

**WE
PROCESS
THE
FUTURE**

binder+co



**THE WORLD'S LEADING
PROCESSING TECHNOLOGY
FOR PRIMARY AND
SECONDARY RAW MATERIALS**

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THE
FUTURE**



RICH EXPERIENCE

From its development of the resonance screen machine in the 1950s through to the present day, Binder+Co has been recognized as an innovative producer of machines and systems for processing primary and secondary raw materials.

With the BIVITEC flip flow screen for difficult bulk materials and the CLARITY sensor-based sorting system, we developed pioneering technologies that have had a major impact on screening and sorting techniques.

Today our products are in use in over 120 countries, processing bulk materials of all kinds - industrial minerals, construction raw materials, ores, coal, fertilizers, salt, recyclables like glass, paper, packaging waste, WEEE, and food and feed.

PROCESSING VALUABLE RESOURCES WITH CARE, EFFICIENCY AND INNOVATIVE SOLUTIONS.

The Binder+Co group's machines and systems are the ideal platform for the efficient preparation and conservation of valuable resources from primary and secondary sources. Founded in 1894 by Ludwig Binder, today Binder+Co is the world leader in processing glass cullet and sorting hard-to-screen bulk materials.

With a portfolio covering six process categories - crushing, screening, wet processing, thermal processing, sensor-

based sorting, bagging and palletizing - we offer customers great expertise and an extensive product range from a single source.

Our understanding of the interplay between these process steps enables us to provide high-performance, custom-configured solutions and so decisive economic and technical advantages.



RELIABLE
CRUSHING



EFFICIENT
SCREENING



WET
PROCESSING



THERMAL
PROCESSING



SENSOR-BASED
SORTING



BAGGING
PALLETIZING

WE PROCESS THE FUTURE

We are always ready to listen to our customers. That's what helps us identify upcoming market needs so we can address them with innovative solutions.

In our own Research & Development Center we develop new processes and techniques, and design, test, and optimize new machines. In our test facility, the Binder+Co Technical Lab, we

coordinate our research and development activities with the needs of our customers. In over 200 trials each year, we do feasibility testing, simulate customers' operational conditions, and develop solutions to fit, with guaranteed performance.

binder+co

SINCE 1894

We have been committed to developing and building high quality products since 1894. For over 120 years our high manufacturing expertise and pioneering innovations have made us a valued supplier in over 120 countries.

1. PIONEERING TECHNOLOGIES

- The world's first sensor-based glass cullet sorting by color and contaminant, with unique three-way solution.
- The most efficient screening solutions for difficult bulk materials such as wet coal and recycled materials.
- Screening of bulk goods 63 µm and above.
- The world's fastest high-performance open mouth-bagging machine.



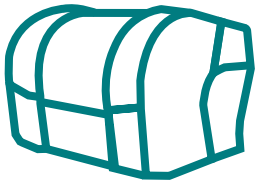
OUR CONTRIBUTION

With our machines and system solutions, we want to facilitate the careful processing and conservation of valuable resources now and in the future.



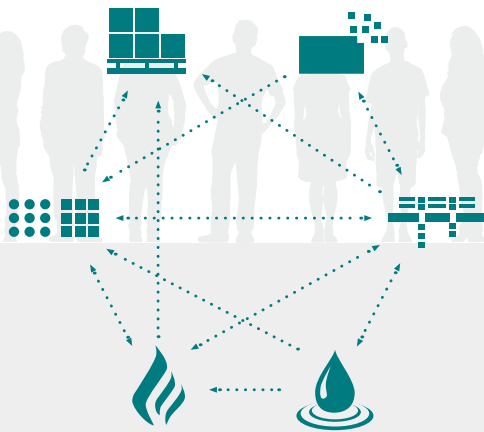
OPEN-MINDED

We work together with our customers, research partners and suppliers to create new concepts for the efficient processing of primary and secondary raw materials.



REVOLUTIONARY

With the BIVITEC, CLARITY, DRYON and MINEXX we have developed pioneering technologies for processing bulk goods.



PROCESS EXPERTISE

In the Binder+Co group we and our subsidiaries bundle processing expertise to offer customers efficient machines and system solutions, from crushing to screening, wet and thermal processing, sensor-based sorting and bagging and palletizing.



PARTNERSHIP

We collaborate at the national and international level with renowned research institutes and universities to provide our customers with the best technologies for processing their products.

AWARD-WINNING INNOVATIONS

2010 – Austrian State Innovation Award for the world's first industrial-grade solution for sorting glass ceramics.
2011 – Best Open Innovator Award as best SME in German-speaking countries.

WE PROCESS THE FUTURE

BAGGING • PALLETIZING

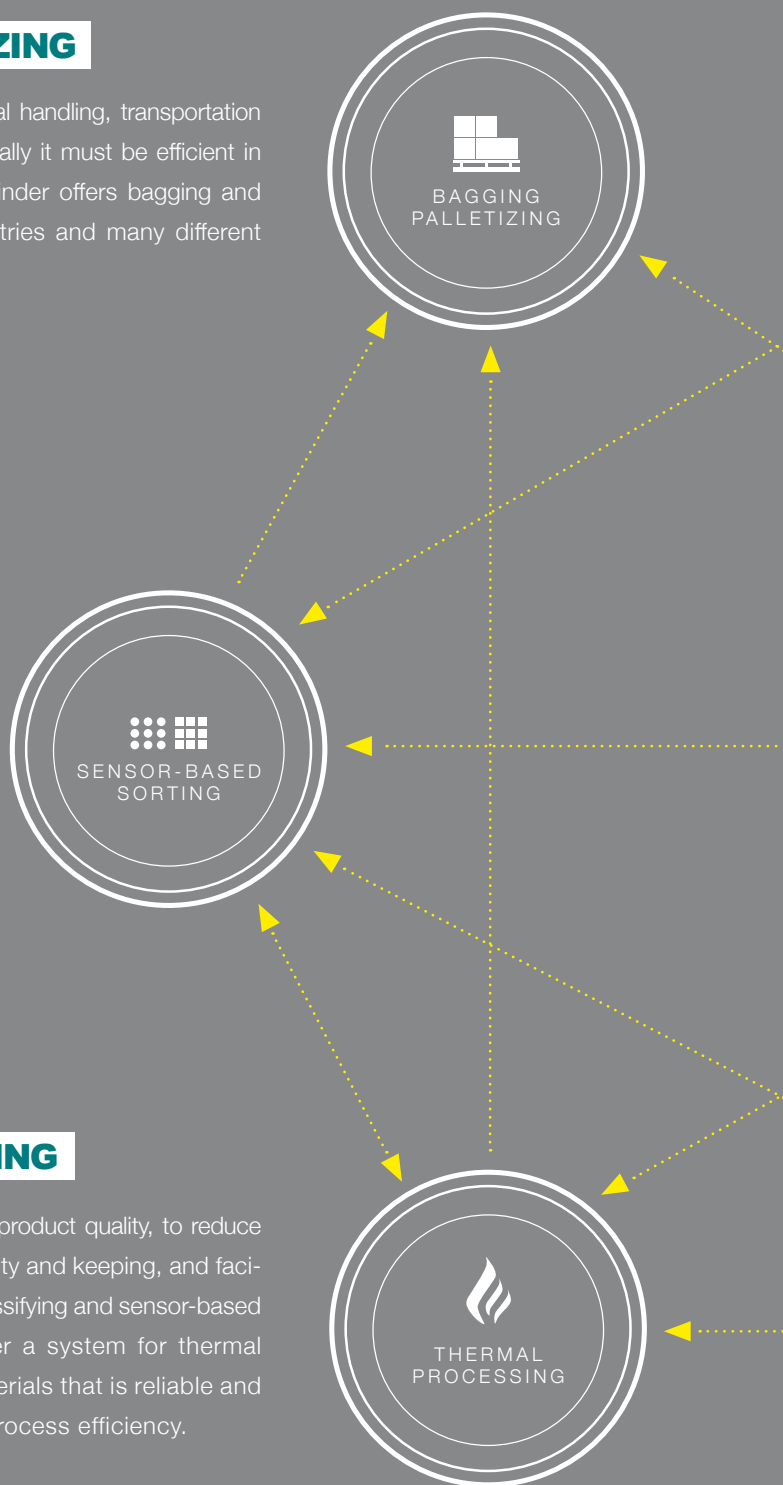
Bagging is necessary for the practical handling, transportation and storage of bulk materials. Naturally it must be efficient in terms of operating costs. Statec Binder offers bagging and palletizing systems for many industries and many different types of bags.

SORTING

In recycling, sensor-based sorting is a necessary and established process step for generating high-quality secondary raw materials and reducing landfill volumes. It has also become essential in the raw materials industry, to reduce the burden on downstream processes, cut operating costs and ensure high product quality. With the CLARITY and the MINEXX, Binder+Co offers sensor-based sorting systems that cover a wide range of applications in the raw materials and recycling industries.

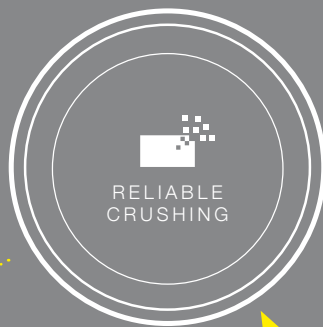
THERMAL PROCESSING

Drying is a prerequisite for high final product quality, to reduce transportation costs, ensure storability and keeping, and facilitate downstream processes like classifying and sensor-based sorting. With the DRYON we offer a system for thermal processing of all kinds of bulk materials that is reliable and easy on products, for maximum process efficiency.



FROM BULK TO PALLET

Individual challenges demand customized solutions. And those require a broad view that does not stop with the individual step but takes in the entire process.



CRUSHING

Crushing is a fundamental step in processing bulk goods. The right granular size is critical for downstream processes. With Comec-Binder impact and jaw crushers we have the right machine for any kind of stone. Roll crushers are used primarily in glass recycling and for special applications in the industrial minerals industry.



SCREENING

The screening step is responsible for getting the right particle size separation. This is critical for product quality, and for downstream processes like sensor-based sorting. Binder+Co has proven its expertise in this field for decades with a wide range of circular and linear screens, resonance screens and the BIVITEC flip flow screens.



WET PROCESSING

Machines and system solutions for dewatering, cleaning and contaminant removal make a big difference in the quality of the end product. Sludge and process water treatment is indispensable for conserving precious water. Together with our subsidiary Comec-Binder, we offer an extensive range of solutions for wet processing.

This broad view enables us to give customers critical competitive advantage. Together with our subsidiaries Comec-Binder and Statec Binder, we offer six key process steps from a single source, from bulk material to pallet.



RELIABLE CRUSHING



CRUSHERS FROM COMEC-BINDER. TOUGH AND VERSATILE.

Crushers from Comec-Binder are some of the most powerful, efficient and reliable machines available for processing stone of all types. They feature easy maintenance and low wear even under the most demanding conditions. Comec-Binder offers a wide range of crushers, from impact and jaw crushers to cone crushers. Roll crushers round out the range, and are used in the raw materials and recycling industries.



IMPACT CRUSHERS

- **Primary impact crusher PU**

For soft to medium-hard stone: Construction raw materials like limestone, dolomite, chalk, plaster and construction waste

- **Secondary impact crusher SU**

For all types of stone

- **Secondary impact crusher R, reversible**

For all types of stone

- **Tertiary impact crusher T, MV, reversible**

For all types of stone

- **Tertiary impact crusher SAND, reversible**

For soft to medium-hard stone



JAW CRUSHERS

- **Primary jaw crusher P**

For all types of stone and construction waste

- **Secondary jaw crusher S**

For all types of stone



CONE CRUSHERS

- **Secondary and tertiary cone crusher HCU**

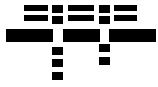
For abrasive stone like diabase, basalt, granite, greywacke



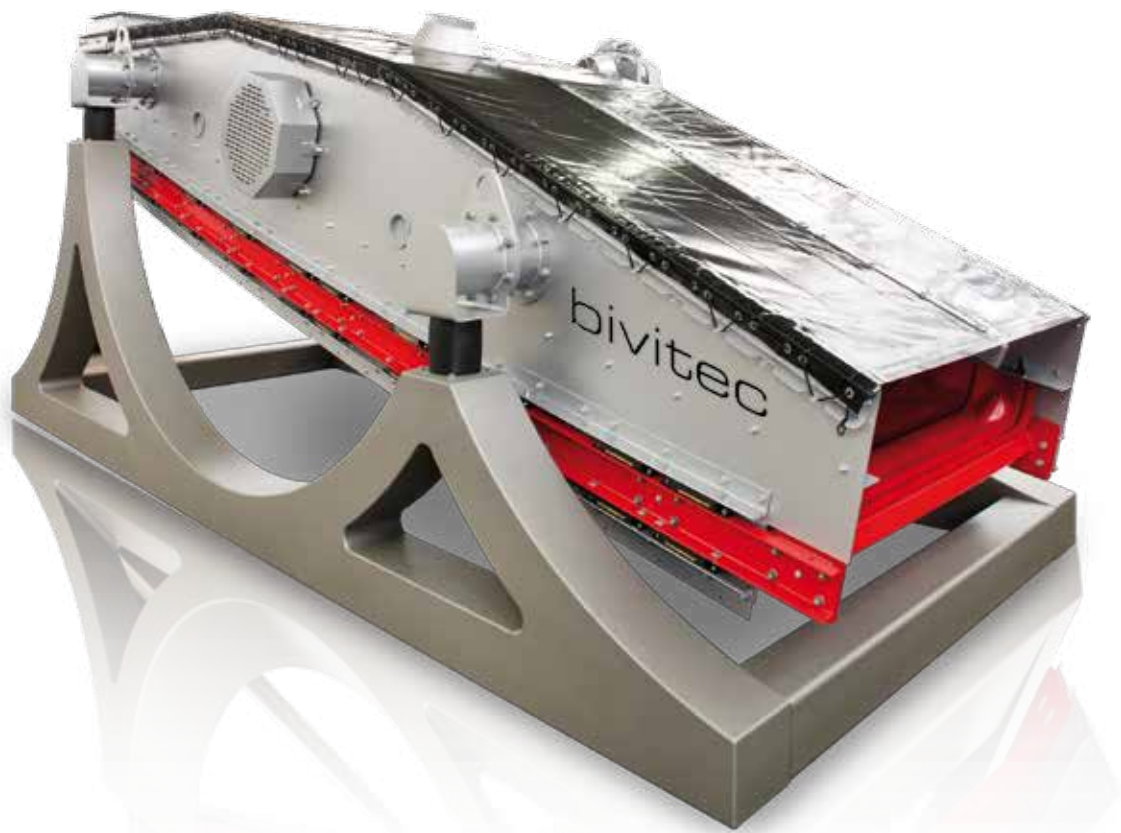
DOUBLE ROLL CRUSHERS

Third and fourth crushing stage for all kinds of stone, especially for clumping materials like plaster, clay and marl, and for recycled glass cullet





EFFICIENT SCREENING



SCREEN WITH NUMBER 1.

With circular, elliptic and linear motion vibrating screens, resonance screens and the BIVITEC flip flow screen for difficult bulk goods, we have a machine for every industry and task, from heavy duty screening to filler removal.

Since developing the resonance screen machine in the 50s, Binder+Co has been synonymous with innovative screening technology, and we have further extended our technology leadership with the BIVITEC for special applications.

Binder+Co screening machines are very versatile. The BIVITEC flip flow screen and our circular, linear and elliptical screens can take up to 4 screen decks, and can be used for wet or dry materials. The different motion (circular, linear and elliptical) types address individual space limitations and requirements at the customer site. Available equipment includes finger screens, wire mesh, 3D cascade grids, rigid and flexible PU-panels and precision screening mats. The circular, linear and BIVITEC screening machines can also be supplied in banana configuration for special requirements.

BIVITEC FLIP FLOW SCREENS

Sharp screening cuts even with difficult-to-screen bulk materials
Can be combined with conventional screen decks
Circular, linear and elliptical basic vibration
Cut points from 63 μ m to 200 mm



CIRCULAR MOTION VIBRATING SCREENS

Cut points up to 300 mm



LINEAR MOTION VIBRATING SCREENS

Low installation height
Cut points up to 300 mm



HEAVY DUTY SCREENS

Circular and linear motion
Cut points up to 400 mm



RESONANCE SCREENS

Low installation height, low energy consumption, low force load
High screening precision with up to seven fractions from one machine
Cut points up to 100 mm



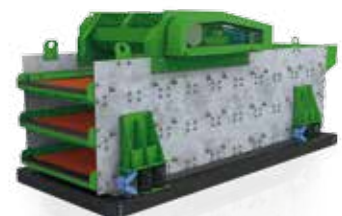
RECYCLING SCREENS

Deck types: finger screen, conical 3D grid, special perforated screens
Effective classification with difficult-to-screen recycling materials
Cut points up to 300 mm



ELLIPTICAL VIBRATING SCREENS

Low installation height thanks to horizontal setup
Cut points up to 300 mm





WET PROCESSING



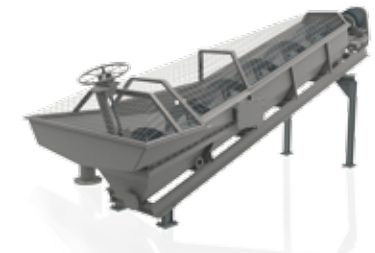
FROM CLEANING TO SAND RECOVERY.

For the wet processing of construction raw materials and industrial minerals, Binder+Co stands out with a product bandwidth that ranges from cleaning highly contaminated materials to dewatering to fine sand recovery.



DEWATERING AND CLASSIFICATION

- **SANDEXX sand traps**
Cleaning and dewatering of sand and gravel
Sand recovery
- **Bucket wheels**
Cleaning and dewatering of sand and gravel
- **Screw classifiers**
Dewatering of sand and gravel
Classification and dewatering of industrial minerals
- **Compact systems with hydrocyclone**
Dewatering and recovery of fine sand
- **Dewatering screens**



DISSOLUTION AND CLEANING

- **Log washers**
Dissolution of brittle grain and clay clumps
- **Attrition machines**
Dissolution and cleaning of sand products
- **Washing drums**
Washing and purification of raw materials for construction



SLUDGE AND PROCESS WATER TREATMENT

COMEC

- **Chamber filter presses**
Filtering sludge with low clay content
- **Belt filter presses**
Sludge filtering
- **Process water treatment**
Systems for treating wastewater from construction raw material and industrial mineral treatment plants



DENSITY SEPARATION

- **Jigging machines**
Separation of light materials





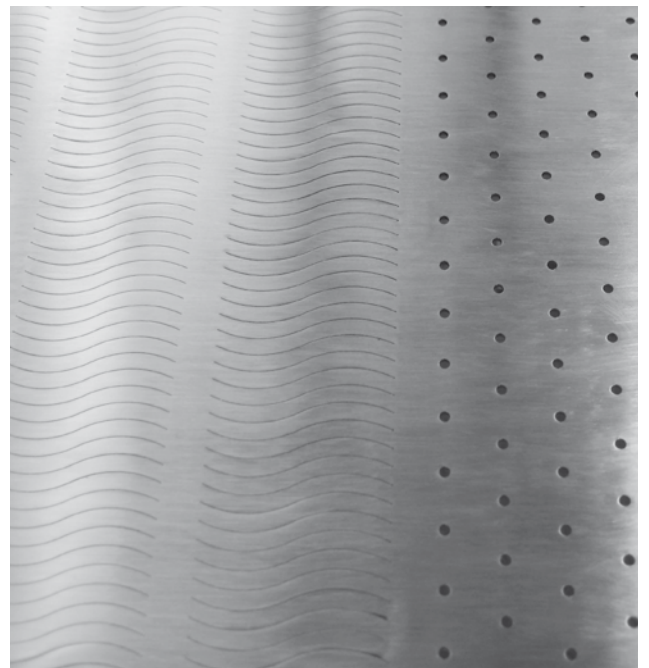
THERMAL PROCESSING



GENTLE AND SAFE.

For decades, DRYON has stood for product-safe and dependable thermal processing of all types of bulk materials. Its fluidized bed dryers and coolers ensure constant product quality in all industries.

BUBLON is the newest development within the Binder+Co group and offers customized microspheres in a controlled thermal expansion. BUBLON Spheres are produced under a patent process and are applied in diverse applications in the plastic, the painting and coating and the building materials industries.



DRYON FLUIDIZED BED DRYER AND COOLER

Vibrating fluidized bed dryer for bulk materials with a wide range of granular sizes
 Drive systems: simple mass oscillator and resonance vibration systems
 Drying surfaces up to 60m²
 Static fluidized bed dryer for fine and uniform bulk materials

Drying and cooling in a single machine
 Conditioning
 Pre-heating
 Crystallization



CYCLONE SEPARATOR

For dust removal, classification and exhaust cleaning in processing plants
 Standard and high-performance separators
 Organics removal



BUBLON

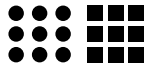
bublon

BUBLON stands for customized expanded microspheres from the 100% ecological material Perlite and supplies an innovative product for many applications in the filler, insulation and lightweight materials categories.

Product range:

- BUBLON Spheres: Production and sales of the expanded minerals
- BUBLON Services: Product development services for new special applications
- BUBLON Expansion Technology: Production installations for BUBLON Spheres





SENSOR-BASED SORTING



WE SORT IT ALL.

20 years ago the CLARITY, the first three-fraction sorting system, revolutionized glass recycling. Today Binder+Co's innovative CLARITY machines are used to sort glass cullet, metals, WEEE, plastics, paper, domestic and commercial waste, refuse-derived fuels and incinerator slag.

The MINEXX offers the highest efficiency and separation precision for minerals, gems and ores. Using customized lighting systems and high-resolution sensors, the system detects all relevant parameters and so enables the economical use of lower-quality deposits.

Binder+Co Sensor Fusion – we configure our sorting systems to meet individual requirements and fit them with the appropriate sensors. A special benefit of this is that the sensors work together, the sensor data is linked and evaluated by algorithms developed by us. This enables the sorting of optically indistinguishable types of material.

CLARITY SENSOR-BASED SORTING SYSTEMS FOR RECYCLABLES

• CLARITY slide sorting systems

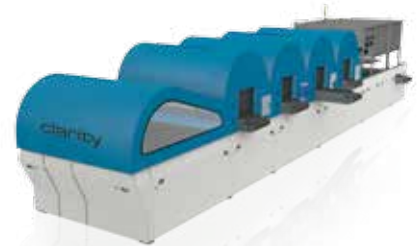
Two or three sorting ways
Lighting and sensor systems for transmission and reflection processes:
VIS, NIR, UV and induction
Sorting widths up to 2000 mm
Grain sizes from 1 to 300 mm
Applications: Glass cullet, plastics, electrical and electronic equipment, shredder fractions, metals, incineration slag and C&D waste

• CLARITY multiway

Up to 6 sorting ways
Lighting and sensor systems for reflection process: NIR
Sorting widths up to 2000 mm
Grain sizes from 50 to 350 mm
Applications: Packaging waste

• CLARITY belt sorting systems

Two sorting ways
Lighting and sensor systems for reflection process:
VIS, NIR, induction and X-ray
Sorting widths up to 2800 mm
Grain sizes from 1 to 420 mm
Applications: Paper, plastics, packaging waste, municipal solid waste, refuse-derived fuels, metals and wood



SEPARATOR SYSTEMS FOR RECYCLABLES

- **Delabeling machines** For the gentle removal of labels and adhesive residue
- **BREEZER, ORKA** Light material separators
- **Long parts separators** For removing long contaminants

MINEXX SENSOR-BASED SORTING SYSTEMS FOR RAW MATERIALS

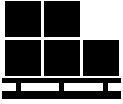
• MINEXX slide sorting systems

Two sorting ways
Lighting and sensor systems for transmission and reflection processes:
VIS, NIR, UV and induction
Sorting widths up to 2000 mm
Grain sizes from 1 to 300 mm
Applications: Industrial minerals, salt, gems, non-ferrous metal ores, precious metal ores and coal

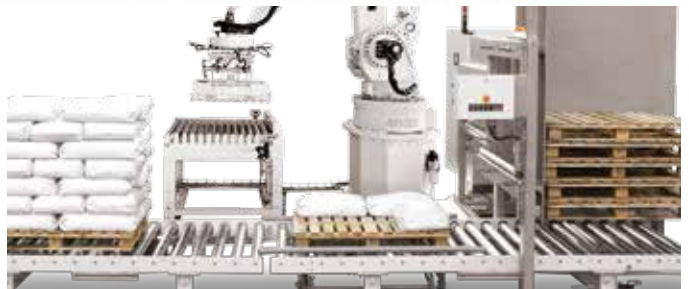
• MINEXX belt sorting systems

Two sorting ways
Lighting and sensor systems for transmission and reflection processes:
VIS, NIR, UV and XRT
Sorting widths up to 2800 mm
Grain sizes from 1 to 300 mm
Applications: Industrial minerals, salt, gems, non-ferrous metal ores, precious metal ores and coal





BAGGING • PALLETIZING



YOUR EXPERT SOURCE FOR BAGGING AND PALLETIZING.

STATEC BINDER is an internationally known specialist for customized packaging systems. The Austrian company already has successfully installed more than 1200 machines worldwide. Whether it's plastic pellets, rice, sugar, grain, fertilizer or flour - the extensive product range offers customized solutions of highest quality. The bagging systems are designed for PE-, woven PP- and paper bags with a filling weight of 5 to 50 kg. Big Bag-stations fill up to 150 Big Bags per hour and the palletizing systems are able to stack all types of bags and boxes. With 40 years of experience STATEC BINDER is global market leader in high-performance open-mouth bagging and known for absolute reliability, innovation and precision.

BAGGING SYSTEMS

• High-performance open-mouth bagging

PRINCIPAC up to 2000 bags per hour

CERTOPAC up to 1500 bags per hour

CIRCUPAC up to 1200 bags per hour

ACROPAC up to 600 bags per hour

Bag type: pillow bag, gusset bag for 5-80 kg

Bag material: woven PP, PE, paper



• FFS-bagging from tubular PE reel

SYSTEM-T up to 2400 bags per hour

Form-Fill-Seal-bagging machine

Bag type: pillow bag, gusset bag for 5-50 kg



• VFFS-bagging from flat PE-film reel

SYSTEM-F up to 900 bags per hour

Vertical Form-Fill-Seal-bagging machine

Bag type: pillow bag, gusset bag for 5-50 kg



PALLETIZING SYSTEMS

• PRINCIPAL

High-speed high-level palletizer

Up to 2400 units per hour

For all types of bags and boxes

With top sheet / slip sheet dispenser

• PRINCIPAL-R

High-performance robot palletizer

Up to 1400 units per hour

For all types of bags and boxes

With fork-, clamp-, vacuum- or custom made bag-gripper



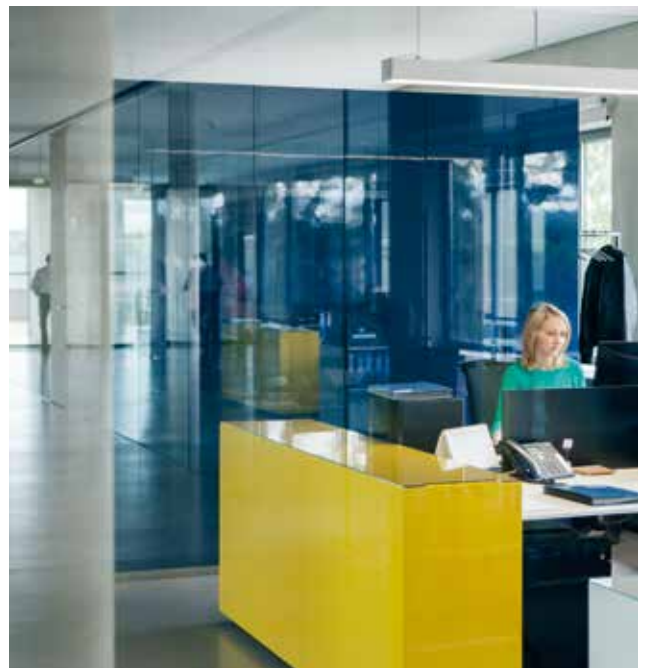


AFTER SALES SERVICE



MACHINES, SYSTEMS, AND ALL-AROUND SERVICE.

Our machines and systems for processing primary and secondary raw materials are hard at work on six continents. We offer innovative systems and processes that give customers decisive competitive advantage; alongside first-class product quality that includes high availability and quick fault and problem rectification by our globe-spanning After Sales Service team.





OUR AFTER SALES SERVICE

- *Fast spare parts supply through efficient shipping logistics*
- *Prompt repair and regular maintenance for the continuous optimization of machine performance and to ensure ongoing reliable operation*
- *Extensive assistance and advice*
- *24/7 service hotline for fast problem-solving*
- *Training in operation and maintenance*

**WE
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BINDER+CO IN

AUSTRIA

binder+co

MANUFACTURING
SALES
AFTER SALES
R&D

PROCESSING STEPS:



RELIABLE
CRUSHING



EFFICIENT
SCREENING



WET
PROCESSING



THERMAL
PROCESSING



SENSOR-BASED
SORTING



STATEC BINDER
highly efficient bagging and palletizing solutions

MANUFACTURING
SALES
AFTER SALES

PROCESSING STEPS:



BAGGING
PALLETIZING

bublon

MANUFACTURING
SALES
AFTER SALES

PROCESSING STEPS:



THERMAL
PROCESSING

BINDER+CO IN

USA

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BINDER+CO USA INC.

SALES
AFTER SALES

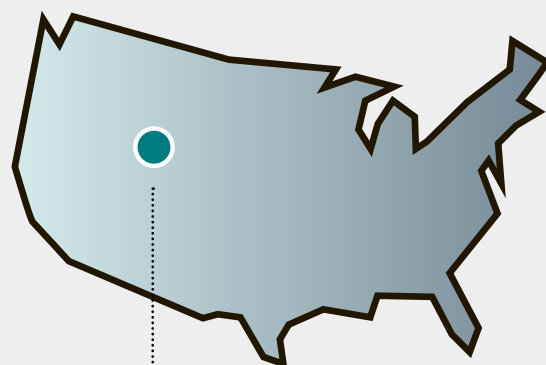
PROCESSING STEPS:



THERMAL
PROCESSING



SENSOR-BASED
SORTING



DENVER, USA



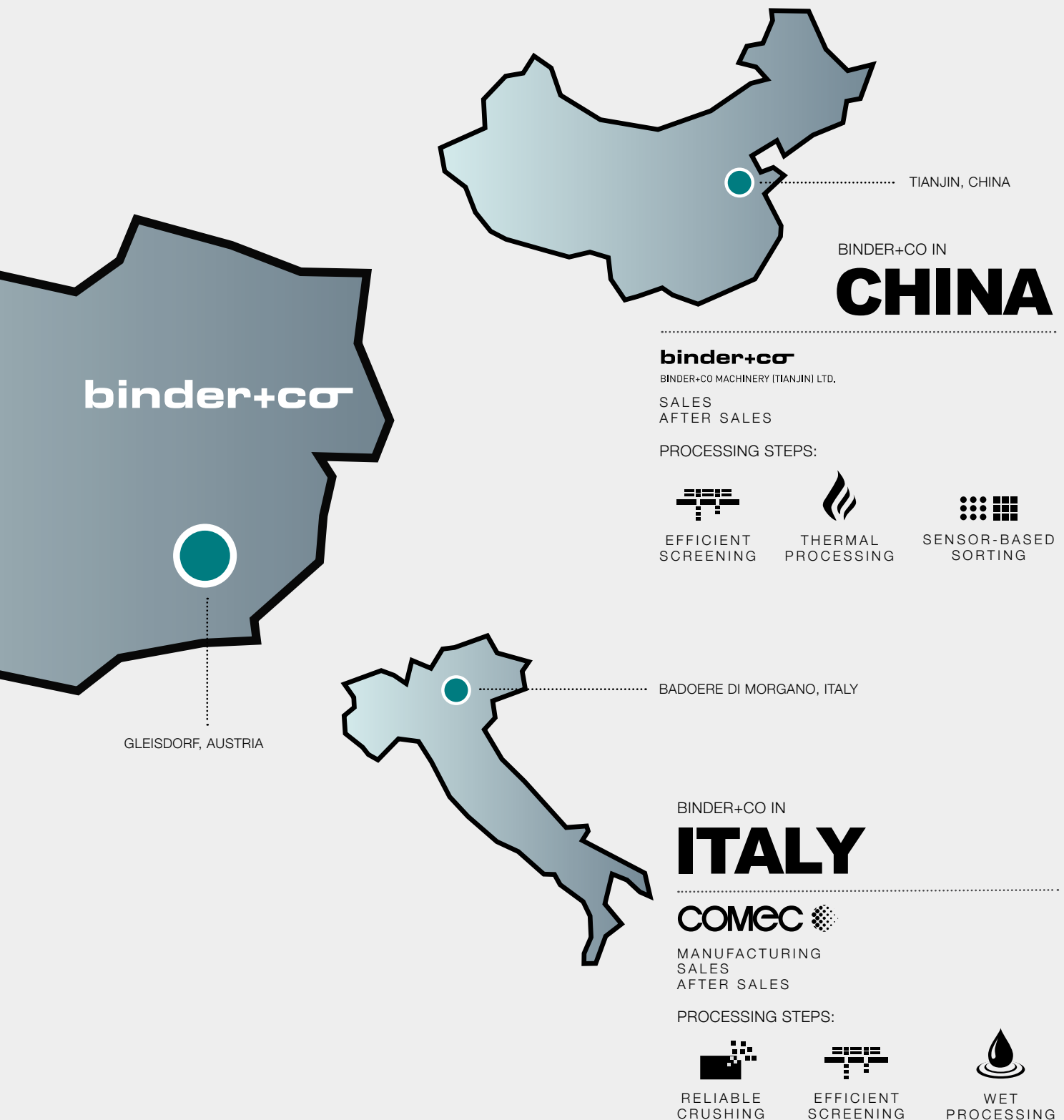
24/7

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AT YOUR SERVICE





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