Innovating your Success.

Visit us.
Interpack Düsseldorf / Germany
May 8–14, 2014
Hall 03, stand no. D28
Dear customer.

Innovating your Success.

Bühler is your global technology partner for the processing and manufacturing of cocoa, chocolate, coffee and many other foods. In these value chains, Bühler has unique process expertise, knows the markets and market opportunities and supports customers in developing products, as well as with 24/7 services, training courses and much more.

At the same time, companies benefit from Bühler’s commitment to creating a better world – through the way it handles valuable raw materials and energy, and with regards to food safety.

Bühler takes up the challenge to develop innovative technology for various company sizes and requirements. Compact solutions in chocolate production or coffee roasting demonstrate how companies in emerging markets or with small production volumes can benefit from Bühler’s process know-how.

Find inspiration in Bühler’s innovations and discover the exciting technological solutions that revolve around the processing and manufacturing of confectionery and food.

Our booth in hall 03, stand no. D28 is the place to be at Interpack 2014. Bühler will be showing more than 10 brand-new solutions and more than 20 exhibits across 1,200 m². Our portfolio covers solutions for roasting, mixing, grinding, conching, refining, moulding, extruding, drying and much more.

Let us play a part in your success. We would be delighted to meet you in Düsseldorf.

Serge Entleitner
Managing Director Chocolate / Cocoa / Coffee
More than 500 valuable flavor substances can unfold in the cocoa bean during the roasting process.
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Services for long-term high performance.

34... Discover the Bühler booth at Interpack 2014:  
hall 03 – stand no. D28.
What’s new at Interpack 2014: Cocoa & Chocolate.

Cocoa beans

Automation

WinCos®
New automation solution

Roasting

HydroKen™
Moisture measuring device for process control and optimization

Debacterization

Debac™
Barth CCP
New features for debacterization and pasteurization

Cocoa grinding

Barth Tornado RSX
New drum roaster that enables higher productivity, efficiency, and flexibility

FineGrind™
Bead mill with energy-efficient drive concept

new machines and services

established equipment with new features
Moulded chocolate

Compact solutions

MicroFactory™
Compact DoMiReCo™ solution for high-quality chocolate in small batches

Dosing/Mixing

ShearMix™
Mixer for Bühler DoMiReCo™ process in stainless steel

Refining/Conching

PreFiner™ V
Two-roll refiner with hygienic design in stainless steel

Finer™ V
Hygienic design in stainless steel, energy-efficient drive system, new efficient cooling system

Moulding

ChocoMaster™ Compact
Compact inline moulding line for solid- and one-shot filled articles

MicroFactory™ Compact DoMiReCo™ solution for high-quality chocolate in small batches

SmartChoc™
Solution with bead mill, mixer and conche for small batches

Frisse ELK™
Multifunctional single-shaft conche with energy-efficient drive system

Frisse DUC™
Trendsetting double-overthrow conche for top quality

CoolCore™
Cold stamping unit with four stamping heads

PowerShot™
Depositor with quick-exchange system for depositing tools
Cocoa.
Perfect roasting, grinding and handling.

With its innovative systems, Bühler ensures highest product quality and maximum yield.

To demonstrate its unique know-how in cocoa processing, Bühler will showcase a complete new roasting system: the Barth Tornado RSX. A new technology enables higher productivity, efficiency, and flexibility in the roasting process. The shorter cycle times per batch boost throughput of alkalized nibs by an average of 20%.

The new moisture measuring device HydroKen™ allows the optimization of roasting processes. Furthermore, ProValid is the Bühler validation service for cocoa sterilization for obtaining documented evidence of effectiveness.

With the PreGrind™ beater blade mill and FineGrind™ bead mill, Bühler will also underscore its competence in cocoa grinding. Last but not least, the WinCos® control system opens up new dimensions in cocoa plant control.

What’s new in cocoa processing:

- Barth Tornado RSX – drum roaster for higher productivity, efficiency, and flexibility
- HydroKen™ – moisture measuring device
- FineGrind™ – bead mill with a new energy-efficient drive concept
- WinCos® – control system
Chocolate mass production. Solutions all along the value chain.

Bühler will present innovations all along the DoMiReCo™ process chain. With the stainless steel versions of its two-roll refiner PreFiner™, its five-roll refiner Finer™ V and its mixer ShearMix™ Bühler demonstrates the latest standards in hygienic design. A new energy-efficient drive and a new cooling concept will be shown for the Finer™ V as well as a new drive concept for the Frisse ELK™ single-shaft conche.

Bühler is also introducing new features for the Frisse DUC™ triple-shaft conche, e.g. new conching software for process optimization. Highlights in chocolate mass and compound production include the SmartChoc™ and MicroFactory™ systems, which demonstrate how companies with small production volumes can benefit from Bühler’s vast know-how in chocolate processing. Both solutions are attractively priced.

What’s new in chocolate mass production:

- **ShearMix™** – powerful mixer and kneader in stainless steel
- **PreFiner™** – two-roll refiner with hygienic design in stainless steel
- **Finer™ V** – five-roll refiner with new energy-efficient drive concept and hygienic design in stainless steel
- **Frisse ELK™** – multifunctional and efficient single-shaft conche
- **MicroFactory™** – compact DoMiReCo™ solution for high-quality chocolate
- **SmartChoc™** – a solution with bead mill, mixer and conche for small batches
Moulded chocolate.
Flexible and energy-efficient processing.

In chocolate moulding, Bühler will show the new ChocoMaster™ Compact moulding line. The ChocoMaster™ Compact is a continuous chain conveyor moulding line for mid-range capacities (500 to 2,500 kg/h) of solid- and one-shot filled articles.

With its new production line ChocoMaster™ Compact Bühler has the right answer for chocolate manufacturers who are looking for production solutions for smaller to medium-sized batches, striking the perfect balance between footprint, output and investment.

In addition to the compact moulding line, Bühler will also show a PowerShot™ depositor with a quick-exchange system and a cold stamping unit, suitable for a production speed of up to 32 moulds per minute.

What's new in chocolate moulding:
• ChocoMaster™ Compact – compact flexible moulding line
What’s new at Interpack 2014: various applications.

Nuts processing
Process solutions from intake to the finished product

Next generation coffee roaster
New dimensions in flavor creation

Roasting
RoastMaster™60
New 60 kg coffee roaster with air recirculation for energy-efficient roasting

Grinding
GrindDefine
Proven coffee grinder with new features

Raw material
Optical sorting
SORTEX A
MultiVision
Optical sorter

new machines and services
established equipment with new features
Roasting
AeroRoast
High-capacity dry roasting of nuts and seeds (machine not exhibited)

Mixing
Sanimix
Batch mixer

Handling
Bag and big bag discharging station
Ingredient handling

Extruding
PrioTwin™
Extruder and preconditioner system

Drying
Ceres
Sanitary drying of RTE coated cereal

Processed product
Bühler provides nut processing companies with complete systems and individual machines that are both highly economical and extremely gentle to the product. From cleaning and sorting through roasting and grinding processes, Bühler offers ideal solutions across the entire processing spectrum.

Whether continuous, batch, large or small scale systems, Bühler is able to offer a wide range of dry roasting equipment to nut and seed processors around the world. With its innovative airflow technology and sanitary design, the new AeroRoast delivers the industry’s most consistent roast at high capacity and is scientifically proven to provide a 5 log reduction of Salmonella in peanuts.

With the Controlled Condensation Process system Barth CCP, Bühler offers a gentle steam pasteurization or sterilization technique that is specifically designed for low moisture foods such as nuts and seeds. The TERP-approved and patented system guarantees a 5 log reduction with minimal product changes.

### Highlights in nuts processing:

- **AeroRoast** – uniform drying and roasting of tree nuts, peanuts and seeds at high capacity
- **Barth CCP pasteurization system** – specifically designed for low-moisture foods such as nuts and seeds
- **Vertical roaster RoaStar™** – top-quality roasting of hazelnuts at a high level
Intelligent optical sorting systems.
Empowering solutions for food safety.

Recognized globally for intelligent technology and engineering leadership, Bühler’s optical sorting portfolio offers a choice of innovative, precision-engineered equipment to meet today’s exacting sorting applications.

Bühler manufactures and assembles a full range of optical sorting equipment for grains, beans, pulses, seeds, nuts, coffee, rice, vegetables and fruits, as well as non-food products such as plastics by color and shape, with superior precision, performance and efficiency.

Equipped with industry-leading technologies including high-resolution cameras, InGaAs technology, PROfile technology, high-pressure ejectors and optimized feed mechanisms, Bühler optical sorters maximize yield and product quality.

Bühler is proud to introduce the new flagship SORTEX A range, which will be showcased at Interpack 2014. With a new design and availability in all sizes and capacity requirements, it is Bühler’s latest and most advanced optical sorting technology yet.

What’s new in optical sorting:

• SORTEX A MultiVision – advanced optical sorting technology for pulses, seeds, nuts, grain, coffee and plastics
Coffee.
Roasting, grinding and handling solutions.

In order to optimize the production of espresso, filter and Turkish coffee, Bühler offers systems featuring advanced technologies for customized production processes.

Bühler will present a new process innovation for the roasting industry. This revolutionary roaster will mark the entry into a new age of coffee flavor creation.

Furthermore, the brand new RoastMaster™60 air-recycling drum roaster for capacities up to 240 kg per hour will be on display. The system features air recirculation for energy-efficient roasting and a new cutting-edge multistep process control.

In the grinding section, the focus will lie on achieving precise particle size distribution and bulk density with the latest generation GrindDefine™ grinder series. As a partner for complete customized coffee manufacturing solutions, Bühler also offers processing expertise in capsules and single-portion coffee products.

What’s new in coffee processing:

• **Next generation coffee roaster** – a new dimension in flavor creation
• **RoastMaster™60** – new 60 kg drum roaster with air recirculation for energy-efficient roasting
• **GrindDefine™ 600** – passage grinder for ground coffee (capsule market)
Ingredient handling solutions.
Customized to individual requirements.

Bühler is a specialist and technology partner for process equipment and services for bakeries, premix and food processing plants.

The market segment Value Adding Processes offers integrated solutions for intake and storage, dosing, weighing and preparation of powdered and liquid components – ingredient handling in perfection from start to finish.

With the new discharge station for bags and big bags a key machine of any ingredient handling plant will be showcased at Interpack 2014.

The batch mixer Sanimix completes the picture with its immaculate design, which fulfills the highest sanitation requirements.

**Highlights in ingredient handling:**

- **Discharge station for bags and big bags** – compact yet with high throughput capacity
- **Batch mixer Sanimix** – mixing homogeneity and high sanitation merge
Extruded products.
Economical solutions for numerous industries.

Bühler offers optimized extrusion solutions – always cost-efficient and compliant with highest hygiene standards. The PrioTwin™ extruder system is tailor-made for working with process pressures up to 150 bar, a maximum specific torque of 11.5 Nm/cm³, and top temperatures of 200 °C.

The lean design of the system is particularly suited to processes involving large batches and a given product formula. Main applications are the production of breakfast cereals, food ingredients and petfood. Thanks to the new transition design, the product can be transferred without an infeed screw to the extruder. The single-stage preconditioner is easily disconnected and separated from the extruder.

For all process stages Bühler provides an integral range of products and services – from raw material handling, cooking, shaping and extrusion through to drying of the extruded products.

**Highlights in extrusion processes:**

- **PrioTwin™** – twin-screw extruder and preconditioner system for the production of breakfast cereals, food ingredients and petfood
Bühler provides efficient thermal processing systems that create value for processors of food products, pet and aqua feed, as well as a wide range of industrial products and materials.

Intelligent, hygienic designs ensure food processors are able to consistently deliver safe, high-quality products, experiencing maximum uptime and operational efficiency. Processors of industrial products also benefit, from the "clean" designs and precise control of thermal processes, which provide the ability to manufacture products to exacting standards, as well as from reduced downtime for maintenance.

Global service and support are also available for nearly any brand of existing conveyor dryer including spare parts, refurbishments, add-ons, process training, and on-site performance evaluation.

**Highlights in drying, roasting and expansion:**

- **Ceres** – the industry’s most sanitary ready-to-eat (RTE) coated cereal dryer, featuring more than 30 innovations and 4 patents
- **AeroRoast** – superior roast quality and consistency, coupled with unequalled capacity and food safety performance
Automation solutions that put your company a step ahead.

With the comprehensive plant control system WinCos® for more complex and high-volume plants and its “little brother” LiteCos for smaller plants, customers can significantly optimize their production and enhance their profitability. Bühler offers automation solutions that are perfectly designed for the food industry’s requirements regarding food safety, maximum productivity and energy efficiency. With its intelligent operating, maintenance and support functions, WinCos® offers efficiency, security and reproducible product quality. By remote access over the Internet, Bühler can provide fast and targeted troubleshooting using remote diagnostics, remote maintenance and support.

Highlights in automation:

- **WinCos® – the plant control solution for high-complexity plants**
  - Solutions for product traceability and food safety
  - Downtime analysis: KPI to locate areas for improvement and increase plant availability
  - OEE (Overall Equipment Effectiveness): KPI to enhance line- and plant-specific productivity and profitability
  - Energy management: monitoring of energy consumption and cost savings thanks to planned load balancing

- **LiteCos – the plant control solution for lower-complexity plants**
  - Touch-panel-based operating, containing all the necessary functions for easy process control
  - Easy-to-use and maintenance-friendly, consistent concept – in line with Bühler machine controls
24 h/day, 7 days/week, available worldwide. Services for long-term high performance.

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

Cutting-edge Bühler test centers provide services to optimize processes and develop innovative products. Product quality can be analyzed in modern laboratories using a wide range of physical, chemical and microscopy techniques.

An extensive range of training courses provides tailor-made courses for production employees, product developers, technologists and laboratory personnel.

Highlights in services:
- Present in more than 140 countries – more than 70 sales and service units
- 8 Bühler locations for roll reconditioning worldwide
- More than 20 manufacturing sites and 24-hour service stations around the world

Have a look to our booth, make yourself at home, and enjoy Bühler’s passion for cocoa, chocolate, coffee and many other products. Bühler shows brand-new solutions and proven systems for various applications (see page 35).

Start your day at Interpack with a Bühler coffee-to-go, and find inspiration in Bühler’s latest innovations, guaranteed to ensure your future success.

Or why don’t you drop by when our experts talk about their experiences in the presentation area? Benefit from the know-how and market knowledge of Bühler.

Last but not least, we cordially invite you to our after-work party at the booth on May 8 at 6 pm.

Highlights at the booth:

- More than 10 new solutions and more than 20 exhibits in total
- Numerous lectures and events
- Solutions for cocoa, chocolate and coffee processing, drying, sorting, extrusion and handling