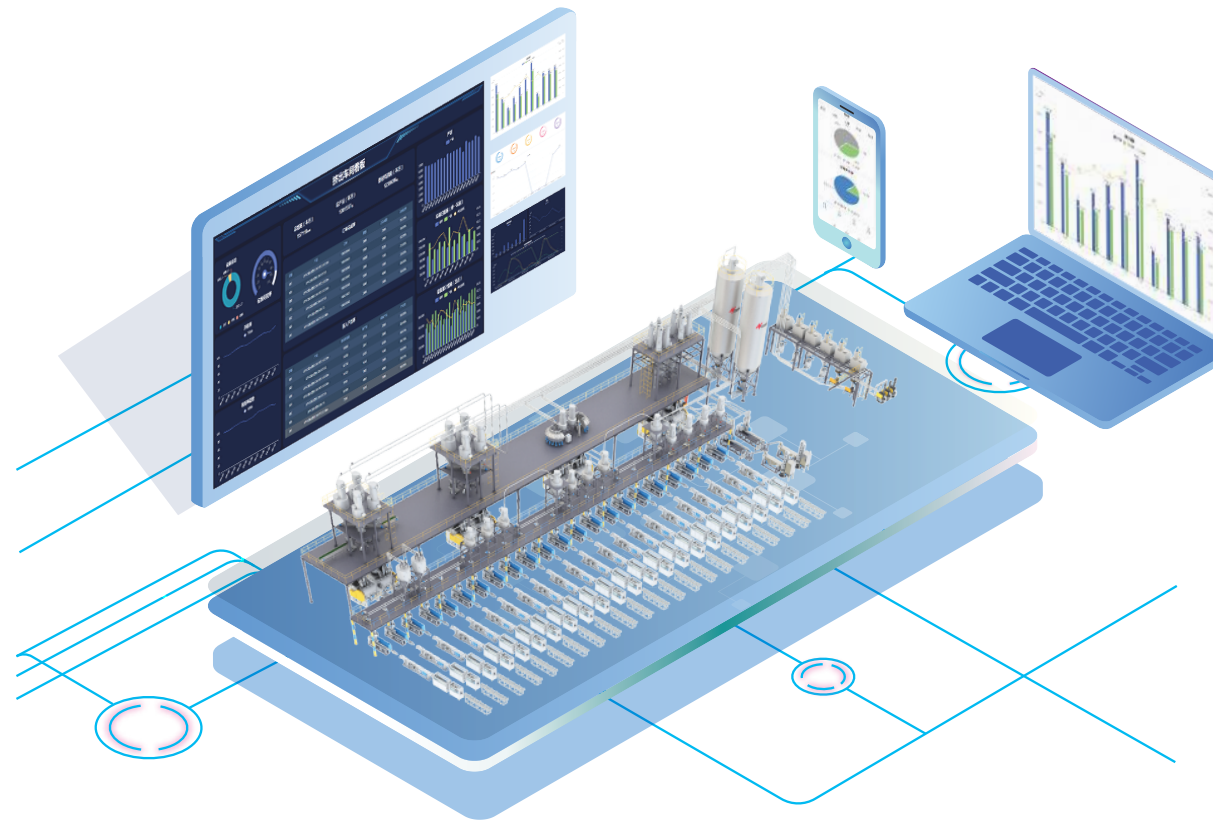
Acquisition and analysis of maintenance plan, main components vibration, running hours and timely reminder of key components maintenance.

Energy Consumption Management

Kw/h unit energy consumption, equipment energy consumption and other dimensions of comparative analysis

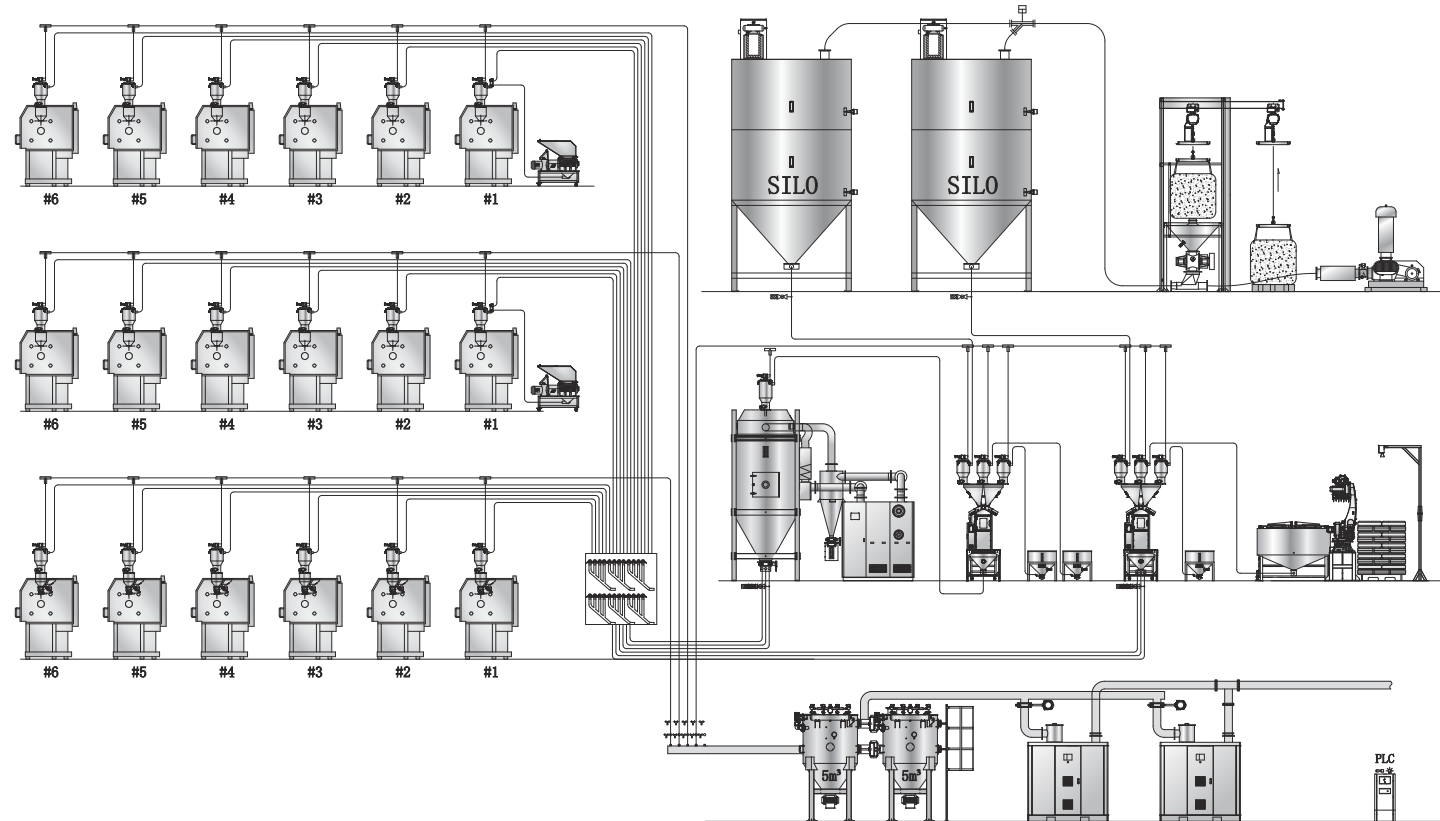
Equipment Monitoring

Equipment real-time status, 24-hour status, equipment utilization, equipment operation monitoring, etc.



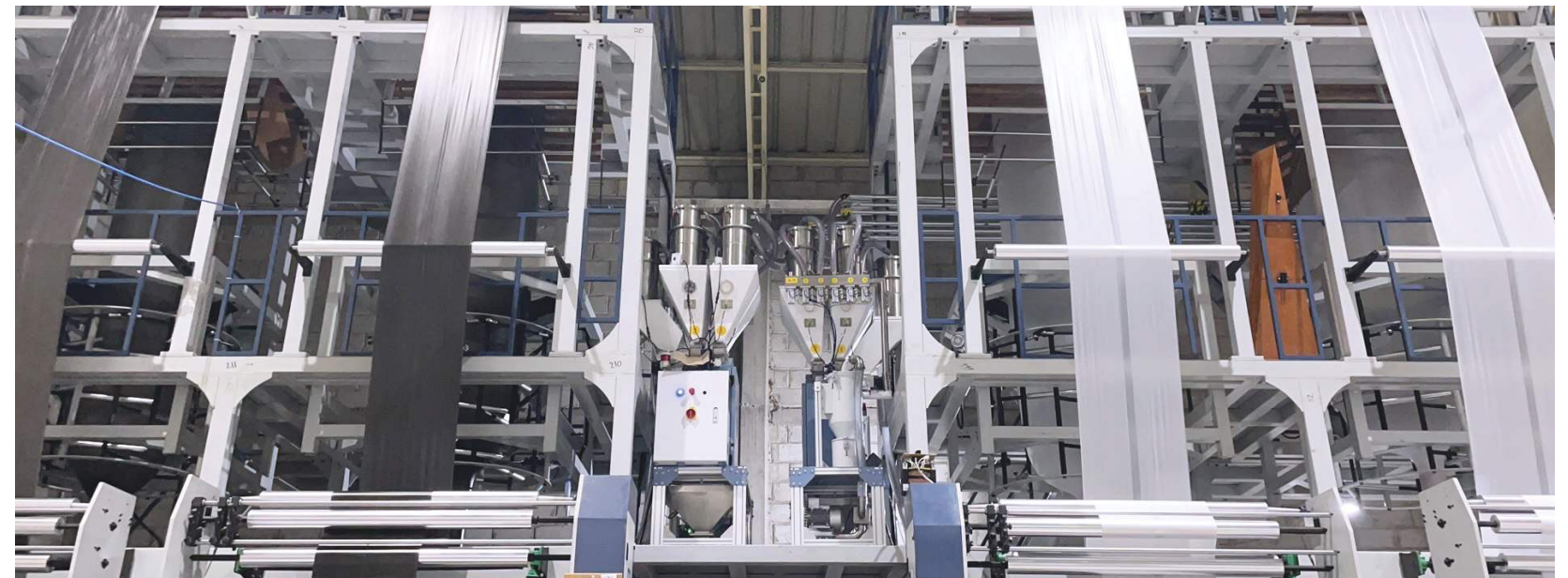
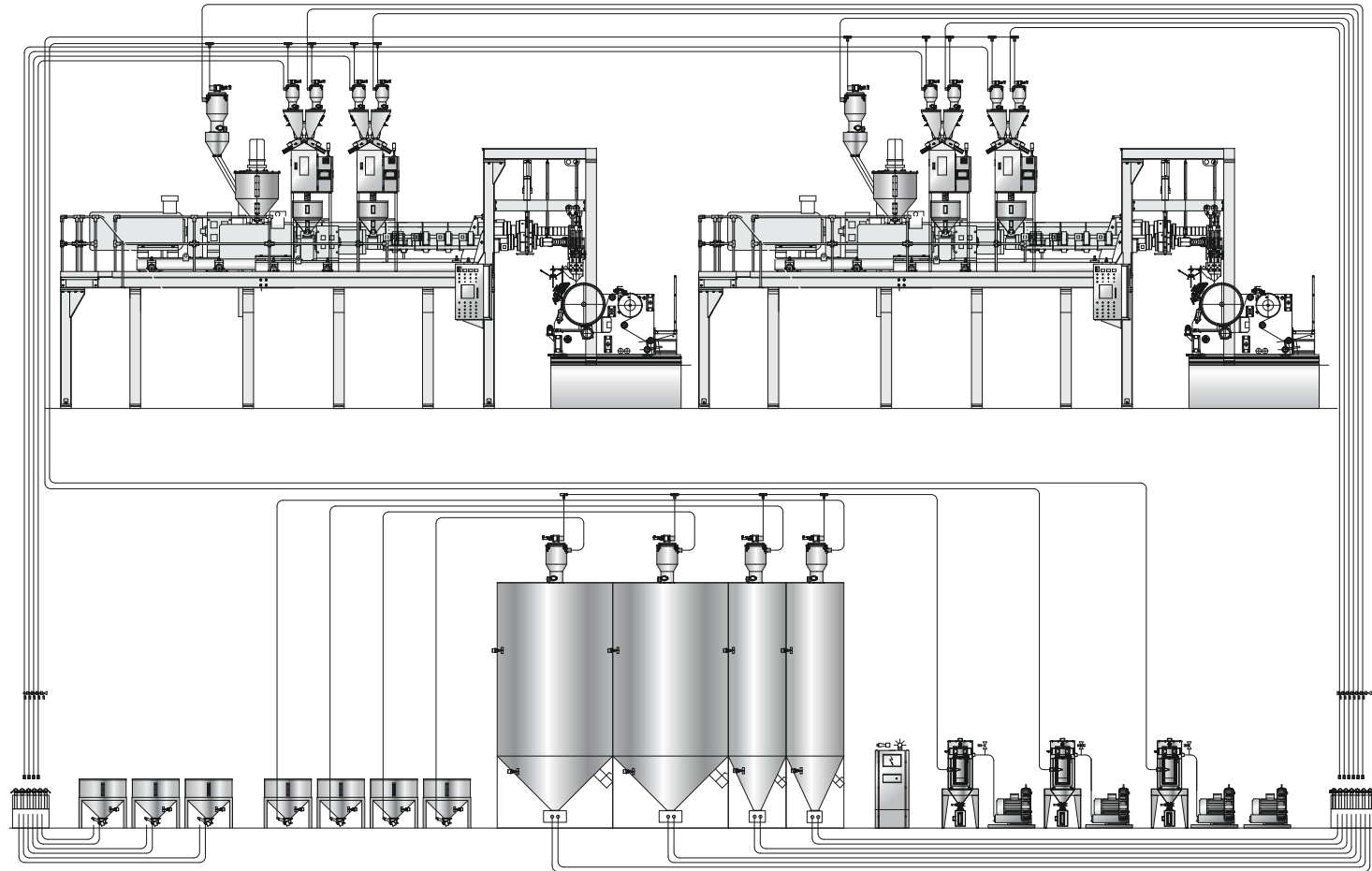
Injection Molding Industry

Suitable in the application of plastic household products, electronic industry, furniture industry, medical industry, automotive industry, etc. For Injection molding industry, Mconvey can provide customized centralized automatic dosing. For complex formulas, various raw materials can be feeding online, it can reduce dosing and mixing costs by about 40%.



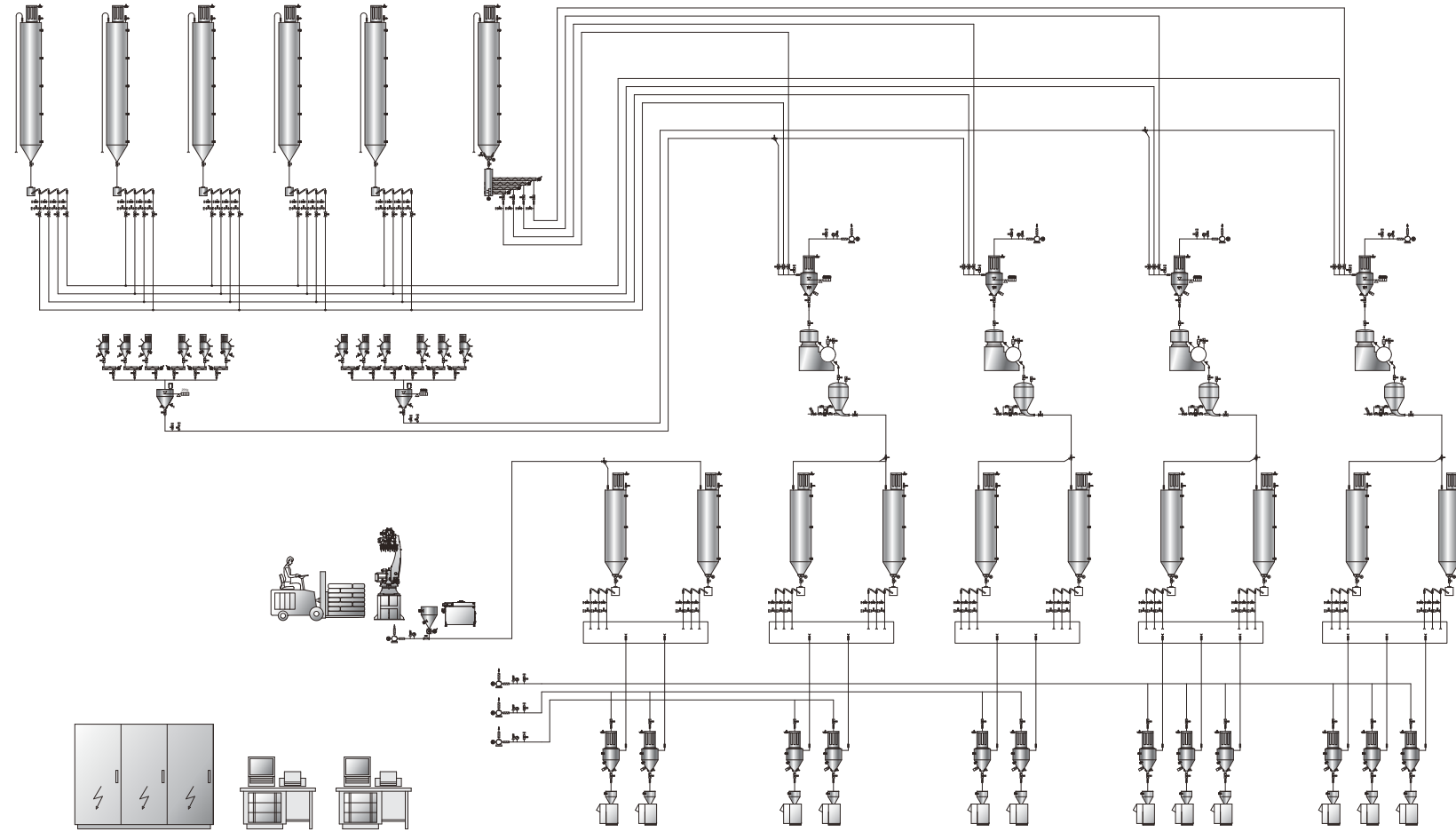
Film Extrusion Industry

In the cast film, blown film and laminating film extrusion industries, Mconvey not only provides multi-component gravimetric blender, multi-component self-mixing machines, and multi-component loss-in-weight feeder system to meet the various application needs of accurate dosing of multiple raw materials for multiple extruders and multi-layer films, but also provides a matching centralized feeding system to meet the various needs of a package of automation equipment upstream of film extrusion processing.



PVC Extrusion industry

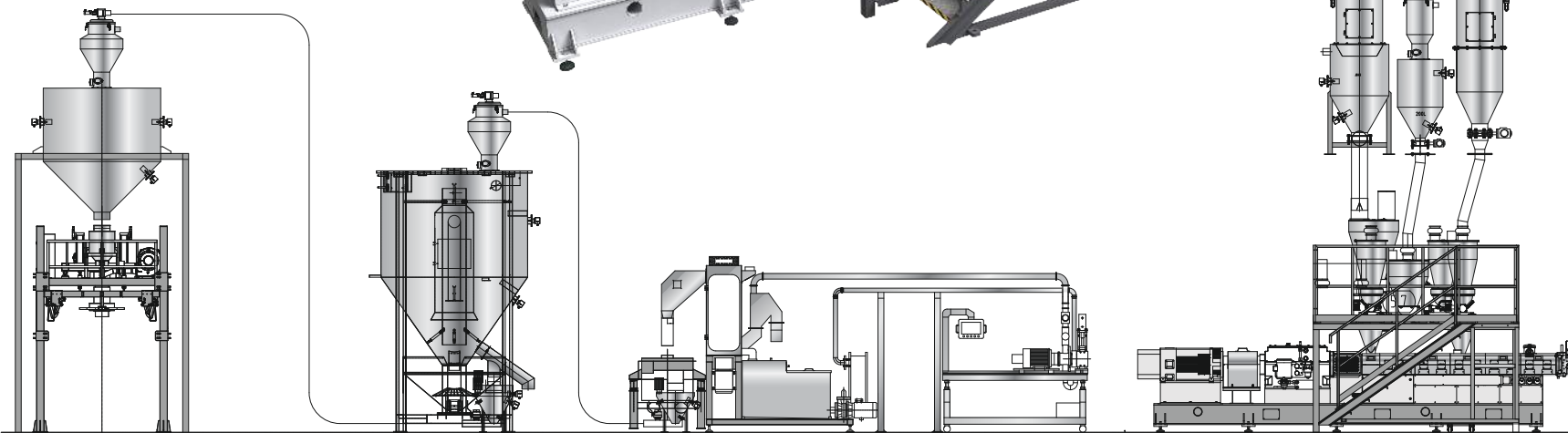
Application in the extrusion industry of PVC pipes/plates/sheets/profiles, Mconvey provides flexible online mixing solutions for PVC resin, calcium carbonate, pigments, recycled materials and various additives. Especially in the centralized feeding, Mconvey provides a complete set of self-developed and self-made full-stack solutions in pneumatic conveying, raw material dosing, efficient mixing, IOT data collection and analysis.



Compounding Industry

Application: Compounding additives / resin and biopolymer / masterbatch: PP, PE, TPE, TPR, ABS, PC, TPU, PA, PBT, PET, PPS, PPA, LCP, PEEK, PMMA, ect.

Mconvey provides a one-stop compound pelletizing solution, including material conveying, dosing and mixing , extrusion , pelletizing , bagging and packaging.



Auxiliary Equipment And Spare Parts



Gravimetric Doser
(For Granules)



Gravimetric Doser
(For Powder)



Gravimetric Doser
(For Injection)



Loss In Weight Feeder
(Powder)



Loss In Weight Feeder
(Granules)



Liquid Doser



Liquid Doser



Rotary Dispensing Station



Vacuum Loading Machine



Filter



Gravimetric Blender



Powder Formula Weigher



Ribbon Mixer



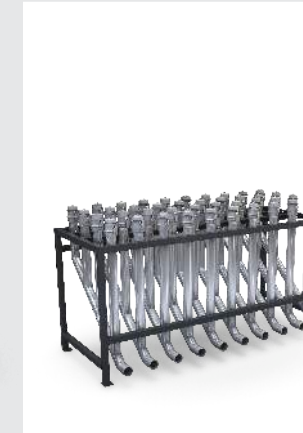
Horizontal Coulter Mixer



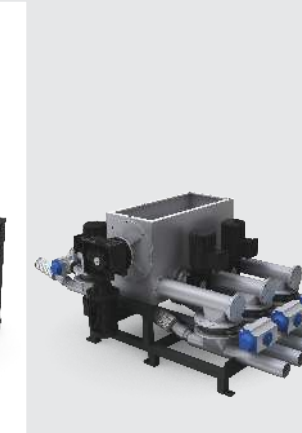
Compound Mixer



Raw material distribution
station



Raw material distribution
station



Material Distribution Station



Receiver and Aluminum
pipe sealant



Feeding station

