

Leading in
optimized
pulses, spices
and sesame
processing.

Serving processors worldwide.



Bühler in partnership with processors.

An integral part of the pulses, spices and sesame seed processing industry.

Bühler offers processors a comprehensive portfolio of process engineered high-capacity processing machines and on-site services to pulses, spices and sesame seed processors worldwide. We understand the complexities and many variants of these commodities and as a leading global technology partner, we are able to deliver customized solutions that can provide performance, yield and efficiency superiority that maximize profitability.

Drawing on over 150 years of experience in specialized food processing equipment, our knowledge in pulses, spices and sesame processing is second to none.

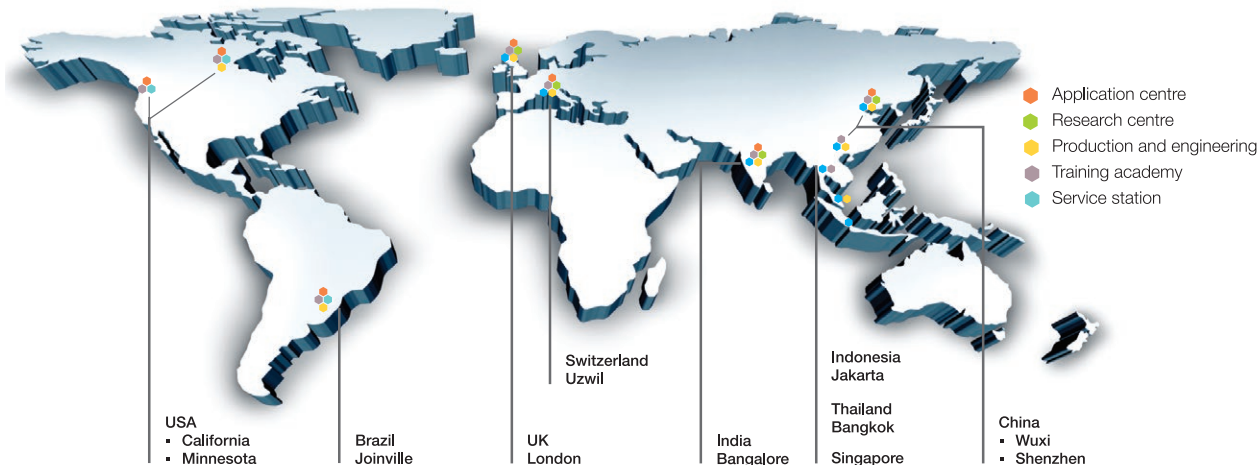
We develop unique value-added capabilities backed by a global supply chain to bring processors smarter, more profitable and more sustainable solutions.

Our comprehensive machine portfolio is also supported by our turnkey capabilities. We can bear the overall responsibility for design, construction, installation and commissioning to ensure unprecedented levels of processing capacity and product quality.

Serving pulses, spices and sesame seed processors worldwide - Our operations in more than 140 countries give you unparalleled access to our wide range of capabilities, which include:

- Global supply of complete processing line of equipment, technology and services
- Innovation in process engineered solutions
- Expertise and vast process know-how of pulses, spices and sesame seed processing
- Leadership in research, development and trends for food safety, food quality and nutrition
- Reducing energy costs and maximizing yields

Buhler's Centers of Competence for pulses, spices and sesame seed processing.





Bühler.

Committed to
innovative pulses,
spices and sesame
seed processing.

BUHLER

Integrated solutions. For pulses, spices and sesame seed processors.



Processing Solutions

Be it for stand-alone or turnkey projects, Bühler's high-capacity, equipment adds value to your commodity, at every phase of the processing stage. We optimize each process to ensure you meet food safety standards, deliver high product quality and reduce broken or damaged product - maximize your yield to the fullest.

Grain Handling and Storage

Bühler's grain handling and storage equipment are designed by product experts and incorporate the latest technology to ensure maximum protection of your raw commodity. We provide a wide range of solutions which gently and efficiently handle your raw commodities including chain, screw or belt conveyors, bucket elevators and storage silos to match different capacity requirements.

Engineering and Project Management

Providing a complete solution including equipment, technology and services is one of the key factors of our success. Bühler technologists and process engineers, available in every major pulses, spices and sesame seed processing geography have the process know-how and local in-depth knowledge to give advice on how you can fully utilize your processing plant to the fullest.



Automation and Process Control

Bühler automation systems deliver ease of operation in processing plants. Processors can opt to incorporate a modular system or a fully automated plant to control and monitor plant production - improving plant processes, efficiency and equipment performance.

Research & Development and Technology Support

Bühler's leadership in pulses, spices and sesame seed processing stems from our continuous research and development, extensive product and process knowledge and close partnership with our customers. We invest in the future, developing the latest solutions from our world-class research facilities to give our customers the competitive edge.

Global Backing

With a presence in more than 140 countries and a history spanning over 150 years, Bühler is dedicated to providing equipment and expert customer service in recognition of our customers' goals. Bühler Application Centers and Service Stations located in every major processing geography offer localized training, continuing education, laboratory analysis, spare parts and after sales service support.

Adding value to your commodity.

Bühler - an integral part of pulses, spices and sesame processing.



Bühler's key benefits for customers:

Bühler's expert knowledge in the pulses, spices and sesame seed processing industry reflects in the solutions and services that we offer; complete solutions from pre-cleaning, storage, cleaning, grading, optical sorting, grinding, de-hulling and splitting right to bagging. Each process stage is customized to suit a customer's plant and commodity; saving costs, lowering wastages, delivering higher yields - increasing all-round profits.

One-stop-solution

One-stop-solution for your complete processing needs. Our pulses, spices and sesame seed processing solutions are suitable for a range of varieties and its variants - splits, whole, natural or hulled.

Higher yield and productivity

Bühler innovations - engineered to reduce product damage and broken grains for maximum product quality and profit.

Process know-how and engineering support

Energy-efficient process lines reduce operation costs. Bühler technologists and engineers, available locally, deliver expert advice on optimizing processing lines to reduce operational and plant costs.

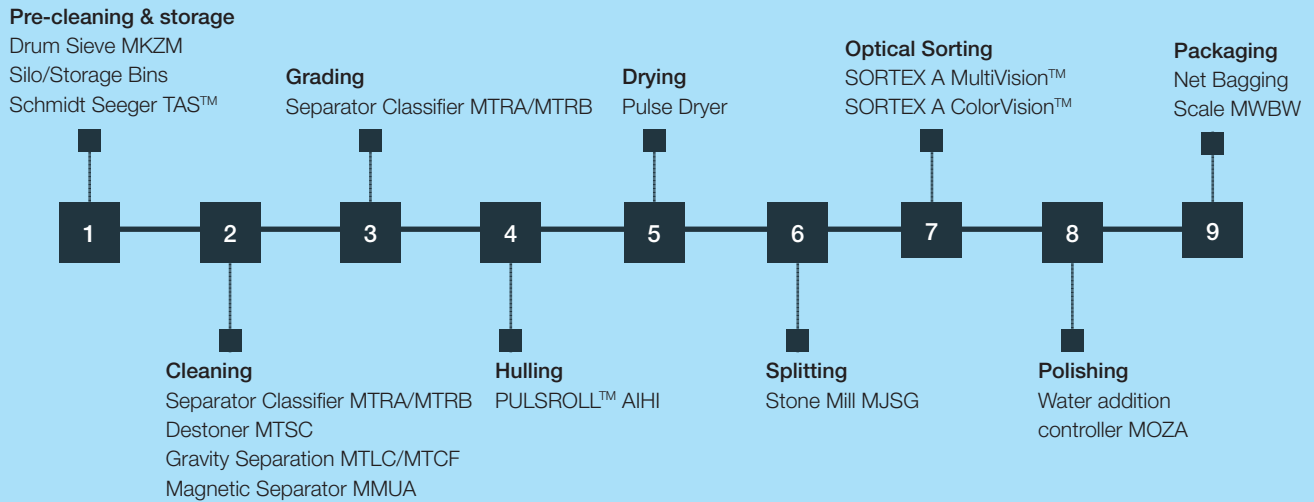
Dust-free plants

Bühler processing lines and equipment have been engineered to reduce dust emissions in plants to ensure food safety, plant safety and hygienic operation.

Automation system

Bühler processing solutions can be fully integrated into automation systems - easier monitoring and controlling of quality, capacity and traceability - reducing manpower and energy costs.

Pulses processing. Innovative solutions from Bühler.



Process Highlight:

Pre-Cleaning, Storage and Cleaning:



Schmidt-Seeger TAS™

- Comprehensive cleaning solutions; cleaners, graders and optical sorters
- Removes a wide range of impurities including subtle color defects to deliver clean and uniform end product for packaging or further processing
- Gentle processing for minimum product damage

Drying:



Pulse Dryer

- Exclusively designed for pulses, delivering process efficiency, yield and final end product quality
- Uniform and consistent drying performance for raw pulses and in-process stages

Hulling:

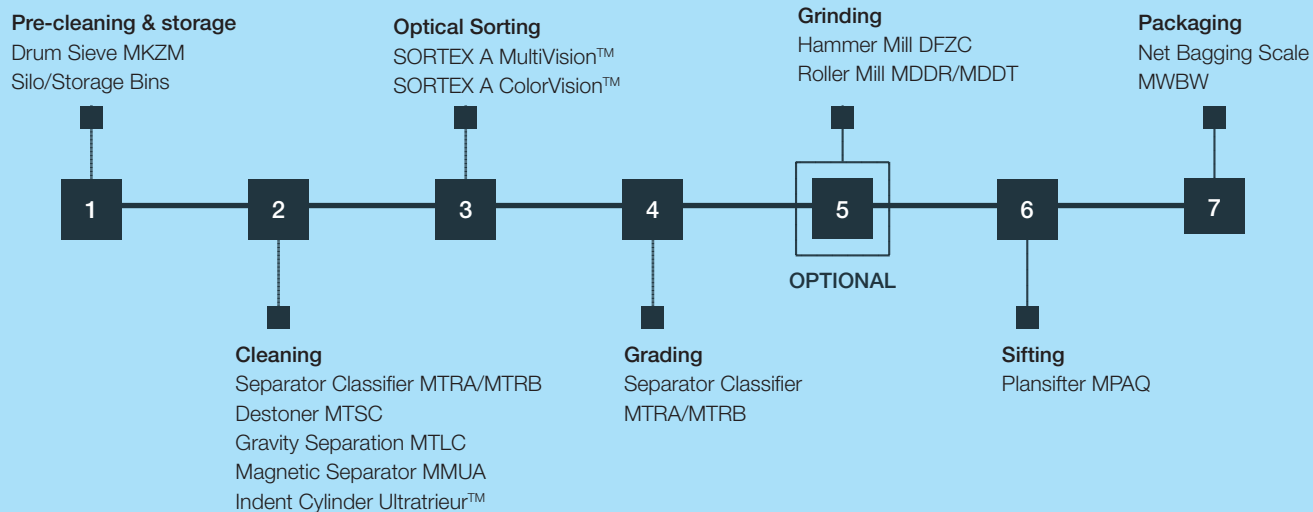


PULSROLL™ AIHI

- Exceptional hulling performance - minimum loss of cotyledon with skin
- Designed with lower energy consumption and easier, smoother operation while maximizing yield

Spices processing.

Innovative solutions from Bühler.



Process Highlight:

Cleaning and Grading:



Separator Classifier MTRA/MTRB

- Flexibility - suitable for multi-product applications
- Minimum loss of good product in reject stream - minimal re-processing required
- Quick changeovers for multi-product applications improving productivity and saving operational costs

Optical Sorting:



SORTEX A MultiVision™

- Exceptional sorting performance - removes subtle light and dark color defects, spots, damaged or blemished grains and foreign materials and seeds
- PROfile™ (shape recognition) technology detects shape difference and difficult to remove defects.
- Available with up to 5 modules for a flexible sorting configuration

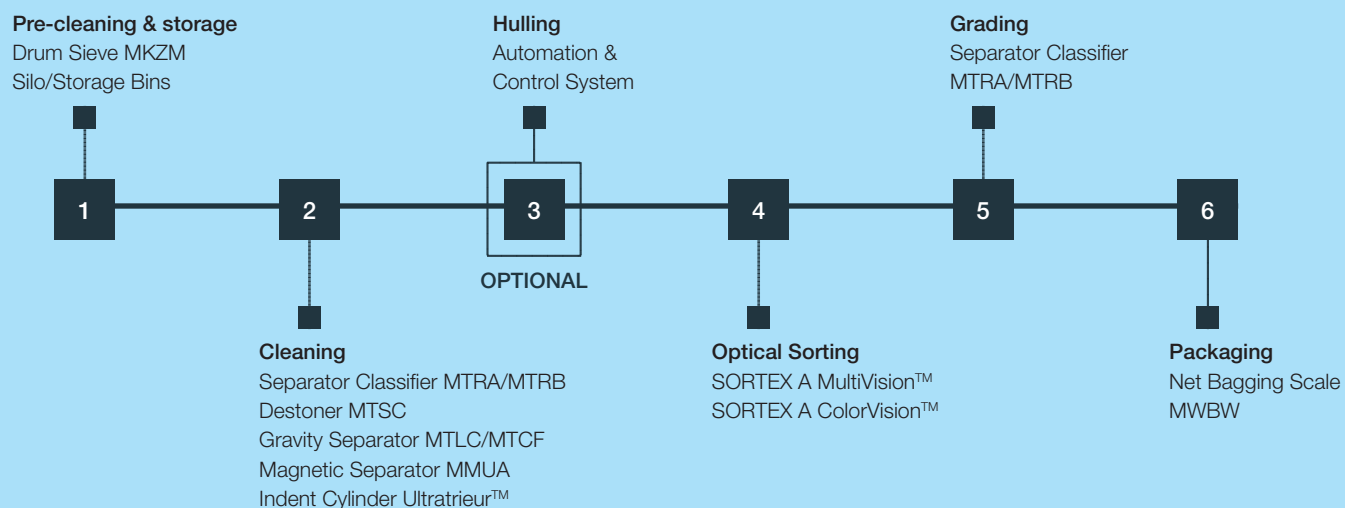
Grinding:



Hammer Mill DFZC

- A solution for a wide range of spices, dry herbs and chillies
- Minimum re-grinding required
- Low temperature rise - retaining aromatic volatile oils and natural color pigments producing the finest quality of ground spices
- Low noise, vibrations and dust emission

Sesame seed processing. Innovative solutions from Bühler.



Process Highlight:

Cleaning:



Destoner MTSC

- Suitable for different origins of seeds, seed sizes and purity levels to suit processors' requirements
- Removes a variety of impurities including stones, immature seeds and other foreign matters with minimal loss of good seeds in reject stream
- Machine design requires minimal product handling ensuring a hygienic operation - meets international food safety standards

Grading:



Gravity Separator MTLC/MTCF

- Accurately grades both natural and hulled seeds according to size and weight
- Effectively separates immature seeds to deliver low fatty acid finished product
- A suitable machine application to segregate raw material for oil extraction, food ingredients, roasting etc.

Optical Sorting:



SORTEX A ColorVision™

- Removes subtle yellows and black spots in hulled seeds
- Trusted Bühler technologies - effectively remove red, brown and black defects in natural seeds
- Available with up to 5 modules for a flexible sorting configuration.

Bühler leadership. In innovation, technology and sustainability.



Commitment to Research and Development

Innovation is the key and driver of our success. We continuously invest an average of 4 - 5% of our turnover into research and development. Our world-class facilities and laboratories house some of the best experts in pulses, spices and sesame seeds and by working in partnership with customers - we set the standards, deliver the innovations and services to help our customers achieve goals.



Encouraging sustainability in processing

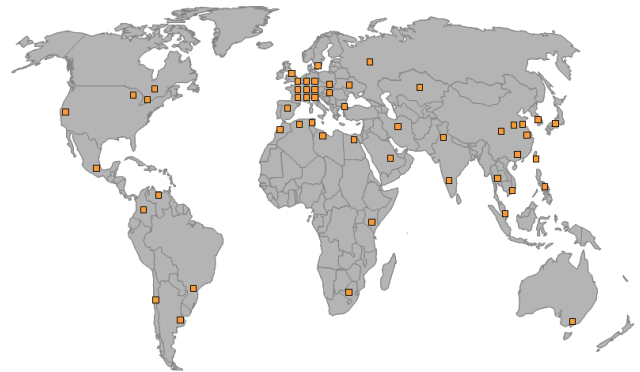
Bühler's focus on sustainability is to generate lasting success for our customers – ensuring that every grain or seed that is processed on a Bühler equipment is utilized to the full. By adopting the Smart Processing approach, Bühler generates added value by rolling out increasingly efficient and effective production processes throughout every processing stage while also ensuring that they comply with strict food safety standards and quality of the finished product.

Global coverage, local support. Wherever you are in the world.



Presence in over 140 countries offering local support and service sites

Bühler operates in all major pulses, spices and sesame seed production markets. So, wherever you are in the world, our local Bühler operating companies provide you with a window to our comprehensive global pulses, spices and sesame seed processing capabilities.



Application Centres

Bühler applications centers located worldwide, allow processors to visit and trial operational parameters and test machine performances.

Service Stations

Bühler Service Stations are available in more than 30 branches worldwide - offering roll conditioning services, sales of spare parts, maintenance and service repairs. The benefits - in addition to the full portfolio of Bühler equipment and a single point of contact for all pulses, spices and sesame processors, having this service available directly from a Bühler's local stockholding reduces waiting and delivery costs.

Bühler Inc.
2385 Arch-Airport Road, Suite 300
Stockton, CA 95206
USA
T 209 983 8400
F 209 983 4800
sortexsales@buhlergroup.com

Buhler Sortex Ltd.
20 Atlantis Avenue
London E16 2BF
United Kingdom
T +44 (0)20 7055 7777
F +44 (0)20 7055 7700
www.buhlergroup.com

