

Innovative coffee
processing.





State-of-the-art technology for all processes. Your coffee creations deserve the best.

Coffee is our passion and inspiration. Bühler is your partner for innovative complete coffee processing solutions. We empower you to transform beans into ultimate coffee sensations for your consumers.

Bühler is the undisputed global technology leader in food production. For more than 40 years, Bühler has been building equipment for coffee processing and complete coffee systems worldwide. Whether for small, medium or large-scale coffee operations – Bühler offers customized solutions that meet your individual needs. Our proven expertise spans the entire range of coffee processing, from green coffee intake, cleaning, sorting, handling, roasting, grinding to degassing.



Our roasting technology sets new standards for flavor generation. It allows you to create your own unique traditional and non-traditional roasting profiles for optimal flavor characteristics and physical bean properties. Sophisticated process control systems ensure the most consistent results and safe operations. Our solutions always give high priority to energy efficiency and environmental protection.



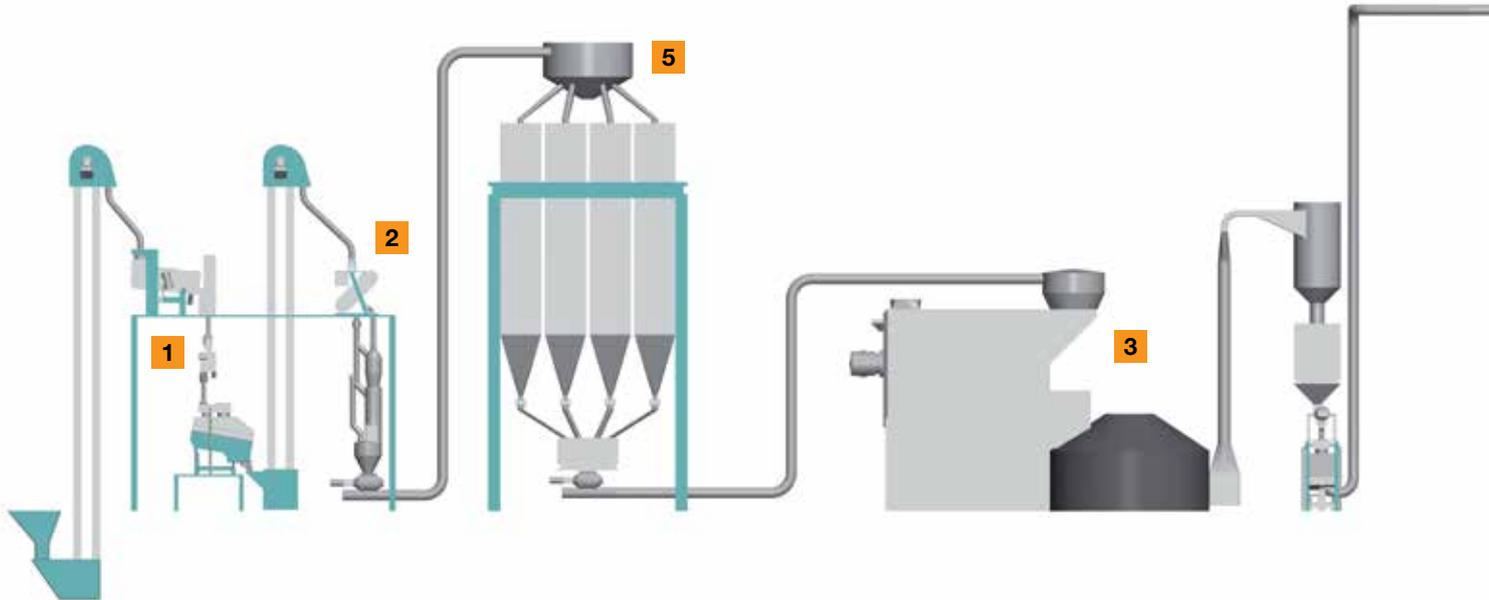
Bühler believes in technology and is dedicated to global research and development. Our R&D spending in coffee is among the highest in the industry, and we collaborate with renowned leading universities. Passionate experts design and test our equipment and solutions. Three coffee application centers are on hand to support you in testing coffee equipment, optimizing processes and developing innovative products.



Bühler employs more than 10,000 people in 140 countries. With its global customer service organization, Bühler coffee specialists are available whenever and wherever you require them. We support you today and tomorrow. Customer satisfaction is Bühler's top priority.

Production solutions for the coffee industry: engineering, technology, automation, maintenance and other services from a single source.

Competence along the value chain. From the intake to roast and ground coffee.



Handling & Cleaning (1)

Customized, reliable and efficient solutions for green coffee intake, cleaning and conveying ensure quality and allow every single batch of coffee to be managed and tracked. A wide variety of separation, sieving and destoning systems, as well as silo solutions and pneumatic or mechanical conveying systems are available. Bühler is at your side with proven, wide-ranging engineering and project experience.



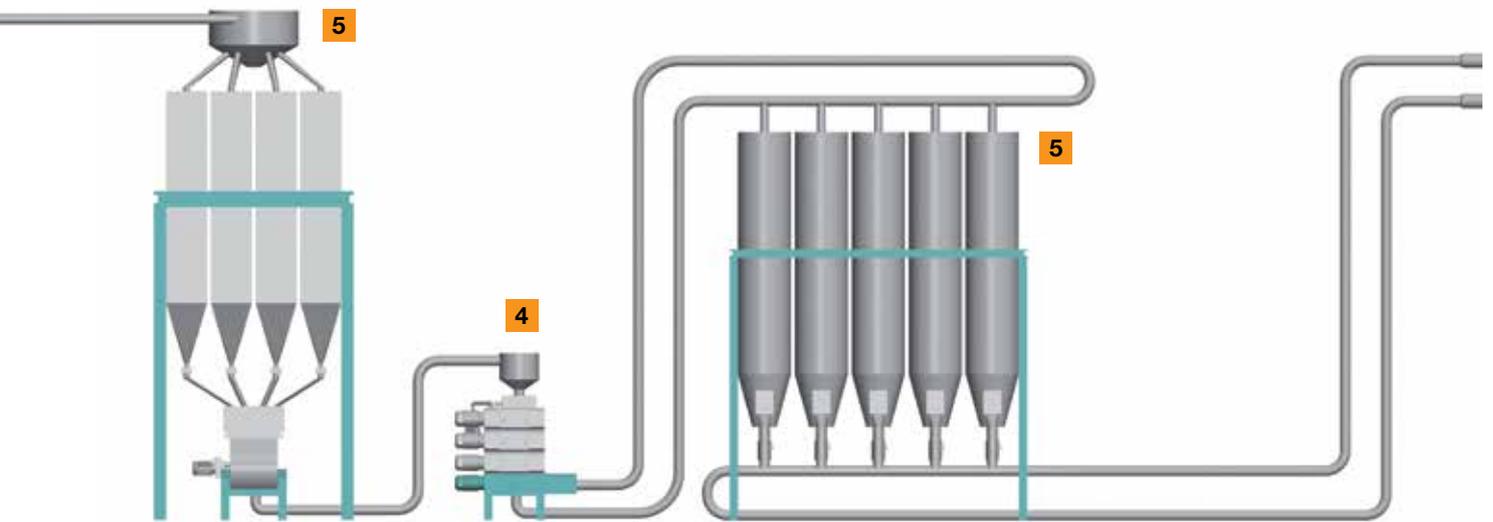
Sorting (2)

Optical sorting is an advanced technology for achieving exceptionally high degrees of purity in green and roasted coffee beans for unparalleled high quality coffee products. It allows foreign material as well as defective beans to be removed. Bühler is the undisputed leader in optical sorting. Our modular Sortex systems detect the color, shape and even the NIR spectrum of every single coffee bean.



Roasting (3)

Bühler roasting technology enables precise control of aroma generation and physical bean properties through traditional and non-traditional roasting profiles. Advanced process control systems ensure the consistent quality of the roasted beans – batch by batch. Bühler roasting technology always gives high priority to safe, energy-efficient and environmentally friendly operations.



Complete coffee line with centralized automation:

Each processing step is crucial in transforming green beans into delightful-smelling roast & ground coffee.



Grinding (4)

Bühler grinders, with their modular design and various sizes, cover the entire range of coffee grinding applications and ensure optimal and consistent particle size distribution in the ground coffee. This is the only way to ensure that the generated flavor compounds are transferred optimally from the coffee powder to the beverage. Capsule applications and microfine grinding are among Bühler's core areas of expertise as a technology leader.



Storage & Degassing (5)

Whether round, square or polygonal, and regardless of height and capacities – the versatile Bühler silo solutions adapt to your requirements. The segment construction even allows for easy installation in existing buildings. An inert gas atmosphere in roast coffee silos may optimally protect the aroma. Special degassing silos equipped with discharging units for roast and ground coffee make the residual gas quantities easy to manage.



Automation (6)

Bühler's entire process expertise is utilized in state-of-the-art plant automation for a complex coffee line. Proven visualization, interfaces and features ensure easy and smooth system operations and monitoring. Recipe-controlled processes ensure product quality and full traceability.



Green and roasted coffee handling solutions. Cleaning, sorting, conveying and storage.

Handling plants for green and roasted coffee are essential to operational efficiency, product quality and traceability in the production line. With Bühler, you benefit from vast plant engineering and project experience gained over more than 40 years of plant engineering.

Efficient green coffee intake and cleaning are essential for small to large-scale production plants. Whether supplied in bags, big bags or large containers, Bühler offers handling solutions to manage the cleaning process. The modular cleaning tower removes foreign materials and refines the beans to the desired degree of purity. Powerful aspiration and filter systems separate the dust.

Product flow can be controlled through pneumatic, mechanical or combined conveying systems and then monitored and traced through our automation system. Bühler expertise is utilized to create this optimized process design.

Diverse Bühler silo solutions for green coffee, roasted beans and ground coffee adapt to individual processing needs. The segmental design even allows for easy installation in existing buildings. The aroma of roasted coffee can be protected by inert gas flushing.

Added value:

- More than 40 years of plant engineering and project experience in coffee.
- System elements specifically designed for coffee applications.
- Various pneumatic, mechanical or combined conveying solutions available.
- Proven reliability and operational efficiency.

Highlight: Cleaning

Optical Sorting

With our Sortex A, you achieve unparalleled degrees of purity.

Destoning

Our reliable mechanical cleaning and destoning solutions allow you to remove foreign particles from the coffee.



Sortex A



Coffee roasting equipment.

A new dimension in flavor creation.

The roaster is the heart and soul of any roast and ground coffee line. It is the roasting process that determines the coffee flavor and the physical properties of the beans. With Bühler roasting systems, you control the roasting process precisely so that you achieve the desired quality – batch by batch.

Every coffee manufacturing application requires individual roasting processes for optimized product properties. Whether for filter or espresso coffee, capsule applications or instant coffee, Bühler's roasting technology and expertise result in roasting solutions that are tailored to your needs.

Bühler roasting systems inspire your product innovations with traditional or non-traditional roasting profiles and assure reliable, safe and efficient roasting operations.

The optimized degree of roast, the roasting time and the roasting profile must be precisely reproduced for consistently high quality coffee products over a long production period. The Bühler process control system automatically regulates the energy input into the roasting chamber and ensures consistent and optimum heat transfer from the hot air to the beans.

The automatic process monitoring concepts and technical safety features of Bühler roasting systems set the safety standards in the industry and ensure maximum process safety. Bühler also gives high priority to energy-efficient and environmentally friendly systems. Bühler roasting systems open up a new dimension in coffee roasting.

Added value:

- Maximum process flexibility using traditional or innovative non-standard roasting profiles.
- High-performance profile roasting control for maximum quality consistency.
- State-of-the-art automation and user-friendly user interfaces.
- Superior safety standards and maximum operational efficiency.



RoastMaster™ 20

Highlight: From small to large

Whether for small, medium or large-scale operations – Bühler supports all coffee production and is on hand with the right roasting systems. Our roasters operate with batch sizes of 10 kg to 660 kg.

The RoastMaster™ 20 was specifically designed for small capacities, yet provides fully-fledged process control software.



Flexible and robust grinding technology. Master your coffee particles size distribution.

For decades, Bühler has been setting industry standards in grinding as a global technology and market leader. Bühler grinding solutions combine optimal coffee powder brewing properties with superior operational excellence.

The aroma compounds formed during roasting must be transferred from the coffee powder into the liquid phase in an optimized extraction process in order to create the ultimate flavor experience. Matching the particle size distribution of the coffee powder with the specific requirements of the percolation process is crucial. Whether for instant, filter, espresso or microground coffee, Bühler provides the solution. Capsule applications as well as dry or wet ultrafine grinding are among Bühler's core areas of expertise.

The proven Bühler gap control mechanics on both sides of the rolls ensure absolute parallelism of the rolls for precise and consistent grinding results. Efficient roll cooling systems with temperature measurement inside the rolls ensure that the product temperature never exceeds a critical maximum temperature. The sophisticated compacting unit opens up a new dimension in the compaction and homogenization of roast and ground coffee and bulk density control.

The user-friendly, intuitive and recipe-controlled process control software allows operational parameters to be monitored constantly. With Bühler grinding solutions, you have particle size distribution under control.

Added value:

- Global technology and market leader in grinding technology.
- Consistent and precise particle size distributions for all applications.
- Modular grinder set-up for customized solutions.
- Superior operational efficiency and reliability; easy cleaning and maintenance.

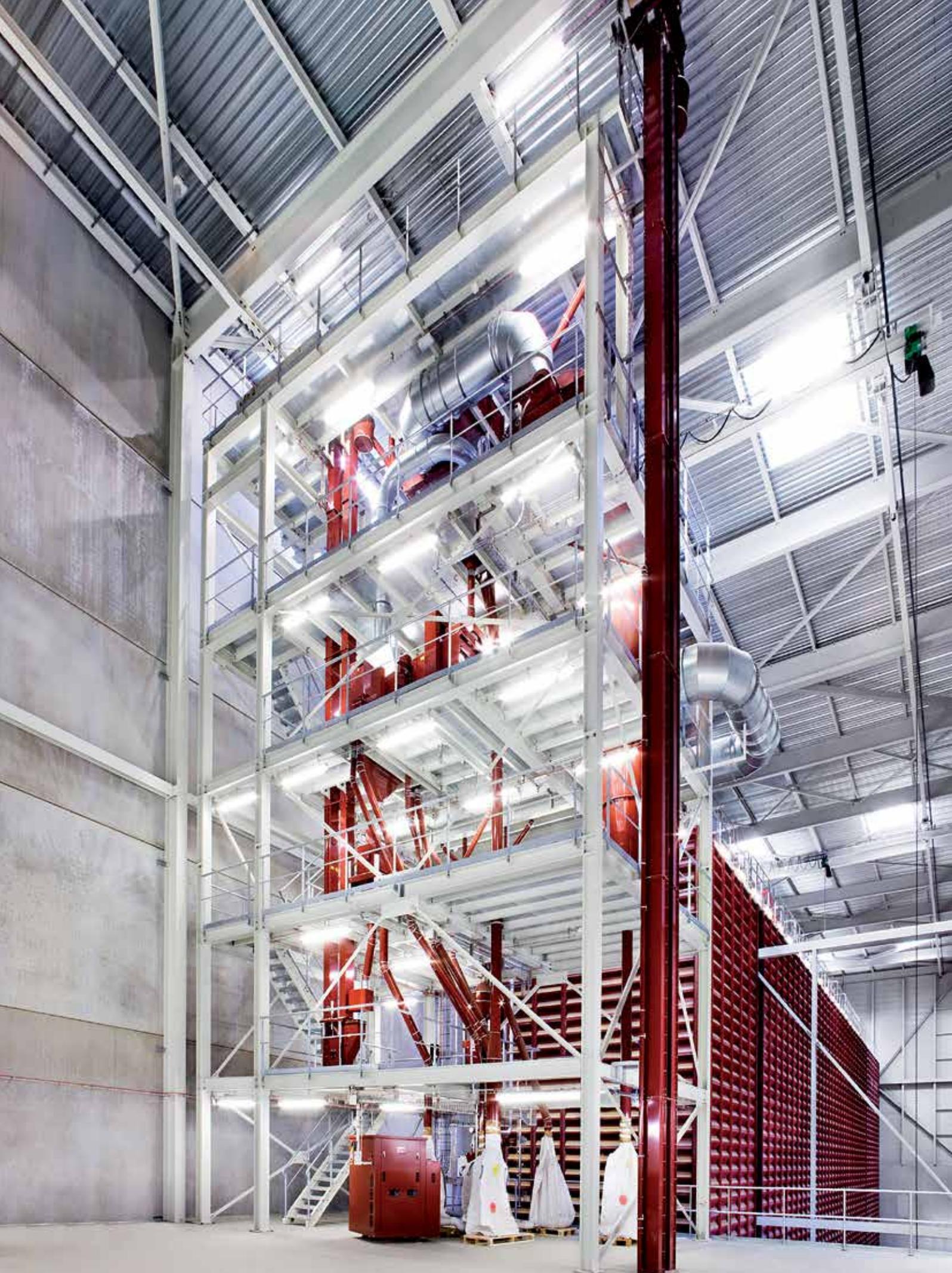
Highlight: Grinding

GrindDefine™

Whether for one, two or three-stage grinding, the GrindDefine adapts to specific requirements. The sophisticated gap control ensures high-precision and consistent particle size distribution in the ground coffee, and therefore an optimum brewing process. Rapid roll exchange and easy cleaning result in superior operational efficiency.



GrindDefine™



Global partner for turnkey engineered solutions. High-performance, customized production lines.

Every coffee factory is unique and requires customized processing solutions. Bühler plans, installs and automates complete coffee processing lines according to your requirements and puts them into operation.

From green coffee intake, cleaning, sorting, handling, roasting and grinding to degassing – Bühler has been building coffee processing systems worldwide for more than 40 years. Sophisticated processes for top product quality, highly efficient and reliable operations and maintenance, user-friendly operation, traceability of products and uncompromising safety – these are stand-out features of Bühler systems.

The vast coffee process knowledge of Bühler experts is also utilized in state-of-the-art plant automation for complex production lines. Proven visualization, interfaces and features ensure easy and smooth plant operations and monitoring. Recipe-controlled processes ensure product quality and full traceability.

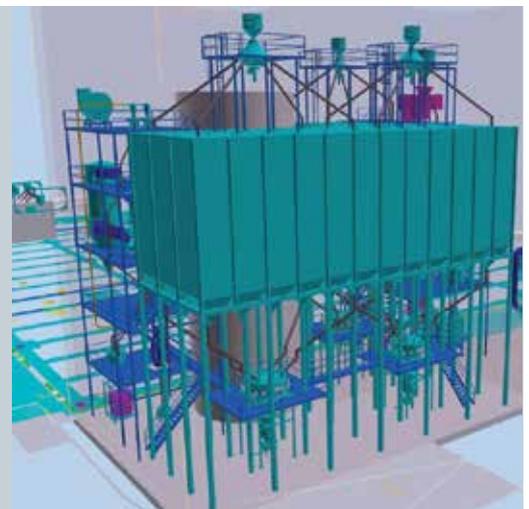
With Bühler as your partner, you are in control of technological challenges as well as installation and commissioning risks, the time schedule and commercial processing. Bühler is only satisfied when the plant delivers maximum performance and operates to your full satisfaction. This way your investments pay off.

Added value:

- One-stop engineering solutions.
- Sophisticated concepts and technological solutions based on decades of process experience.
- Complete, customized automation solutions.
- Proven project planning and implementation experience in highly complex projects.

Highlight: Trust in Bühler engineering

Bühler has implemented a vast number of high-performance production systems across the globe. Leading multinational industrial companies have selected Bühler as their partner and put their trust in our expertise.





24 h / day, 7 days a week, available worldwide. Services for long-term high performance.

Bühler is ready whenever and wherever you require support. You can rely on Bühler's global customer service organization. Bühler experts support you today and tomorrow.

Bühler is the leading partner when it comes to long-term system performance for manufacturing top quality coffee products. Customized maintenance, retrofitting and reconditioning packages ensure that your machines remain state of the art. This way, you maintain productivity and operational reliability over a long period of time.

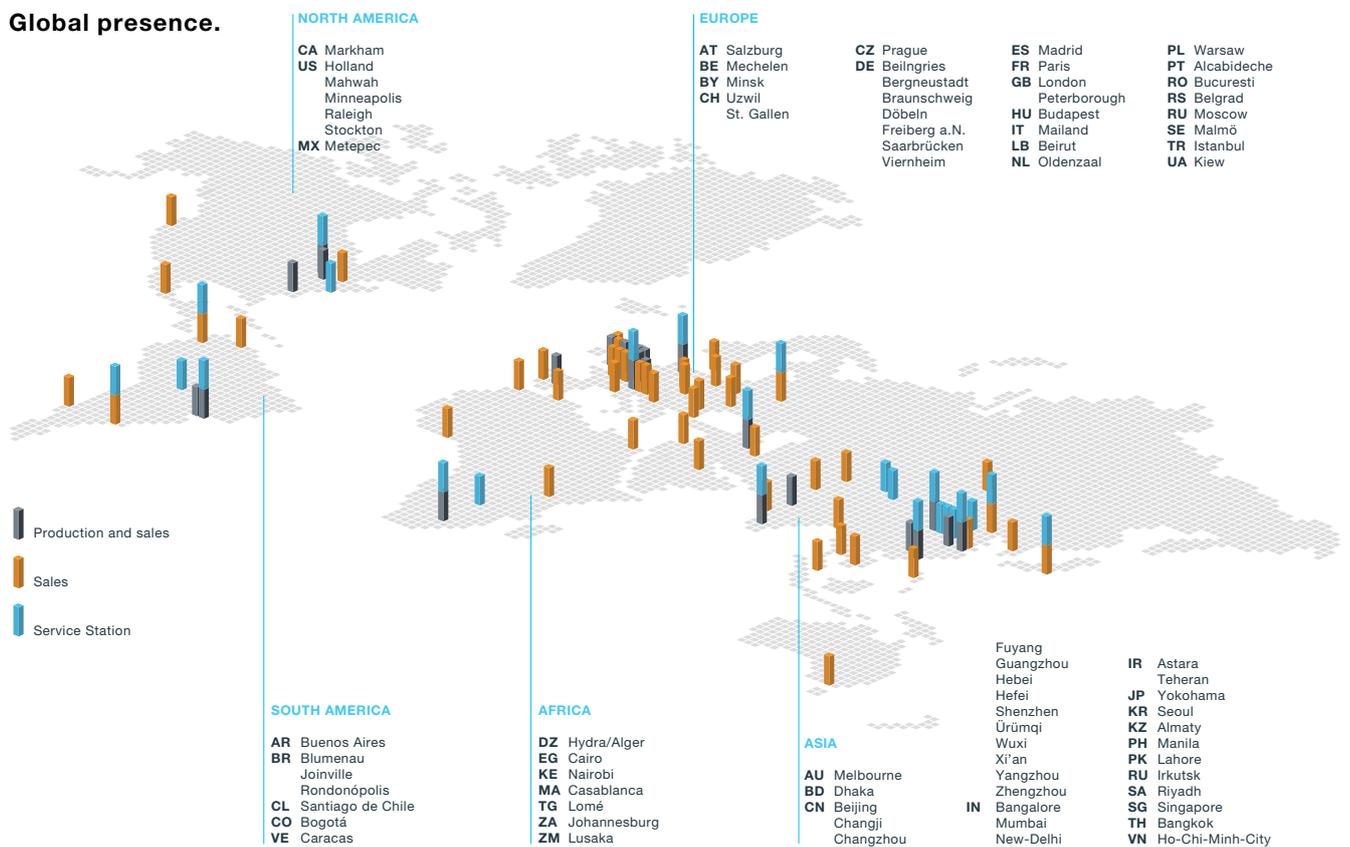
Three cutting-edge Bühler coffee application centers provide services to test equipment, optimize processes and develop innovative coffee products.

Our experienced coffee experts assist you in trial planning and execution – not only on a laboratory scale, but also using industrial-sized equipment under realistic conditions. Product quality can be analyzed in our modern laboratories using a wide range of physical, chemical and microscopy techniques.

Added value:

- Present in more than 140 countries.
- Over 70 sales and service units.
- More than 20 manufacturing sites and 24-hour service stations around the world.
- 3 coffee application centers on hand to assist you.

Global presence.



Bühler AG
CH-9240 Uzwil, Switzerland
T + 41 71 955 11 11
F + 41 71 955 35 82
sc.buz@buhlergroup.com
www.buhlergroup.com/coffee

