Discover. Sustainable solutions for your success.

Visit us.

Interpack Düsseldorf / Germany
May 12–18, 2011
Hall 03, stand no. 3C43/D28
Each year, people drink 500 billion cups of coffee and enjoy 8 million tons of chocolate.

Nature is the basis of your business and your success. Protect it with sustainable process solutions which help to increase your productivity and in the same way allow you to reduce energy costs and CO₂ emissions. That’s what Buhler calls “Innovations for a better world”.

Contents.

4... Discover. Sustainable solutions for your success.
6... What’s new at Interpack 2011: cocoa & chocolate.
8... Cocoa. Perfect roasting for perfect flavor.
10... Nuts, almonds or spices. Gentle but effective pasteurization.
12... Chocolate mass production. Solutions for better processes.
14... Moulded chocolate. Flexible and energy efficient production lines.
16... What’s new at Interpack 2011: various applications.
18... Coffee. Well prepared for new business opportunities.
20... Extruded products. Economical solutions for numerous industries.
22... Dried, cooled and expanded goods – Buhler Aeroglide.
24... Optical sorting – solutions by Buhler Sortex.
26... Tailor-made automation systems and services.
28... Optimized energy solutions by Buhler.
30... Interpack hall plan, Buhler booth plan.
Dear customer.

Discover.
Sustainable solutions for your success.

Buhler is a leading technology partner for the chocolate and cocoa industry worldwide. With our experience we provide customers with complete solutions. Buhler has the expertise to optimize every single step in your production chain – from saving energy to improving the quality of your products. A decision for our solutions is also a decision for responsibility: food safety and sustainability are Buhler’s core competencies.

Discover at Interpack 2011 how sustainable solutions by Buhler help both your business and the environment alike. We present innovations for cocoa and chocolate processing and many other applications. Learn all about possibilities to enhance your machinery and processes for better use of valuable raw materials and other resources – to optimize productivity, reduce costs and CO2 emissions.

Our booth in hall 03, stand no. 3C43/D28 is the place to be at Interpack 2011. Buhler shows 11 brand-new solutions and 14 proven systems on more than 1,200 m². Our portfolio covers innovative machines for roasting, grinding, conching, refining, moulding, extruding, drying and much more.

Buhler is trendsetter in a rapidly changing market. Discover the latest trends in the food industry in our Future Center and learn how Buhler is in the vanguard to develop eco-friendly and cost-efficient solutions for your company. Or why don’t you drop by when our experts talk about their experiences in the presentation area?

Discover Buhler. We will be delighted to meet you in Düsseldorf.

Edi Boller
Managing director chocolate / cocoa / coffee
What’s new at Interpack 2011: cocoa & chocolate.
Cocoa.
Perfect roasting for perfect flavor.

In cocoa and nut processing – which is represented by the Buhler center of competence at Buhler Barth – optimized solutions for cocoa processing companies will be demonstrated. With its innovative systems, Buhler Barth ensures highest product quality, maximum yield – and that more than 500 valuable flavor substances can fully unfold in the cocoa.

Buhler will show its brand new cocoa grinding application which is based on two machines: the PreGrind™ and the FineGrind™ mills. With this new application Buhler rounds up its portfolio for fully supplying the cocoa industry with processes and machines specially designed for their particular needs.

For demonstrating its unique know how in cocoa processing Buhler Barth will showcase two model lines. The NARS™ – nib processing line (Nib-Alkalization-Roasting-Sterilization) and the RoaStar™-Debac™ line – the cocoa bean processing line.

What’s new in cocoa processing:

- PreGrind™ – beater blade mill
- FineGrind™ – bead mill
Buhler provides nut processing companies with complete systems and individual machines that are both highly economical and extremely gentle to the product. From cleaning and separation through roasting and grinding processes, Buhler offers ideal solutions across the entire processing spectrum.

The new CCP-pasteurization system, which is Buhler’s first answer to the increasing discussion about food safety for dry goods and bulk material, will be demonstrated. This highly advanced processing solution meets strict requirements regarding food safety and guarantees pasteurization with a 5 log reduction and a moisture addition rate of less than one percent. Hazelnuts, peanuts, cashew nuts, pistachios and almonds are handled with utmost care in this tailor-made production system. The Buhler solution is also well suited for the pasteurization of spices and powders without impairing taste or color.

The system offers a unique mode of operation to reduce the salmonella quantity in an extremely effective and gentle fashion. At the same time, the processed products retain their natural appearance.

What’s new in pasteurization:

• CCP-pasteurization system – for hazelnuts, peanuts, cashew nuts, pistachios, almonds, spices and powders
Chocolate mass production. Solutions for better processes.

Today, Buhler is the global leader in conching and refining technology. Chocolate, fillings and coating masses which have been refined with Buhler systems do not only provide an extremely narrow particle distribution, but are also homogenized and flavored in an optimal way.

In the segment of chocolate mass production a new mixer will be presented. With the ShearMix™, Buhler is emphasizing its innovative spirit in terms of the DoMiReCo™ process, which remains the most frequently used application for producing chocolate masses.

A redesigned five-roll refiner with energy-efficient drive concept offers a potential energy saving of up to 10%. Additionally Buhler will also demonstrate new applications for conches as well as the successful laboratory concept of SDX three-roll refiner in combination with an Elkolin™ 5 kg conche.

What’s new in chocolate mass production:

- **ShearMix™** – mixer for the Buhler DoMiReCo™ – Dosing-Mixing-Refining-Conching – process
- **Finer™ V** – five-roll refiner with new energy-efficient drive concept

Process Applications:

- Buhler DoMiReCo™ systems
- SDX three-roll refiner
- Elkolin™ 5 kg conche

Buhler’s innovative spirit in the segment of chocolate mass production is evident through the introduction of the ShearMix™ mixer and the Finer™ V five-roll refiner, both designed to improve the efficiency and quality of chocolate production.
Moulded chocolate.
Flexible and energy efficient production lines.

With its new production line ChocoStar™ Compact Buhler Bindler – the Buhler center of competence for chocolate moulding – offers smaller producers the opportunity to benefit from its vast knowledge in chocolate moulding at a very competitive price. A depositor and other new components of a completely new line concept are tailored for production capacities from 500 up to 1,500 kg/h.

Additionally Buhler Bindler will present the FlexDie™ nozzle for depositing various masses with a wide range of viscosity. No matter if depositing water or caramel – the same FlexDie™ nozzle is suited for any mass. Furthermore the new revolutionary MultiTherm™ TC laboratory analysis equipment for cocoa butter and chocolate will be presented the first time. Buhler Bindler will also showcase a redesign of their highly successful PowerShot™ depositor and new applications of their unique CoolCore™ cold stamping unit and Seed-Master™ chocolate tempering system.

What’s new in chocolate moulding:
• ChocoStar™ Compact – line concept for production capacities between 500–1,500 kg/h
• PowerShot™ 425 – compact depositor
• FlexDie™ – nozzle for the deposition of various masses
• MultiTherm™ TC – revolutionary laboratory analysis equipment
What’s new at Interpack 2011: various applications.

- **GrindDefine™ 600**
  - passage coffee grinder
  - for ground coffee (capsule market)

- **RoastMaster™ 20**
  - 20 kg drum roaster with a user-friendly innovative automation system

- **PRIOtwin™**
  - extruder and preconditioner system

- **AeroExpander™**
  - expansion system for pellet snack products
  - (machine not exhibited)

- **AeroFlow™**
  - fluid bed toaster
  - (machine not exhibited)

- **SORTEX E1A**
  - optical sorting system for frozen fruit and vegetables

- **SORTEX Z+**
  - optical sorting system for coffee (machine not exhibited)
Coffee.  
Well prepared for new business opportunities.

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

With comprehensive know how in the field of coffee production and sensitivity for individual process requirements, Bühler and its collaboration partner Petroncini Impianti develop customer-friendly solutions for first-class coffee specialties – along the entire process chain from green bean handling, cleaning, and storage to roasting, blending and grinding of the roasted coffee.

At Interpack 2011 the company will showcase new solutions for the market segment of industrial coffee processing. Highlights are a new drum roaster and a new modular passage grinder which specially suits the increased requirements for ground coffee in the coffee capsule market.

What’s new in coffee processing:

- **RoastMaster™ 20** – 20 kg drum roaster with a user-friendly innovative automation system
- **GrindDefine™ 600** – passage grinder for ground coffee (capsule market)
Extruded products. 
Economical solutions for numerous industries.

Buhler offers optimized extrusion solutions – always cost-efficient and complying with highest hygiene standards. The new 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 Buhler provides an integral range of products and services – from raw material handling, cooking, shaping and extrusion through to drying of the extruded products.

What’s new in extrusion processes:

• PRIOtwin™ – extruder and preconditioner system for the production of breakfast cereals, food ingredients and petfood
Drying, cooling and expansion of processed goods. Solutions by Buhler Aeroglide.

Buhler Aeroglide driers, toasters, roasters and coolers are known worldwide for uniform, efficient thermal processing.

The company delivers leading technology in RTE breakfast cereals, nuts and seeds, snack food, petfood and aquaculture, as well as for an extensive range of non-food products. Main features of all solutions are improved product consistency, reduced energy usage and customized thermal processes. Additionally the machines offer reliable operations and easy access for cleaning and sanitation.

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

Highlights in drying, cooling and expansion:
- AeroExpander™ – expansion system for pellet snack products
- AeroFlow™ – fluid bed toaster
Optical sorting of fresh and processed food as well as plastics. Solutions by Buhler Sortex.

Buhler Sortex provides control and management solutions that enable producers in selected industries to meet the quality criteria demanded by their customers while maintaining optimum productivity and yield.

The sophisticated solutions help customers to safeguard their product quality, brand image and increase their revenue. Processors of fresh or frozen fruit and vegetables gain significant competitive advantages as do those dealing with grains, seeds, nuts, beans or pulses.

Buhler Sortex technologies outperform alternative methods in identifying and selecting premium product of perfect shape, size and color.

When applied at the last stage in the packing line, companies can be confident of delivering a product to end-consumers that will enhance their brand reputation. This is because of Buhler Sortex’s promise of adherence to the most exacting standards in the production of the safest, most hygienic food.

Highlights in optical sorting:

• A SORTEX ETA will be showcased at Interpack 2011
Solutions that put your company a step ahead. Tailor-made automation systems and services.

Buhler process solutions are top performers in terms of both productivity and product quality. Comprehensive service and training guarantee that machines will run smoothly, thus delivering peak quality and high throughput – even when customers use older systems. State-of-the-art automation solutions allow customers to optimize production workflow, energy and raw material management. Buhler offers customized packages that are perfectly designed for the industries’ needs regarding food safety, productivity and energy consumption.

Highlights – services and automation:
- WinCoS.r² – process automation for consistent and reproducible product quality
- Solutions for product traceability and food safety
- Global customer-oriented service network – 24 hours, 7 days a week
- Roll change program for five-roll refiner with original Buhler rolls
Reduce energy costs and CO$_2$ emissions. Optimized energy solutions by Buhler.

Customers looking for new methods of energy supply and utilization can rely on Buhler energy optimization services – from the first audit to analyze the operating situation and energy requirements to planning the measures and installing the necessary devices.

In the cocoa industry a new cocoa shell combustion and an active energy management system offer opportunities to save energy. For chocolate production energy-efficient drive concepts for refiners and the tempering system SeedMaster$^\text{TM}$ are tailor-made solutions to cut costs by reducing the energy consumption.

Additionally the new SmartEnergy$^\text{TM}$ concept provides a revolutionary solution for many companies facing high energy costs: combining state-of-the-art micro power plants and optimized production-relevant energy flows reduce energy consumption and lower CO$_2$ emissions.

Highlights in energy optimization services:

- Audits to analyze the operating situation and energy requirements
- Optimization of thermal processes
- Cocoa shell combustion, new drive concept for five-roll refiner and energy efficient tempering system
- State-of-the-art micro power plants to reduce energy costs and CO$_2$ emissions
Discover the Buhler booth at Interpack 2011: hall 03 – stand no. 3C43/D28.

Visit us at Interpack fair and discover a booth of more than 1,200 m² where a total of 25 machines will be exhibited.

Be prepared for interesting lectures and get a view into the future of cocoa and chocolate production at the unique Buhler Future Center.