

# CIMBRIA

## NEWS

2013/14

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**YOUR  
PRODUCT  
OUR  
KNOWHOW**



# CIMBRIA

## NEWS 2013/14

### GLOBAL PERSPECTIVE – LOCAL FOCUS

Karsten Larsen - CEO [kla@cimbria.com](mailto:kla@cimbria.com)



Cimbria is an international company with its headquarters in Thisted, Denmark. The company was founded in 1947 and we are proud of having a long history of supplying good, reliable solutions based on in-house technology and utilizing the opportunities on the global market. Today Cimbria is a one-stop-shop and one of the world's leading suppliers of drying, conveying, storage, sorting and seed processing technology. Cimbria's mission is to contribute to the creation of a sustainable link between efficient production and optimum utilization of agricultural crops with due consideration to man and the environment. We achieve maximum machine utilization with minimum environmental impact, and our equipment and projects play a significant role in securing the global food supply.

Our primary customers operate within the grain and seed business, although our equipment and plants are also used in e.g. breweries, malting houses, animal feed plants, fertilizer storage systems, biomass treatment plants, cement plants and for the handling of other bulk materials. Credibility, quality, efficiency and flexibility are among the criteria that have convinced an increasing number of customers throughout the world to invest in Cimbria technology. Thousands of Cimbria plants are in operation in many parts of the world. Our plants operate under very different conditions and process a wide range of products, with such diversity being a result of our research and development over a period of more than 65 years. This is the best reference for our expertise and competitiveness in the global market.

In this magazine you can read about a selection of our new technologies and latest installations. We design, develop, manufacture and install customised solutions ranging from stand-alone equipment to complete processing lines and major turnkey projects, including advanced automation and information systems.

Cimbria's project competence provides our customers with a high degree of security, comfort and awareness in relation to their project and ensures qualified results in each and every aspect, as well as complete integration and coordination of functions and components. We excel in all disciplines and have a high level of expertise in research and development, knowledge of crops, engineering and production, as well as project management, consultancy, education and training, inspection of plants and design.

With 65 years of experience we have strong industry insight, and the starting point for each project is a thorough understanding of the customer's needs. Project design reflects this insight and is integrated into our customers' existing infrastructure. Finally, testing and commissioning ensure that a project is not handed over until all parties are satisfied that the project is ready for operation. This is what we mean by "Solutions Together". In summer 2013 Cimbria opened a new factory in the Czech Republic. This is our second factory in the Czech Republic. The new facility is mainly for production, but also includes new office space. The new factory will primarily manufacture products within the conveying and seed processing business areas. Our expansion in the Czech Republic is an important step in our efforts to ensure that Cimbria remains abreast of current and future demand.

Our vision continues to be that Cimbria will maintain and further develop our position as a global, innovative and leading supplier of quality products and processing equipment for the treatment of crops, animal feed and other bulk goods.

In 2013 Axcel sold a majority stake in Cimbria to the private equity fund Silverfleet. The foundation of our future strategy is based on achieving organic growth through the further development of Cimbria's business areas and geographical market positions, as well as continued optimization of our production facilities.

In addition to Cimbria's more than 800 committed employees, a number of Cimbria offices, dealers and agents are present throughout the world, and are thereby always close at hand and ready to provide service to all our customers. Their dedication and capabilities are key factors in our success.

The Cimbria Group of Companies in:

Denmark • Austria • Czech Rep. • India • Italy • Kenya • Egypt • Turkey • Malaysia • Russia • Thailand • Ukraine • United Kingdom • Germany • Kazakhstan

Agents and dealers in:

Argentina • Australia • Bangladesh • Belgium • Brazil • Bulgaria • Canada • Chile • China • Eritrea • Ethiopia • Finland • France • Germany • Greece • Hungary • Iraq • Ireland • Italy • Israel • Japan • Kazakhstan • Lithuania • Mexico • Montenegro • Netherlands • Pakistan • Peru • Philippines • Poland • Portugal • Romania • Russia • Switzerland • Serbia • Slovakia • Slovenia • South Africa • South Korea • Spain • Sweden • Taiwan • Turkey • United Kingdom • USA • Vietnam

## MARINE HARVEST - NEW SALMON FEED FACTORY

Niels Christensen - nch@cimbria.com



Marine Harvest is the world's leading seafood company offering farmed salmon and processed seafood to customers in more than 50 markets worldwide. Marine Harvest is the biggest producer of Atlantic salmon in the world and is responsible for over 5 million salmon meals per day.

In addition to fresh and frozen salmon, Marine Harvest offers a wide range of value-added products such as coated seafood, ready-to-eat meals, delicious finger food and smoked seafood. Though salmon is the main farmed product, the company also farms white halibut. Marine Harvest has decided to build a new fish feed factory in Norway as a greenfield project. The site is located on the west coast in Bjugn, about 100 km southwest of Trondheim.

Logistically, the new plant is located immediately adjacent to the sea, and most of the deliveries for the factory will arrive by ship.

Likewise, products from the factory will leave the same way.

The planning and design of the project has been executed by Danish engineering company Graintec A/S. Cimbria was chosen for delivery of:

- Intake line from ship-unloader to raw material silos. The unloader itself will be supplied by our German partner Neuero. The conveying line is about 300 m long. It starts at the quay and has a capacity of 300 TPH.
- Machine tower as a complete building with decks for cleaning and weighing of incoming products. The building is 9 x 16 m and 40 m high.
- Conveyor system from raw material silos to dosing silos consisting of standard heavy chain conveyors and elevators designed for 150 TPH.
- Midi and macro dosing silos, approx. 4,500 m³, as a complete building incl. steel structures and cladding. The silo cells are made of small wall elements and outloading is in part secured by bin-activators.
- Finished product silo, approx. 5,000 m³, again as a complete building. The silo cells are made of trapezoidal wall elements and fitted with speed-reducing loading chutes in order to handle the pellets as gently as possible to avoid any damage.
- Warehouse as a complete building consisting of steel frames and cladding. Approx. 1,000 m².

The deliveries for the project were coordinated with the other contractors on the project and were commenced in spring 2013. Consignments were shipped by vessels directly from Thisted to the site. The installation was started at the same time and a major part of the job was executed during the summer and autumn months. Most of the work will be finished by the end of 2013. A large number of Cimbria employees have been at the site during the installation period. As no hotels are available within driving distance, a villa was erected for all the workers and administration on site, including all necessary facilities such as canteen, laundry, sleeping apartments, etc.



## INCREASING NEED FOR STORAGE

Niels Christensen - nch@cimbria.com



During 2013 activities in this segment have increased significantly once more due to deliveries of a large number of silos.

We have further developed the rectangular modular system for the silos in order to standardize the design, thus ensuring fast delivery and easy installation.

The silos have been delivered for storing raw material and finished product at feed mills. We have also had the pleasure of enlarging more existing silo plants, which is possible due to the standardized system.

In addition to the storage systems, we have supplied several steel constructions, such as machine towers, conveyor bridges and warehouses.

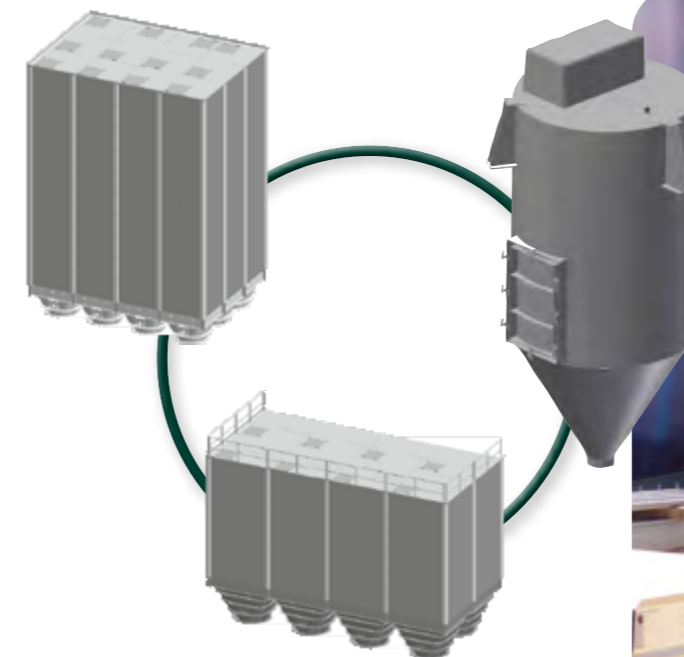
These have included the supply of silo systems to:

### Nestlé Rossiya, Vorsino, Russia

A few years ago, we supplied several finished product silos to Nestlé's pet food factory in the greater Moscow area. In 2013, the production was extended and more silos were requested.

### The delivery primarily consisted of:

- Raw material silo consisting of 12 cells
- Finished product silo consisting of 8 cells
- Meal silo, diam. 2,100 mm
- Coating silo, diam. 2,000 mm produced in AISI304



Additional conveyers were also supplied in order to integrate the new silos into the existing facility.

### EWOS Chile Alimentos

For the company Ewos Chile Alimentos we have delivered extensions of the existing silo installation via Chilean engineering company GRAINTEC LTDA.

GRAINTEC was responsible for the entire design and planning of the project in cooperation with EWOS and we were appointed to deliver the silo cells.

The existing silos were delivered a few years ago and it had become necessary to increase the capacity of two raw material silos by 450 and 500 m³ respectively. Along with the extension, we also delivered one new silo block for raw material with a storage capacity of 1,200 m³.



## GENTLE CONVEYING AT SEA

Niels Christensen - nch@cimbria.com



Cimbria has supplied a conveyor system for handling special products as carefully as possible in order to avoid breakages and dust. The equipment have been developed in collaboration with Danish engineering company Grintec A/S, to which we have delivered this system for handling fish feed pellets. In such applications, the importance of gentle product handling is essential because of the environment.

The screws are used in connection with the loading and unloading of vessels for transportation of fish pellets from fish feed factories to off-shore fish farms. The biggest screw conveyor has a length of 23,775 mm and a diameter of 800 mm.

For unloading the screw is mounted in a heavy steel construction, incl. a vertical tower which can turn through 270°. The outloading arm can either be a single unit or two linked units for unloading distances of up to 14 m and 25 m respectively. The unloader can

be lifted and lowered 15/10°. The movements are controlled by hydraulics from the ship's control bridge.

The system is very easy to operate and suitable for delivery of feed to fish farms at sea. It is easy for operators to carry out the positioning of the unloader according to the feed barges.

The amount of feed delivered to off-shore farms is relatively high, as the fish are normally in seawater during the growth phase. The system is a substitute for the traditional way of delivering by means of big-bags, and as the capacity is high, the unloading time is short.

In addition to these very gentle conveyor screws, the plants have been fitted with open speed-reducing filling chutes in bins and containers, as gentle handling is of great importance throughout the entire product handling and storage line.



## BIO-FUEL PLANT FOR FELLESKJØPET AGRI, NORWAY

Willy Jensen - wje@cimbria.com



In February 2013 we signed a contract for the delivery of equipment for a so-called bio-energy plant, which produces steam / heat that is used in the production of animal feed and for heating dryers, etc. The plant burns waste resulting from the cleaning of grain both at the plant where it is located, but also from other plants in the area, which are thus able to sell bio-energy rather than being left to dispose of hazardous waste that may not be burned in existing district heating plants.

Cimbria has been involved in the design phase on the part of the plant that receives the grain waste, and has delivered screw conveyors, bucket elevators, chain conveyors, a belt dryer and aspiration plant with filter.

The conveying system and belt dryer are designed to handle grain waste, which during the harvest period often has to be dried before it can be briquetted and stored for later use.

In addition to aspiration on the belt dryer and conveying system, a powerful extraction system from the hopper has been established to ensure that the dust is kept within the plant, which is located opposite the railway station and immediately adjacent to a large car park.



This is a view of the interior of the hopper, which is a large, low-sided silo into which the waste product is tipped directly from a truck.



This picture shows most of the plant, with the belt dryer in the background and the large reception silo on the far right.

# STRAND UNIKORN A/S, MOELV, NORWAY

Willy Jensen - wje@cimbria.com



At the beginning of 2012, Cimbria reached agreement with Strand Unikorn on the drawing up of a project proposal for 2 sub-assignments, each with drawings and descriptions that were to be used as the basis for enquiries with regard to potential suppliers. Cimbria made a bid for both projects and was awarded the two contracts, which were signed in July and December 2012 respectively. One of the projects was a new raw product intake that was to be incorporated into a new intake building with elevator tower and which was also to house a filter system for dust extraction from the hopper. A magnet was installed to make sure that ferrous matter did not get into production. The new intake line has a transport capacity of 200 t/h and the plant was put into service at the beginning of 2013.

The second part of the assignment was a two-fold increase in capacity of a previously delivered finished product plant with associated conveying lines from production via new screens to the 23 new Cimbria finished product silos, containing a total of approximately 1,400 m3 of finished pelletized feed. Completely separate conveying lines have been established from each production line to the screen, in addition to the return passage of waste and filter dust, such that contamination cannot occur. Above each silo there are 3 sets with distribution conveyors which are each equipped with spot filters in order to prevent contamination. A loading facility has been constructed below the silos. Trucks drive onto a weighbridge and by means of a mobile conveying system the truck can be filled according to the customer order in question. The conveying system has a capacity of 150 t/h, and there are Moduflex loading chutes at both ends of the mobile conveyor, which enables dust-free loading of the trucks. In addition to the aforementioned filters, there is also a filter which ensures extraction of dust during loading of the trucks. The plant will be commissioned by Christmas 2013.



Strand Unikorn's feed factory can be seen here with raw product intake and finished product silos.

Distribution conveyors on the ceiling of the silo

Loading facility featuring mobile conveyor with Moduflex loading chute

MoRoS LAN modem

Remote access release

Remote view from office desk

# CENTRICOATER EVOLUTION

Michael Augustin - mau@cimbria.at



From October 2013, all CENTRICOATERS ordered will as standard be delivered with a 12" touchscreen in combination with an analogue LAN modem. The familiar, clearly-presented menus for operating the CENTRICOATER have not changed, only now part of the touchscreen is permanently given over to menu buttons which are needed periodically by the operator (e.g. HOME, ALARM, ACTUAL button). A GOTO button is also implemented, which allows quick access to the different menus, e.g. to each dosing line (PUMP, POWDER).

The analogue LAN modem allows remote access for trouble-shooting and maintenance in two ways. The current and future trend is to have the CENTRICOATER PLC implemented in the client's computer network with its own IP address, which allows remote access using a VPN tunnel (the safest way of remote access currently available) via the internet. In order to let the client rest assured that Cimbria cannot spy on details of his network, remote access must always be authorized by the operator by means of a key switch. Only then is the VPN tunnel created, and only the CENTRICOATER PLC can be seen at the other end of the VPN tunnel. As an extra option (on request), if connected to the client's network, the CENTRICOATER can be monitored from the office. In areas without internet access, or if the local network is temporarily out of order, access can be achieved using a standard analogue telephone line (e.g. fax line). It may be old-fashioned, but it is still the most uniform standard worldwide. This LAN modem is also available (on request) with a GSM slot instead of the telephone line plug for connection via a

GSM data card. In this case, the network signal at the location of the main switchboard must be strong enough to be connected to the provider network via minimum HSDPA. Unfortunately most plants are installed in steel towers, which act as "Faraday cages". A GSM contract can be based on a pre-paid solution if locally available (please ask your local GSM dealer for details) to reduce annual standby costs to a minimum.



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## NEW WAYS IN COFFEE PROCESSING

Wieland Bogdan - wbo@cimbria.com



### The History of Coffee

An Ethiopian herdsman named Kaldi noticed his goat frolicking happily near a bush. Chewing on the red berries, the goat let out an exuberant “Baaaaaaahhh!” The coffee berry had been discovered! Kaldi sampled the berries himself. A feeling of elation consumed him. He declared to his goat, “These berries are sent from heaven.” He was so excited that he and his goat ran to the nearest monastery, proclaiming their miraculous effect. “Baahhhhh!” “Baahhhhh!” The chief monk was not amused: “Are you possessed?” he snapped. He condemned the berries as the Devil’s work and promptly threw them into the fire. “Evil!” However, shortly afterwards the smell of fresh roasted coffee filled the pious halls of the monastery, enticing the monks. Once the chief monk had dozed off - no doubt due to a lack of caffeine! - a young rebellious monk snatched the cooling beans from the fire pit. This innovator, the world’s first barista, mixed the beans with water and the resulting brew kept the monks up all night thanking their creator. “Hallelujah!” A holy revelation indeed!

### Coffee market report

Coffee prices suffered a downturn in 2013 with the prices of all four group indicators declining steeply during the course of the year. The monthly average of the ICO composite indicator price now stands at its lowest level since March 2009, and the severe downward trend observed over the last two years shows

no sign of slowing. Despite a slight decrease in September, total exports for coffee in 2012/13 reached a record volume of 110.2 million bags, comprising 68.5 million bags of Arabica and 41.7 million of Robusta. Total production in 2012/13 is also estimated at a record volume of 145.2 million bags. World consumption is estimated at 142 million bags for the calendar year 2012, and is growing at around 2.4% per annum.

It is too early to put forward an estimate of world production in 2013/14, which is now under way in all exporting countries, but early indications suggest possible decreases in some leading exporters. Brazil is in the off year of its biennial cycle, and the damage from coffee leaf rust in Central America is expected to become more evident. Furthermore, it should be noted that current low prices are likely to discourage farmers from investing and maintaining their crops, which may have a negative effect on future production levels.

### BEO - Honduras

#### COFFEE PROCESSING PLANT - Input capacity 5 t/h Parchment Coffee

BEO - Beneficio de Exportación de Occidente - is located in the departments of Santa Barbara, Copan, Lempira and Ocotepeque, Honduras C.A. On the initiative of three cooperatives of small producers, which needed their own export channel, BEO was founded in 2010. Due to expansion requirements and the demand to process more coffee, in 2012 the cooperative invested in a modern processing plant to increase its processing capacity and meet all European standards for food processing. A complete 5 t/h coffee processing plant from Cimbria was installed, which is now in operation for the upcoming crop in 2013/14. Thanks to its

modern equipment, BEO is now Fair Trade, Organic, Rainforest Alliance and UTZ certified. Mr. Oscar Serrano, President of BEO, claimed that acquisition of this Cimbria plant has been a motivation for the cooperative and has encouraged its customers to buy coffee which guarantees quality, reliability and efficiency. It is an organization with clearly defined values, as well as being a leader in the processing and export of specialty coffees. Market position is continuously improved through highly competitive quality systems implemented through the technology in its machines and equipment, as well as highly trained human resources in the preparation of specialty coffees in order to become the preferred option for its customers.

### CAFFEX - Honduras

#### COFFEE PROCESSING PLANT - Cleaning Capacity 10 t/h

Cafés Finos de Exportación S. de R.L. (CAFFEX) provides processing and export services to a large number of small coffee-producing cooperatives in Honduras. It has built up a strong position in the Honduran coffee market and specializes in fair trade/organic coffees. CAFFEX aims to strengthen its long-term relationship with producers through the provision of high-quality services, transparency, technical assistance and social projects for the communities.

“When you start a new plant it’s the only opportunity you’ve got to push the envelope and try new things,” says Raul Hawit from Caffex. Caffex badly needed the shake-up and we at Cimbria were invited to take part in the project to help design an adequate coffee flow, including ideas and new approaches to improve the process itself. The factory is equipped with all the essentials, such as Delta Cleaners, conveying equipment and a dust extraction system with Cyclofans from Cimbria.

### Guna Trading House PLC - Ethiopia

#### COFFEE PROCESSING PLANT - Input capacity 3 t/h green coffee

Guna Trading House PLC is a private company established in 1992. It is engaged in export and import. This new 3 t/h green coffee processing mill is automated and includes the latest Cimbria equipment and advanced technologies. The mill was built and commissioned by Cimbria Heid in cooperation with Cimbria Ethiopia, Mr. Tadele Dargie and his team. The equipment installed includes Cimbria’s Pre-cleaner Delta 142.1, Delta Grader 125, TS 90 De-stoner, Coffee Beater SSM 500, Polisher Hansa SM14 and one Gravity Table GA 110. Other Cimbria equipment, such as Elevators, Belt Conveyors and Cyclofans, was also delivered and installed.

**TOTAL EXPORTS FOR  
COFFEE IN 2012/13  
REACHED A RECORD  
VOLUME OF 110.2  
MILLION BAGS**

## SEA CHROME - COLOUR AT FIRST SIGHT

Michela Pelliconi - mpelliconi@seasort.com



Many years of experience in the field have allowed SEA sorting machines to play a leading role in the optical electronic sorting industry. Our strong market position is the result of over 40 years of know-how in the development and production of optical electronic colour sorting equipment. This enables us to offer the most innovative and flexible sorting solutions based on our technical experience and strong concept.

The latest sorting machine introduced to the market is the SEA Chrome optical sorter, equipped with high-resolution full-colour RGB tri-chromatic cameras which, combined with HIS software, allow a near human eye vision color sorting technology. SEA Chrome system is also equipped with a shape-sizing function integrated into the system, which sorts elements according to their geometric characteristics.

The hardware system is organized with easily replaceable circuit boards, using state-of-the-art SMD and FBGA technologies.

Self-control functions (auto-diagnostics and auto-calibration) ensure excellent operational stability.

LED lighting and background systems, exclusively designed for SEA sorting machines, allow the most precise focusing of the beam on the inspection line.

Program settings and adjustments are performed through user-friendly software which allows real image setting directly on the sorter touch-screen to define the defective elements to be rejected.

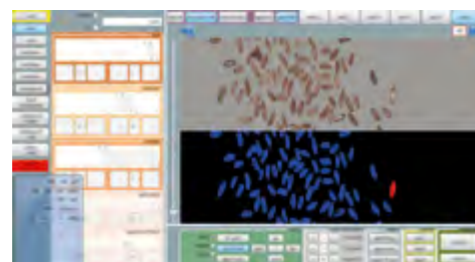
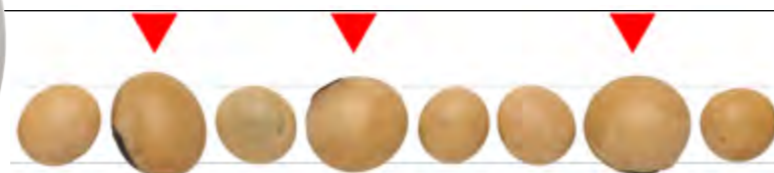
SEA Chrome sorters are available from 1 to 7 chutes in order to satisfy any production capacity.

SEA Chrome perfectly suits the needs of modern food and non-food processing systems that demand the optical sorters' ability to detect and reject products that have different shades of similar colours.

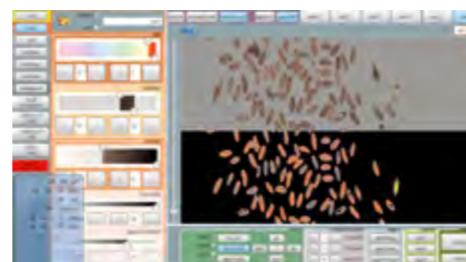
Some typical examples for which the highest sorting accuracy is required are the removal of allergens, in particular soy beans from wheat, or separation of elements containing gluten from gluten-free cereals (maize, rice, buckwheat).

Other evident advantages arising from SEA Chrome application can be found in mixed-colour pulse processing (kidney beans, lentils, peas, fava beans, etc.), for which monochromatic - and even bi-chromatic - optical sorting technologies are not able to match the excellent performance provided by SEA Chrome tri-chromatic technology.

SEA Chrome currently represents state-of-the-art optical sorting technology that is able to match the increasingly stringent requirements of the food commodities industry, ensuring that safety and purity requirements continue to be met.



SEA Chrome offers the near human eye vision color sorting technology.



### REJECTED

### SORTED



TESTING  
CENTERS  
AVAILABLE IN  
DIFFERENT  
COUNTRIES FOR  
INDUSTRIAL TESTS

## MODULAR EAR CORN DRYERS

Niels Christensen - nch@cimbria.com



During the last couple of years we have succeeded in transferring the basic elements of the silo design to dryers for ear corn. The dryers are built as modular chamber dryers in two ways: either as single-pass reverse dryers or double-pass reverse dryers.

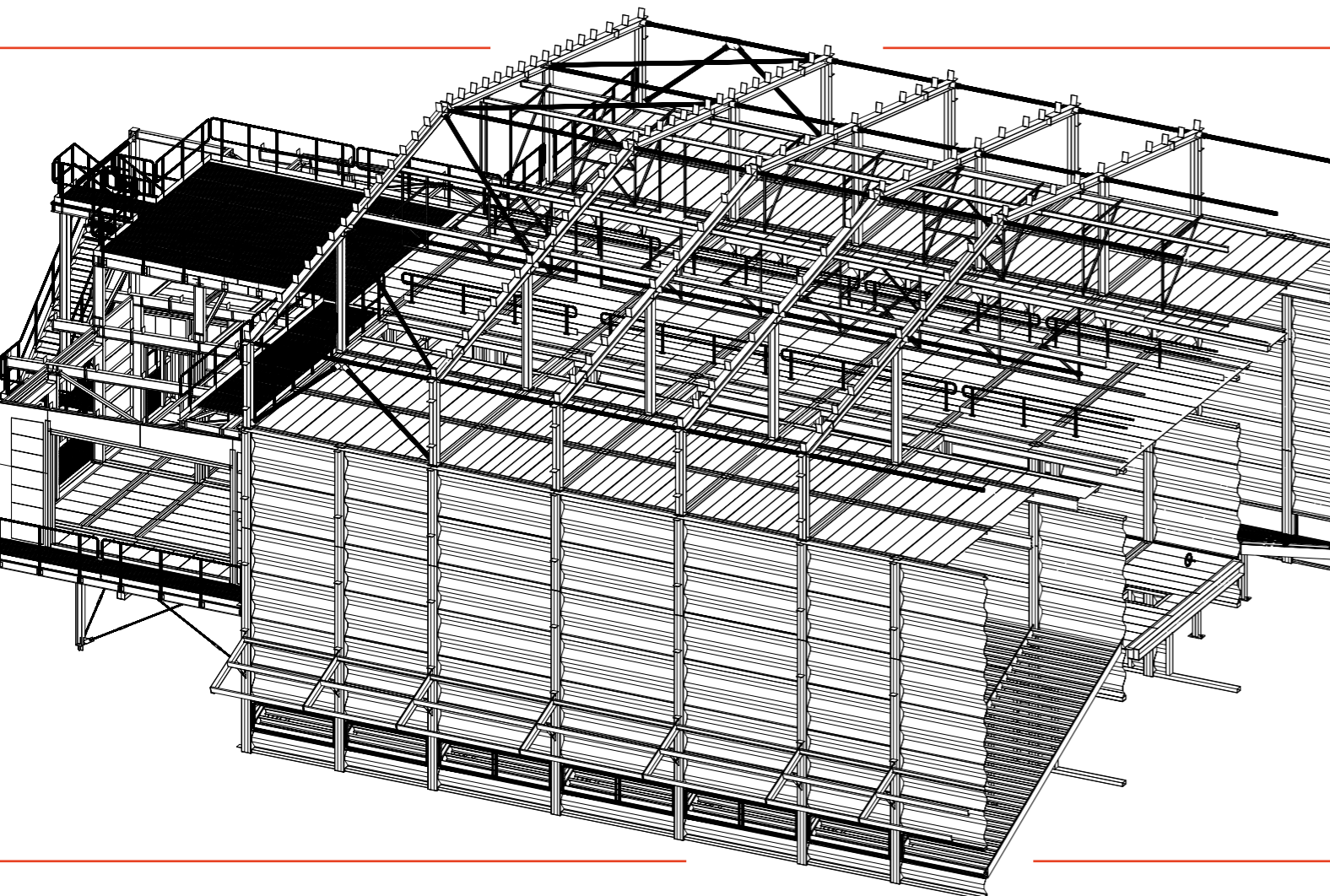
Single-pass dryers have an individual fan and heating source (gas or hot water) for each cell, whereas double-pass dryers' chambers have common heating and ventilation, and air passes from one bin to the next.

The dryer walls are made of trapezoidal steel profiles with a smooth section in the connection between the wall and bottom. The inclined bottom is made of perforated sheet which allows drying air to pass through, and the dryer deck is made of chequer plate.

Filling takes place from the top through the deck, and the cells are fitted with filling chutes that slow the descent of the product. The product outlet from the dryer is either to the outside or into the centre.

Design and supply of steel construction, roof construction, access, etc., are performed according to individual design.

On double-pass dryers heating and fans are mounted at the end of the dryer, whilst on single-pass dryers heating and fans are on the side of the dryer cells.



## PROCESSING PLANT FOR NORDKORN SAATEN

Niels Christensen - nch@cimbria.com



Nordkorn Saaten, a member of the German Getreide AG group, is a seed production company located in Güstrow, Germany.

Getreide AG is a German, family-owned group of companies employed in agricultural trading with a strong focus on commodity trading. Additional activities include the production of crop seeds, animal feed, oil and food production, malt and the distillation of alcohol.

A new seed plant in Güstrow was installed in an existing building at the same address as a German system built at the beginning of the millennium. This existing equipment was worn out and no longer offered either sufficient capacity or quality.

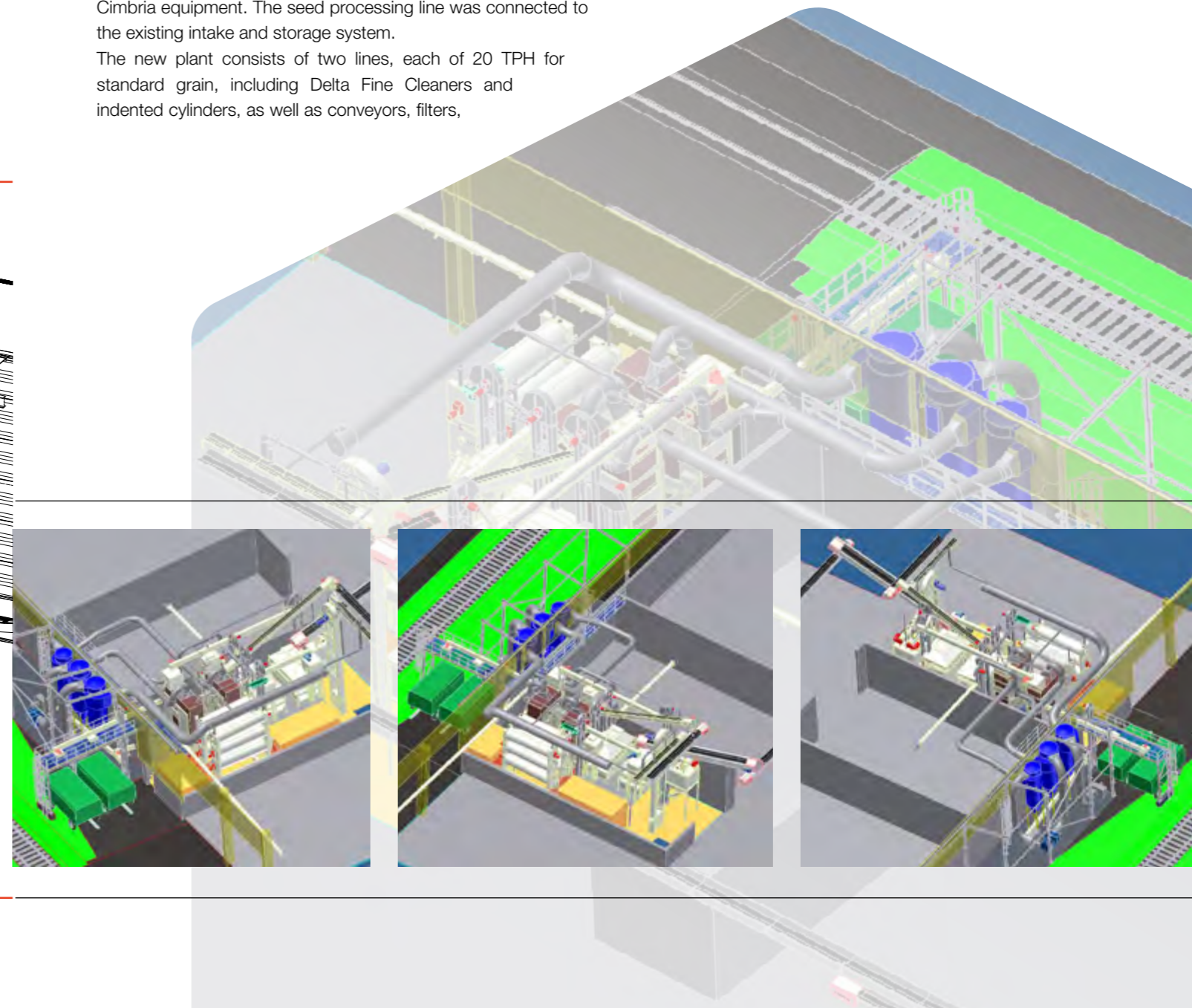
In collaboration with Nordkorn, we designed a new system with Cimbria equipment. The seed processing line was connected to the existing intake and storage system.

The new plant consists of two lines, each of 20 TPH for standard grain, including Delta Fine Cleaners and indented cylinders, as well as conveyors, filters,

fans and a new SCADA control system. The project also takes into account that space for gravity tables should be available.

The electronic control system is new for both new and existing machinery.

Installation commenced in April and was completed in July 2013. The restrictions on space, in particular, posed a challenge during the design of the system, but also during erection. Careful planning of the installation was very important in order to get the equipment at the right place in the right sequence.



## PARENT SEED PLANT FOR DOW SEEDS

Dirk Kaschub - dka@cimbria.com



DOW is a fast-growing, multinational company in the seed business. Cimbria is proud to be amongst their suppliers in the USA, and now also in Europe.

This summer, DOW Seeds placed an order with Cimbria for a parent seed line for maize, sunflower and rape seed being installed in Rastatt, Germany. The plant consists of a colour sorting unit, as well as a chemical treating line mainly for parent seed. Highest purity

after colour sorting, excellent coverage and reproducibility in chemical treatment and

genuine and gentle product handling overall have been the main tasks that Cimbria was charged with solving.

The main components of the plant are a Colour Sorter Pixel Next 2 MN + MR and a Centricoater CC 50, along with a fully automatic mixing system. Conveying systems with box tilters and pendulum bucket elevators, a packing unit, the complete electronic control unit, as well as the aspiration system, round off the installation.

Furthermore, during all assembly work, DOW implemented its exemplary safety programme, which satisfies its so-called "mission to Zero", thus demonstrating DOW's sense of responsibility with regard to both its own and foreign staff in terms of industrial safety.

Safety is not only a calming word, it is a mission for modern and dutiful entrepreneurs like DOW, which further extended and trained our sensitivity to this important theme in Cimbria.



## QUALITY EQUIPMENT FOR QUALITY PRODUCTS

Michael Bjørn - mbj@cimbria.com



Teutoburger Ölmühle produces a patented wide range of varieties of cold pressed edible rape oil in high quality for the domestic market and for export.

The business relationship between Teutoburger Ölmühle and Cimbria started in 2001, and since that time Cimbria has been a preferred supplier of equipment that serves as an essential part of Teutoburger Ölmühle's process to achieve the demand for high quality.

In 2013, Teutoburger Ölmühle began building a new processing plant designed to increase capacity. This was the third process extension since 2001.

For the newly-extended processing plant, Cimbria has supplied 13 Delta Cleaners from the 100-series and an EcoMaster triple Column dryer.

The plant is due to be commissioned in January 2014.



INGREASED  
VOLUMEN OF  
ORDERS CALLS  
FOR EXTENDED  
PRODUCTION  
CAPACITY





## OPTIMIZING QUALITY

Dorel Tibrea - dorel.tibrea@cimbria.ro,

Franz Franer - ffr@cimbria.at



The seed producer Saaten Union Romania has signed a contract for a complete treating and bagging line in addition to the seed processing plant supplied in 2007 and upgraded in 2012. The new line will primarily be used for sunflower and maize seed. The customer's primary aim was to improve the seed coating process

in terms of both capacity and quality by adding a batch centrifugal treater CC150. At the same time, the customer wanted to prevent all seed damage by replacing some of the old bucket elevators with new Pendulum Bucket Elevators. The new plant includes only PBE conveying. This confirmed the need for gentle conveying in all seed production.



Saaten Union, Romania - Batch Treater CC150 Saaten Union, Romania - All Elevators were replaced with modern and gentle conveying Pendulum Bucket Elevators

## MOBILE SEED PROCESSING FOR ETHIOPIA

Tadele Dargie - tadeledargie@yahoo.com



Basic seed cleaning machines - namely a Delta cleaner, an indent cylinder and a seed treater - are assembled on a portable trailer chassis. A generator with sufficient capacity is included in order to run the assembly. The trailer containing the combined compact cleaners can be pulled by tractor from one locality to another to clean basic seeds for farmers. These mobile seed

cleaning plants are very efficient. They are extensively used in agricultural research institutions and seed enterprises developing and supplying cleaned and graded seeds to subsistence farmers in Ethiopia. Supplying basic clean seeds to farmers has now become one of the strategic inputs that has resulted in the continuous growth of agricultural productivity in the country.



## EXTENDING AND UPGRADING PRODUCTION

Niels Ulrik Bliksted - nub@cimbria.com



### Extension of production in CZ

In 2013 Cimbria opened new production facilities at Cimbria in the Czech Republic. The purpose of the new factory facility is to increase Cimbria's overall production capacity in accordance with Cimbria's vision of becoming a global, innovative and leading supplier of quality products and processing equipment for the treatment of crops, animal feed and other bulk goods.

The new 5,500-m2 factory is now fully operational in the Czech republic, and today there are around 110 employees at the company working in two shifts.

A great deal of effort is being devoted to ensuring that in future we can be even more flexible with respect to delivery times. As well as considerably boosting our overall capacity, we have also become even more flexible when handling the many orders that have to be manufactured on the new production platform.

### Extension of production in DK

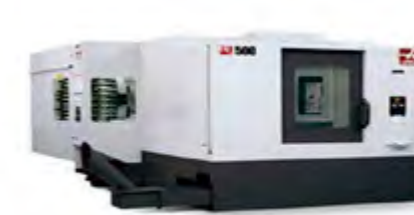
At Cimbria's production facilities in Thisted, a new 1,000-m2 extension in connection with the stock & shipping department is in the process of being constructed. This increase in capacity has been commenced in order to be able to handle the increasing volume of orders for equipment and projects.

In addition to the new extension, Cimbria is currently implementing a new Warehouse Management System (WMS). The WMS is designed to simplify and streamline working processes. In addition to providing full management of the warehouse, the system will help boost results throughout the entire supply chain due to better traceability and online planning.

WMS is fully flexible because it contains modules that support and optimise the entire stock management chain in terms of reception, stock placement, order processing, shipping and overview of stock levels.



Bystronic BySprint 4020 Fiber Laser



HAAS ST40 Drilling centre



HAAS EC500 Horizontal milling centre

## HUGE SILO PLANTS IN UKRAINE

Henning Roslev - Bukh hrb@cimbria.com



During 2013 Cimbria built a number of silo plants in Ukraine. For Ukrainian company Mriya Agro, which is based in western Ukraine and is one of the biggest players in the agricultural sector in the country, Cimbria supplied two plants in 2013, each of 100,000-tonne storage capacity.

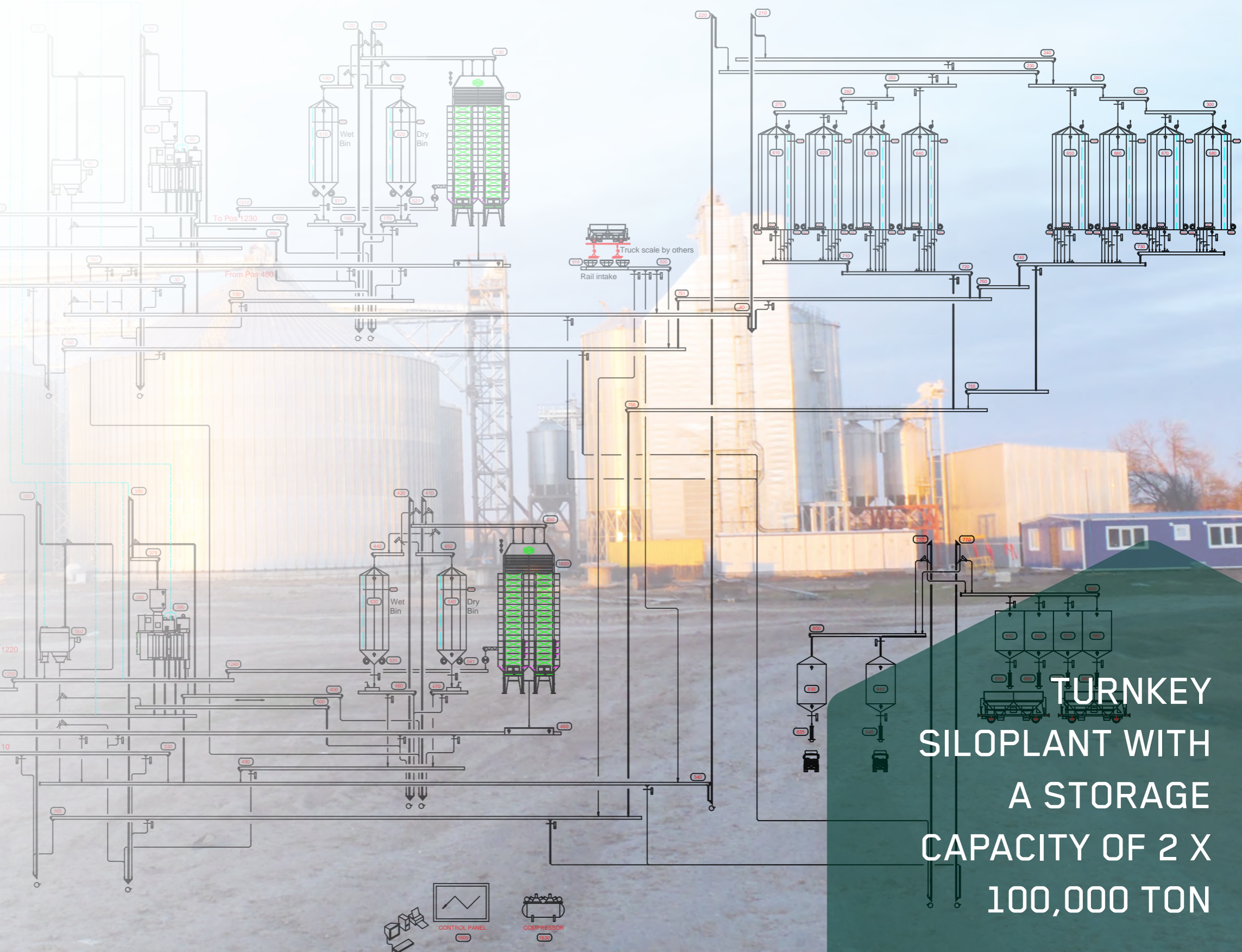
The two silo plants have two 200 tph intake lines, each with Cimbria drum scalper, a Mega cleaner, two Cimbria ECO Master double dryers with recirculating air system, each with a capacity of 150 tonnes per hour, in addition to storage by means of 8 silos of 12,500 tonnes each, with sweep augers and aeration fans.

The installed conveying system is made up of heavy-duty elevators and chain conveyors with capacities of 200 tph.

In addition, the plant has been equipped with a Cimbria Unitest temperature monitoring system with integrated aeration control as well as a level measuring system with indication of the grain level in each silo.

For control, monitoring and operation of the plant, Cimbria has supplied a complete MCC and control system with PLC and SCADA for operating the plant on a PC.

The intake, cleaning and drying systems for both plants were commissioned in November 2013 for drying of 35% wet maize crop.



**TURNKEY  
SILOPLANT WITH  
A STORAGE  
CAPACITY OF 2 X  
100,000 TON**

## ANOTHER SUNFLOWER PEELING PLANT

Andreas Fröhlich - afr@cimbria.at



The trend for sunflower peeling plants, especially in Bulgaria, appears to be continuing.

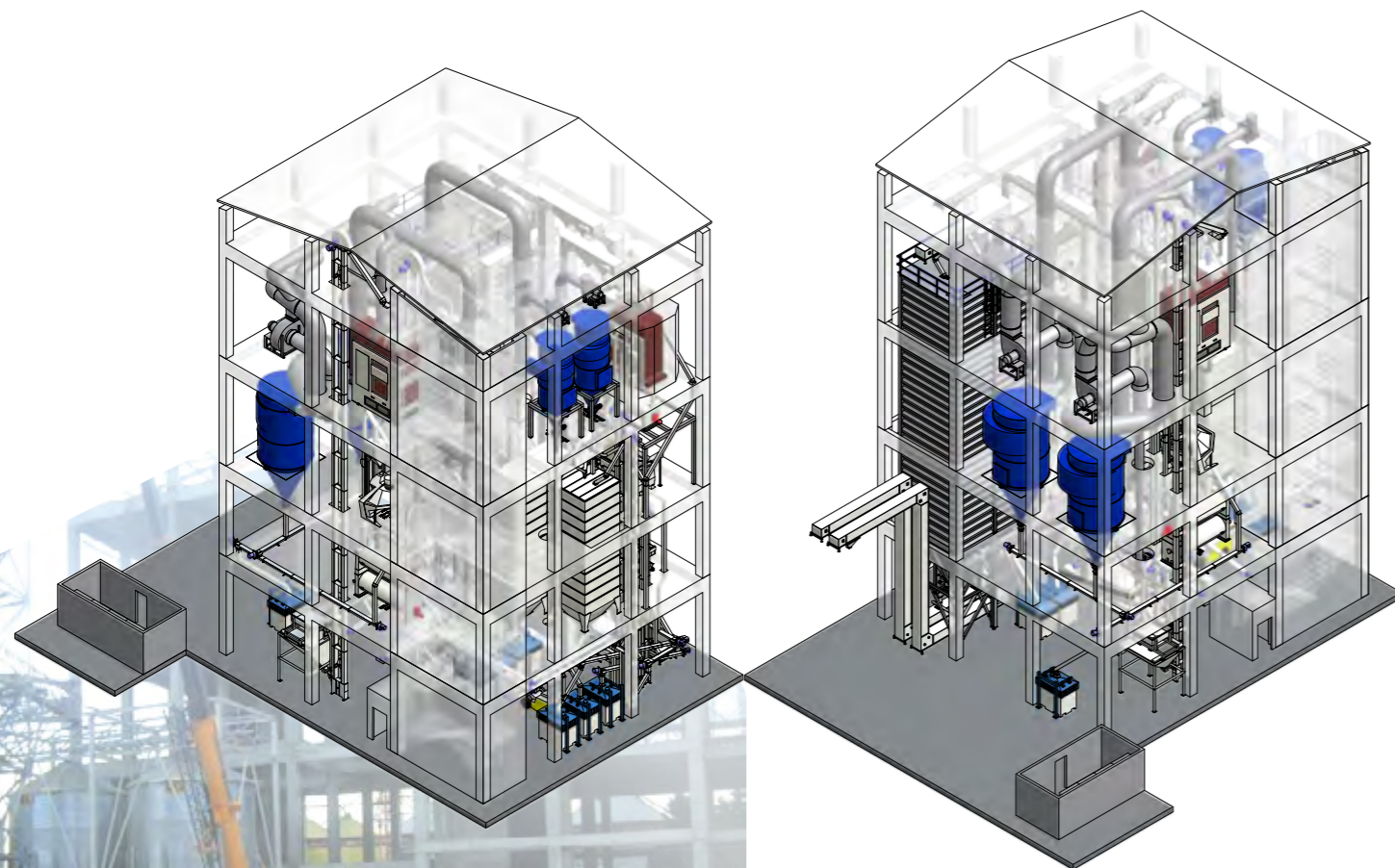
Cimbria is currently installing another complete sunflower cleaning and peeling plant in Bulgaria.

The company Nikola Popov from Dulovo, which had already bought a complete pumpkin seed processing plant from Cimbria back in 2009, has now invested in a fine-cleaning and peeling plant for sunflower. The peeled sunflower will be sold as premium product to bakeries and for snack production.

The fine-cleaning and peeling section has an input capacity of up to 4 t/h, thus providing an output of around 2 t/h of peeled

kernels. The waste products from the peeling process are used further for pellet pressing and for oil pressing.

The plant will be configured in a vertical installation with 5 floors, and includes the following machinery: Delta cleaners, Drystoner, indented cylinder separator, cylindrical screening machine, four impact hullers, Aspirator and two gravity separators. All conveying equipment is of course also supplied exclusively by Cimbria, including low-speed elevators, belt conveyors and pendulum bucket elevators. The aspiration system composed of tube filters will enable the return air to go back into the building, thus enabling the customer to heat the building during wintertime.



## MAIZE SEED PLANT FOR SAATBAU LINZ

Andreas Fröhlich - afr@cimbria.at



Cimbria granted an order in Austria for a complete maize seed plant for 13,500 tonnes of ear corn per season.

Saatbau Linz has been an important and valuable customer for Cimbria for some time.

Two complete turnkey seed processing and storage plants for grain and legumes, as well as a number of medium-scale and small-scale projects and stand-alone machines have been exclusively built by Cimbria for Saatbau Linz during recent years. The main slogan of Saatbau Linz (Saat gut – Ernte gut) neatly explains their vision in just 4 short words: Good seed – good harvest.

Saatbau was founded back in 1950 as a cooperative of farmers in Upper Austria. Since that time, the number of members has grown steadily to currently stand at 3,095 farmers, who also own Saatbau Linz. Represented by a strong and experienced board of directors and skilled management, Saatbau has grown into one of the major players in the seed business, not only in Austria, but also in Southern Germany and Central and Eastern Europe in general. Increasing activities in Ukraine and Russia are a further sign of Saatbau's importance in the seed business, where quality is the major key to success.

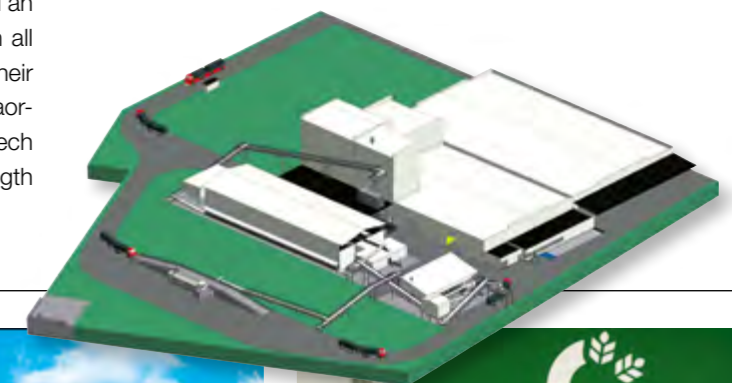
The multiplicity of its self-made seed types is making Saatbau an important and recognized supplier of highest quality seed in all the European markets in which it is involved. The potential of their plant genetics, in particular in grain, but also in maize, is extraordinary. Its own seed processing plants in Austria, Slovakia, Czech Republic, Hungary and Poland are clear evidence of the strength and growth of Saatbau.

For the 2014 maize harvest, Saatbau Linz has now contracted Cimbria for a complete turnkey maize seed plant in Geinberg, close to the German border.

The plant consists of the following major components, all exclusively supplied by Cimbria:

- Reception with walking floor
- Husking and hand-sorting
- Chopper and load out station for husks
- Double-pass ear corn dryer
- Shelling and pre-cleaning
- Fine cleaning, grading and gravity separation
- Colour sorting
- Chemical treatment
- Packing and palletizing
- Complete conveying system
- Full control system

We are very much looking forward to successfully commissioning the plant at the end of August 2014.



Contract signed on November 22nd, 2013. From left to right: Ing. Josef Fraundorfer (MD Saatbau), Mag. Johann Donabauer (MD Cimbria Heid), Ing. Franz Harold (MD Cimbria Heid), DI Karl Fischer (MD Saatbau)

# NEW INSTALLATIONS IN THE BALTIC STATES



Arne Jensen - [aje@cimbria.com](mailto:aje@cimbria.com)

During the last 10 years Cimbria's dealer in the Baltic States, "Dotnuvos Projektai", has built up a very strong position on the Lithuanian market, such that it is now the market leader within the post-harvest business.

Today Dotnuvos Projektai offers our customers a complete service, from preparation of the proposal, including design of the plant, to implementation of the installation as well as after-sales service.

Over the years, Dotnuvos Projektai has expanded its activities, and has today subsidiaries in both Latvia and Estonia, thus enabling them to cover the whole of the Baltic States.

Being able to offer our customers local technical and sales support in addition to the reference list that Dotnuvos can present makes it very easy for our clients to choose Dotnuvos Projektai.

2013 has been another very busy year for Dotnuvos Projektai, as illustrated by the following photos – amazing results in a relatively small market.



KB „Kedainiu aruodai“ - Silo plant extension



Baltic Agro - Extension of existing Silo plant

Galinta ir partneriai - Reconstruction of existing concrete silo plant

Agrospelta – 12.000T silo plant

Upytės eksperimentinis ūkis – 2.000T silo plant

Farmer S. Siuse - extension of existing silo plant

Agrospelta Seduva – 12.000T Silo Plant

## 90.000M³ SILO PLANT FOR RUSSIA

Arne Jensen - [aje@cimbria.com](mailto:aje@cimbria.com)

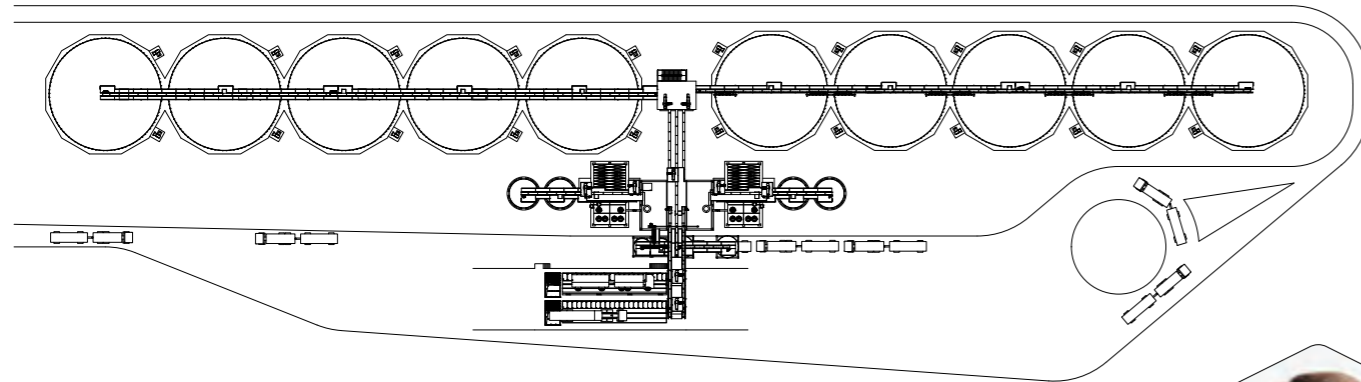


During spring 2012 Cimbria signed a design contract with the company JSC "Chisminskoye" for the design of a 90,000 m³ silo plant, after which on 20th December 2012 the supply contract was signed.

The project includes two truck intakes, each with a capacity of 100 TPH in sunflower seed. Both intake lines have a Cimbria Drum Scalper followed by a Mega 168 screen cleaner.

In terms of drying, the design includes two Cimbria ECO Master Dryer DMG-34Rs with a capacity of 50 TPH in sunflower seed (13-7%).

The storage section consists of 10 x 9,000 m³ flat-bottom silos equipped with sweep augers, aeration fans and a Cimbria Unitest system for monitoring the seed quality during storage. The complete facility is operated from a Cimbria PLC, PC control and automation system.



## NEW CIMBRIA DRYERS IN RUSSIA

Arne Jensen - [aje@cimbria.com](mailto:aje@cimbria.com)



A number of recent installations confirm Cimbria's drying technology in Russia.

### Republic of Mordovia

In November 2012 we signed a contract with JSC Farm "Oktyabrskaya" for the supply of two AMG-24 dryers, each with a capacity of 20 TPH in wheat (25-13%).

### Lipetsk Oblast

In June 2013 an AMG-30 dryer was successfully put into operation – this dryer has a capacity of 50 TPH in wheat (22-14%) and belongs to JSC "Lipetskmyasoprom".

### Krasnodar Krai

In September we commissioned an AMG-28 dryer with a capacity of 50 TPH paddy (15-13%). The customer is Southern Rice Company Ltd.

### JSC "Chisminskoye", Republic of Bashkortostan

In December 2012 a Cimbria ECO Master Dryer model DMG-34R with a capacity of 50 TPH in sunflower seed (13-7%) was commissioned.

## NO. 1 IN THE WORLD

Henrik Frandsen - [hfr@cimbria.com](mailto:hfr@cimbria.com)



Cimbria has supplied loading chutes for many years: From its modest beginnings in 1977, when the first loading chute was constructed and sold to a grain installation, right through to the present day, when loading chutes have been delivered to numerous plants and for use with a vast variety of materials worldwide. Back in 1977 the people involved realized that this had the potential to develop into an interesting business area, and as it turned out they were not only right in their assumption, they were also ahead of their time.

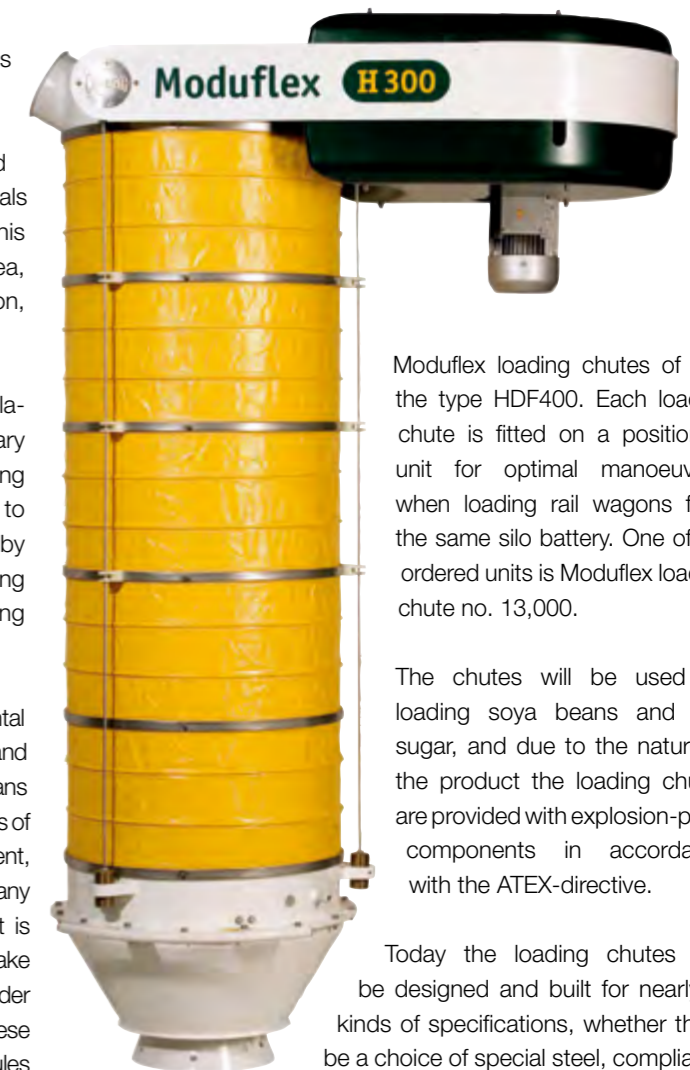
They could not have foreseen that current environmental legislation in most countries demands that a loading chute is necessary for keeping the work space clean and tidy when handling dusty bulk materials. Due to even more stringent legislation to protect the working and surrounding environment - and thereby protecting the health and safety of the people working and living around plants and ports - this initial idea of developing a loading chute has turned into a great success for Cimbria.

New environmental protection laws and regulations means that for producers of grain, flour, cement, lime, and many other materials it is compulsory to make this investment in order to comply with these rules. Obviously, stricter rules

for handling materials for human consumption also make it necessary to have enclosed loading methods. Due to the factors mentioned above, Cimbria has already supplied several Moduflex loading chutes manufactured for plants where dust control, hygiene and - if relevant - compliance with the ATEX-directive are essential.

### Supply of loading chute no. 13,000

Cimbria Moduflex' partner in Lithuania, Firma Liucija, has recently placed an order for 8



Moduflex loading chutes of the type HDF400. Each loading chute is fitted on a positioning unit for optimal manoeuvring when loading rail wagons from the same silo battery. One of the ordered units is Moduflex loading chute no. 13,000.

The chutes will be used for loading soya beans and raw sugar, and due to the nature of the product the loading chutes are provided with explosion-proof components in accordance with the ATEX-directive.

Today the loading chutes can be designed and built for nearly all kinds of specifications, whether these be a choice of special steel, compliance with various explosion-proof standards,

bespoke adaptations to fit the needs of the customer or special certification requirements concerning traceability when human food is handled.

Over the years this business area has grown slowly but surely, and there is no doubt that Cimbria is the leading supplier of loading chutes. This is not bad considering that the novel idea of a loading chute for a loading system originated more than 35 years ago.



## BOOSTING THE TURKISH SEED INDUSTRY

Mustafa Esensoy - m.esensoy@cimbria.com.tr



The history of the private seed industry is fairly new in Turkey. There were only two private seed companies in the country before 1980, and the sum of their share of the total certified seed trade was only about 1-2 %. The public sector was completely responsible for seed production and distribution, and prices were controlled by the government. For many varieties, the common practice was to reserve seeds during the harvest, and hybrid seed utilization was not a common process. Commercial seeds, which were distributed almost free of charge by the public sector, were generally of very low quality and it was not possible to talk about a "seed trade volume" figure in Turkey. Between 1982 and 1985, the Turkish seed industry enjoyed a high rate of growth following the liberalisation of the seed production business through a number of legal regulations. Total volume of the commercial seed market had been anticipated to reach about 375 million USD as of 2008. Within the last 2 years the number of seed companies has doubled in number and the volume increased to 650 million USD as of 2012. All the existing and newly established companies are investing in new processing lines. Government institutions and public banks are providing initiatives for those companies which are investing in the seed industry, which has also increased attention on the Turkish seed industry.

At Cimbria Turkey we have delivered several stand-alone machines and lines to both local and international seed companies within the last year, as listed below:

### Maize and Sunflower Processing line/ Limagrain Turkey

Limagrain Turkey doubled its capacity by adding a new line for processing maize and sunflower seed.

The line consists of Delta Cleaners, Indent cylinder separator, and gravity separator and it can handle 4 t/h of sunflower seed.

### Machines for KWS Turk's New Maize Drying Plant

KWS invested in a new steel cob drying plant in Eskisehir/Turkiye with compartment capacities of 40 tonnes. The plant dries the cobs and processes them with Cimbria's maize sheller and Delta cleaners to make them ready for export.

### May Agro's Investment in Individual Machines

MAY Seed has been involved in the research, production and marketing of vegetable, field, industrial and forage crop seeds since 1978 under the MAY brand name. MAY is Turkey's leading investor in the agricultural sector, with more than 100 employees specialising in agronomy and more than 20,000 tonnes of annual capacity of certified seed production, processing and preparation for domestic and international markets.

May has been using Cimbria machines, and invests in new machinery every year to increase capacity.

Last year we installed a Delta Cleaner and Centricoater complete with accessories to the existing lines.



### First Popcorn Dryer Installation in Turkey/ AMG34

Yayla Agro Gida Sanayi A.S., which is one of the biggest legume processors in Turkey, has a processing capacity of 125,000 tonnes in its certified plants in Ankara, Mersin, Cankiri and in the Thracia region.

Last year we installed 2 processing lines with an input capacity of 12 t/h chickpeas. These were so successful that the customer decided to order the first dryer for popcorn processing in Turkey. The dryer ordered was an AMG34 and we have achieved a capacity of 20 t/h of popcorn, notwithstanding the figure of 14 t/h that was specified in the contract.

### Abalioglu's ADG-16

Abalioglu Group started its operations in 1969 with its feed mill in Denizli as the first private sector feed company in Turkey. It assumes a prominent place in the "Top 500" list issued annually by the Istanbul Chamber of Industry as one of the fastest growing and evolving

companies in Turkey. ABALIOGLU is continuing its investments, not only in the feed sector, in which it is the leader, but also in agriculture, livestock and food sectors.

Abalioglu decided to install a new dryer for their existing American branded dryer, as they had been having problems with it. Although we experienced very tough competition against European and Argentine suppliers, we are really happy to install our ADG-16 at the premises of such an important reference company.

### Moduflex Ship Loader VF650FF/29 with 1200 m3/h Capacity for TMO

The Turkish Grain Board, founded in 1938, is a limited liability and autonomous state economic enterprise running on state capital. Since its foundation, the Turkish Grain Board has constructed warehouses of various types and tonnages at ports and intensive production areas in every district of Turkey. The total storage capacity of Turkish Grain Board is 4.5 million tonnes, with 546,700 tonnes of this capacity located at ports.

Since the government regulations for dust emission were modified to meet EU standards, most companies have started to invest in systems to comply with these standards. Furthermore, the government is forcing companies that run on state capital to make the necessary investments immediately to reduce their emissions. TMO is one of these companies that decided to change their existing loading systems to reduce dust formation. Last year a Moduflex ship loader VF650FF/29 was chosen to replace its existing system in the Port of Mersin.



## SUPPLYING SEED CLEANING LINE FOR JAPAN

Kenichi Anzai - overseas@anzai.co.jp



Takemoto Oil and Fat Co. Ltd. is the oldest oil pressing company still operating in Japan. The company was established in 1725 when it began pressing oil from cottonseed for subsequent use in lanterns. In the late 1920s the company also began to press oil from sesame seeds. Since that time Takemoto Oil and Fat Co. Ltd. has expanded and become well known in Japan. Currently, its daily production of sesame and commercial oil is some 70 tonnes. At present, Takemoto Oil and Fat Co. Ltd. produces both sesame oil and sesame paste for the food industry, as well as chemicals for fibres, engineered concrete & construction, plastic & film and electronic parts for industry in general.

cleaning line. The existing factory had a capacity of 10 TPH and was equipped with aspiration units, cleaners, and dry-stoners, all of Japanese origin. Takemoto was not satisfied with the performance of the old line and decided to examine the market in a bid to find better machinery. Takemoto contacted Anzai Mfg. Co. Ltd., the Cimbria Group's agent in Japan, which introduced Cimbria equipment to Takemoto. In collaboration with Cimbria, Anzai organised test samples of sesame seed. The excellent results delighted Takemoto. A Cimbria Heid dry-stoner was test-run on Takemoto's site for several weeks and showed really good performance during the demonstration period.

The test results from both units were so satisfactory in terms of quality and performance that Takemoto soon decided to purchase Cimbria equipment for its new sesame cleaning line. Now the new plant has a Deltacleaner and two dry stoner units installed and will be up and running by the end of 2013.

Anzai Mfg. Co. Ltd. is very proud to have introduced Cimbria and Heid equipment to a well-known and historic company like Takemoto Oil and Fat Co. Ltd., and is confident that the new customer will enjoy the benefits offered by the new cleaning activities.

In 2009 Takemoto Oil and Fat Co. Ltd. commenced planning of the construction of a new factory in order to increase the capacity of their sesame



## SUSTAINED DEVELOPMENT IN SPAIN

Roland Ertl - roland.ertl@ilpersa.com



Despite the economic crisis and subsequent recession in the country, resulting in a lack of funding, uncertainty about new investment and cuts in subsidies, the agricultural sector remains strong. It is constantly evolving and offers new opportunities in terms of post-harvesting and storage.

The new facilities expected to be built, as well as the renovation and modernization of existing plants, have enabled us to return a turnover similar to that of recent years.

This is true not only in the rice sector, where we have seen the biggest investments in recent years, but also in maize, sunflowers and - currently gaining in strength - the production of oats. This latter cereal should provide a major boost to plant drying, storage and the milling industry in the years ahead.

La Aldea (Tarragona), and is shortly due to commence another project which is scheduled for the first quarter of 2014 in Aranjuez, Madrid.

All these facilities have Ilpersa storage silos and dryers, process- and conveying equipment from Cimbria.

The long history of Industrias Luis Peris (ILPERSA) - incidentally soon to celebrate its centenary - in Spanish and international markets, as well as its representation of CIBRIA, make it a trusted partner of the most important companies in the cereals sector, as well as in milling, seeds and non-food business areas.

### NEW DRYING AND STORAGE FACILITIES IN SPAIN

During 2012 and 2013 ILPERSA has delivered silos with a total storage capacity of 35,000 m3 in the local market, all accompanied by corresponding machinery and conveying equipment.

In Spain alone, ILPERSA installed 8 turnkey storage and drying grain facilities in the towns of Villafranca (Seville), Tafalla (Navarra), Ribera del Duero (Burgos) and Mérida (Badajoz), Isla Mayor (Seville), Algemesí (Valencia),



Tafalla, Navarra



Villafranca, Seville



Sollana, Valencia

## INDIAN PADDY SEED PROCESSING

Michael Petzman - mpe@cimbria.com



India is one of the largest producers of rice in the world, supplying basmati rice to various parts of the world, including Europe, Dubai, the USA, etc. In light of potential competition from Vietnam and other rice-producing markets, as well as the need to provide a safeguard against food shortages, a lot of efforts are being focused on producing the best quality rice. This has resulted in production of high quality hybrid paddy seed for farmers which has far better yields than normal seed.

Over the last couple of years Cimbria has seen an increased demand for paddy seed processing lines in India. Cimbria was approached by Jam Jam Agritech, a company based in Hyderabad, India, wishing to set up a complete paddy seed processing line with an output capacity of 10 t/h (equivalent to an input capacity of 25 TPH on wheat).

Jam Jam Agritech was looking for a reliable technology partner, since it was the sole processor for M/s Dhanya Seeds, which is part of the large Indian conglomerate M/s Tata and Sons. It chose Cimbria as its technology provider as we have been fortunate in having experience of executing turnkey paddy processing lines in the past.

Cimbria designed a full turnkey processing line (with able help from Mr. Raj Kumar Kundu – VNR Seeds) which included seed

processing, treatment, drying and packing facilities. It was the first large turnkey installation for Cimbria in India with this capacity.

Mr Hari Prasad, MD of Jam Jam Agritech, visited a number of installations in India and Europe as well as the manufacturing facilities before taking the final decision. Mr Hari Prasad works closely with VNR Seeds, which has processed paddy seed very successfully on a Cimbria line for the last 3 years.

The line is equipped with a Precleaner, Fine Cleaner, Gravity Separator, De-stoner, Centricoater, Jog Conveyor Dryer and Vacuum Cleaning System, along with Low-speed Elevators and Pendulum Bucket Elevators for gentle handling of Paddy seed. The order was placed with Cimbria in December 2012 and the plant was commissioned in May 2013. Manufacture, transport, installation and commissioning thus took place within quite a short space of time, especially taking into account the huge capacity of the seed processing line. The installation team had to work continuously for 18 hours in 2 shifts to erect the plant within a 4-week period.

Following the successful completion of the plant, Cimbria has once again demonstrated its ability as the sole supplier of turnkey seed processing plants, as well as its ability to help clients install such plants within record time with support from India and Europe.



## DRYERS FOR BAYER CROP SCIENCE

Rajiv Iyer - rsi@cimbria.com



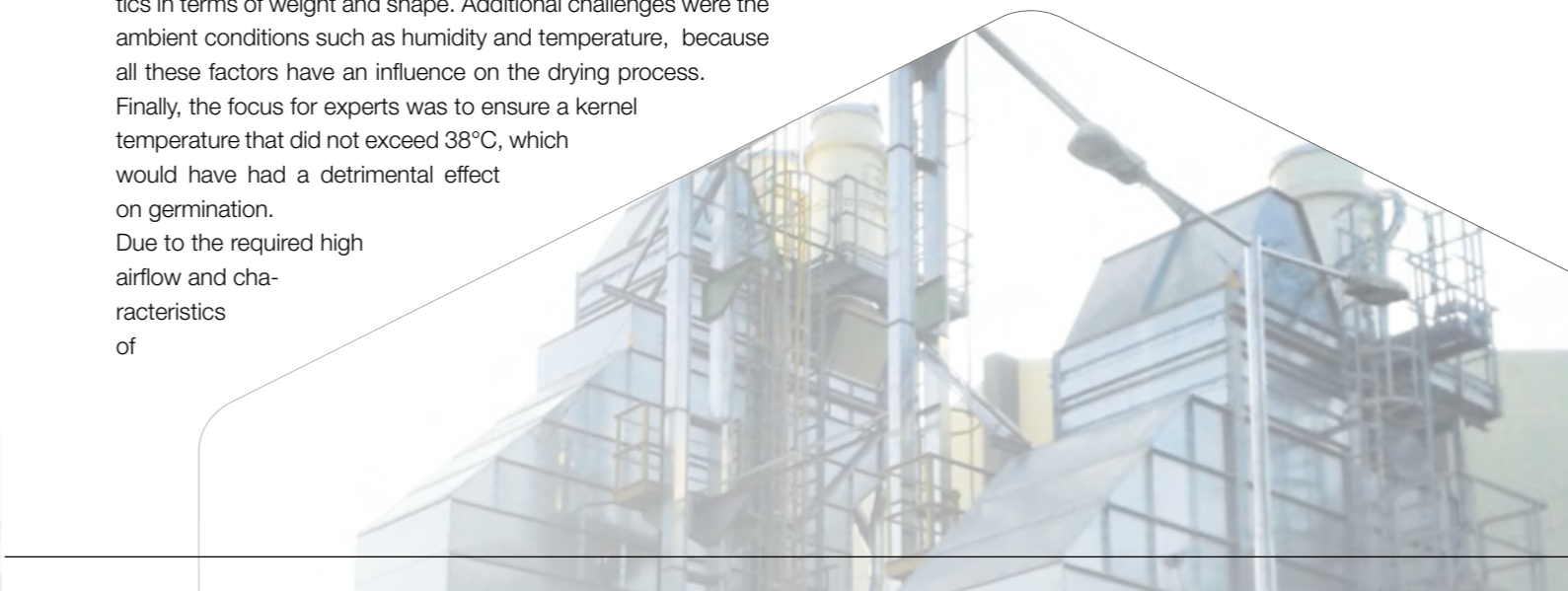
For BCS – Bayer Crop Science India Pvt. Ltd. Cimbria supplied two small capacity dryers for a product with special characteristics. By implementing minor modifications, Cimbria has acquired a new satisfied customer for Cimbria dryers.

BCS, Bayer Crop Science, is one of the biggest global players in the production of different varieties of crops. Several decades ago Cimbria Heid received the first order from Bayer for several machines and we still enjoy excellent cooperation. Following an order for 2 seed processing lines in 2010 in which Cimbria supplied all relevant and key equipment including Fine Cleaner, Gravity Separator, Destoner and Cylindrical Screening machines, in 2012 BCS made a new enquiry for drying crops such as millet, corn and paddy which included conveying equipment and implemented an existing Cimbria Precleaner and Bucket Elevators. The special challenge was to dry millet with special characteristics in terms of weight and shape. Additional challenges were the ambient conditions such as humidity and temperature, because all these factors have an influence on the drying process. Finally, the focus for experts was to ensure a kernel temperature that did not exceed 38°C, which would have had a detrimental effect on germination. Due to the required high airflow and characteristics of

millet, it was necessary to install additional special air baffles at the drying column to avoid any fall-outs. A specially modified burner from Tecflam Italy running on LPG gas guaranteed a continuous heating source for this sensitive process.

Finally, at the end of 2012, Cimbria Heid Austria successfully won the order for 1 x Dryer BMG 12 with almost 23 t batch size and 1 x Dryer BMG 6 with approximately 12 t batch size with additional conveying equipment such as Bucket Elevators from the EC-line and Belt Conveyors from the GT-Series.

As a result of close cooperation and a good business relationship between the Indian team from BCS, Cimbria Austria & Denmark and Tecflam Italy, the entire cleaning and drying line was successfully set up and commissioned.



## NORTH AMERICAN ANNIVERSARIES

Lars Nørgaard - lno@cimbria.com



Cimbria has been celebrating its 20th anniversaries with two prominent North American partners of the Cimbria Group: the company Nexeed Inc., which is Cimbria's dealer on the Canadian market, and the Bratney Companies, which serve the markets in both the United States of America and Argentina.

From its headquarters in Des Moines, its subsidiaries in Boise, Kansas City, Missouri, Houston, Sacramento, California and its field crews and territorial managers throughout the United States and Argentina, Bratney provides full-line solutions for the processing and handling of seed, grain, feed and industrial products. Its product line includes the highest-performing equipment for material handling, cleaning, packaging, separation, conveyance and storage. Last spring, Bratney also became the exclusive dealer for the range of Cimbria SEA electronic sorters, and has immediately enjoyed great success following the introduction of this state-of-the-art technology to American and Argentine markets.

Nexeed inc., formerly known as Cimbria Canada, has been providing equipment solutions to Canadian seed and grain processors since 1993. Customers include leaders in seed cleaning, treating, coating, special crop cleaning and processing. Earlier this year, Nexeed also successfully expanded its product portfolio by incorporating Cimbria SEA electronic sorters into its product line, thus becoming the exclusive dealer for electronic sorters in Canada.

During our 20-year relationship, Bratney Companies and Nexeed inc. have sold thousands of machines in the market and continue to make an invaluable contribution, not only to the awareness and positioning of Cimbria as the preferred technology, but also very much to the direct development of the product range to the benefit of Cimbria customers worldwide.

Cimbria acknowledges and appreciates these efforts and contributions and looks forward to continued cooperation with these two partners, which have become synonymous with our slogan: Solutions.Together.



From the left:  
 Michela Pelliconi  
 - Cimbria SRL (SEA)  
 Peter Bratney  
 - Bratney Companies  
 Dave Evald  
 - Bratney Companies  
 Lars Nørgaard  
 - A/S Cimbria  
 Mark Metcalfe  
 - Nexeed Inc.  
 Rod Cockerline  
 - Nexeed Inc.  
 Darin Stutler  
 - Bratney Companies  
 Janice O'Hearne  
 - Bratney Companies  
 Kellie Gerhinger  
 - Bratney Companies  
 Curt Davis  
 - Bratney Companies

## OPPORTUNITIES IN US AND ARGENTINA

Darin Stutler - darins@bratney.com



2013 continued to be an extremely busy year, with agricultural processing and related industries remaining strong, which has resulted in a record year of business.

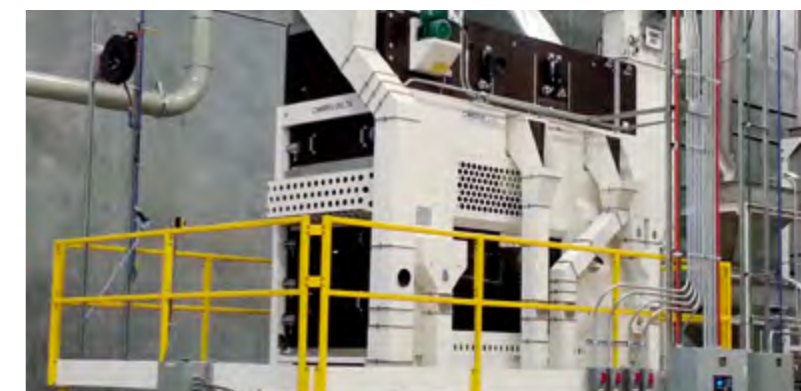
All of our Cimbria product lines have seen continued growth, with large Centri-Coater projects for maize, sorghum, soya and other seeds. There have been more than twelve major projects this season. Our core products - cleaners, de-stoners and gravity tables - continue to be leaders in the market.

Using the Cimbria "complete approach" we were able to obtain strong results in non-seed sectors such as oat processing, edible products

and several large coffee systems by providing base Cimbria equipment along with engineered pre-build Cimbria accessories.

We have ended the year strongly with the introduction of the Cimbria SEA colour sorter to the USA with two large projects for maize and soya products. The Cimbria SEA colour sorter is a natural extension of our product lines and we see continued opportunities in the area of vision systems.

We are celebrating our 20th anniversary of working with the Cimbria Group in the USA and our 13th year in Argentina. We are looking to build on our relationship with the two teams with many positive years to come!



## ACTIVE CANADIAN MARKET

Mark Metcalfe - mmetcalfe@nexeed.ca



2013 was once again a busy year in the Canadian grain and seed industry, and Cimbria was actively involved in developments.

In Western Canada, several new seed processing plants were built, and many others upgraded for higher capacity and improved cleaner performance. One example is Tez Seeds, located in Western Saskatchewan. Tez Seeds built its first seed plant, which included a Cimbria Delta 107 Super Cleaner, Cimbria Heid HSR 16010 long grain indent cylinder and Cimbria Heid GA210 gravity separator. Primary air for this equipment is cleanly handled with a CF30 Cyclofan. The plant, which was commissioned in the spring of 2013, is proving to meet the high standard of quality which Tez expected for cleaning wheat, barley, and pulse products for seed. This is one of several new seed plants being commissioned this year using exclusively Cimbria cleaning equipment.

The Canadian market for seed coating equipment is also expanding, with several new installations of Cimbria Heid Centricoaters for soybeans and seed cereals. Centricoater technology is considered to be the leader for even and consistent application of seed treatment. One of this year's new installations is at Semences Prograin, where a CC150 with dual liquid dosing capability and washwater systems was installed. Prograin had a successful first seed-coating season with this new equipment and reports excellent seed quality and equipment performance.

Projects like the ones mentioned, as well as activities in industrial cleaning for export and milling, continue to keep Nexeed (Cimbria's exclusive partner in Canada) busy into 2014.

## NEW AGRICULTURE PARK IN RWANDA

Jørgen T. Nielsen - [cimbria@africaonline.co.ke](mailto:cimbria@africaonline.co.ke)



On August 23rd 2013, the president of Rwanda, Paul Kagame, officially opened the Agriculture Park, specifically the seed silo, processing plants and mechanization assembly plant, which makes up part of the Kigali Special Economic Zones.

Back in 2009 the Minister for Agriculture, Mrs. Agnes Kalibata, visited Cimbria East Africa in Nairobi after a trip to Kenya to visit the Kenya Seed and National Cereals & Produce Board, where she had been told that Cimbria was a potential supplier for the silo complexes and cleaning plants needed for the Agriculture Park.

Later that year there was an invitation for tenders. Cimbria won the contract to supply a 2 x 10,000-tonne silo plant, as well as a maize seed cleaning plant.

Cimbria started the construction of the originally ordered 10,000-tonne silo plant, but even before construction was completed, there was an invitation to tender for the extension of the silo plant by another 10,000 tonnes. Cimbria was awarded this contract too.

With this extension, the silo plant order now consisted of a 20,000-tonne silo construction with two intakes and cleaning lines, each of up to 60 TPH and a 15 TPH dryer. All horizontal conveying is carried out by means of belt conveyors. The conveyor system includes

belt weighers that are all interconnected so that they constantly read incoming grain capacity as well as discharged grain capacity.

Linked

together, the belt weighers and the computer system provide management with a daily update of total capacity, as well as the number of tonnes stored per silo (Grain Banking). Cimbria has also delivered the electrical supply, including a grain temperature monitoring system.

For the Agriculture Park Cimbria was likewise awarded the contract for a maize seed cleaning plant designed for 4 TPH, including shelling, cleaning, gravity separation and seed treatment.

Even before this plant was installed, the Ministry also placed an order for a maize cob sorting and drying plant. They primarily produced the plans for the building themselves, and we qualified to supply all the conveying, heating and electrical systems, as well as cob dryer control using the Unitest system.

The maize cobs come in from farms. The first stage consists of cob sorting on sorting conveyors, from where they proceed to the drying process. After drying, they enter the seed plant where shelling takes place. The seed cleaning and cob drying plant are both mechanically and electrically connected.

Installation of the seed cleaning plant was completed very recently and the cob dryer will be completed by the end of 2013.

The Special Economic Zones were created to promote private investment, industry and export growth by offering quality infrastructure, streamlined business regulations and incentives to investors and businesses.

Through these specialized zones, Rwanda is promoting market access to agricultural products in particular, as well as creating jobs and transferring skills to increase both domestic and foreign investment, in addition to diversifying exports.

Within the agriculture section of the Special Economic Zones, there are 5 sub-sections: Seed Processing Plant, Food Strategic Design, Grain and Seed Housing System, Modern Fish Processing Plant and Tractor Assembly Plant.

According to President Kagame, the facility will be integral in ensuring food safety, nutrition and the fight against poverty. He also emphasized the importance of private partners in the success of the Agriculture Park.

"Rather than be the recipients of aid, why can't we strive to be the ones who provide assistance to others? The private sector of our own country should be an integral part of lifting Rwandans out of poverty," said President Kagame.



# UGANDA – AN AGRICULTURAL HUB

Michael K. Kibet - Kibet@cimbria.co.ke



Uganda is a landlocked country in East Africa. It is bordered to the east by Kenya, to the north by South Sudan, to the west by the Democratic Republic of the Congo, to the southwest by Rwanda, and to the south by Tanzania. The southern part of the country includes a substantial portion of Lake Victoria, shared with Kenya and Tanzania. Uganda lies within the Nile basin, and has a varied, but generally equatorial, climate. The country is on the East African plateau lying between 4° north and 2° south, between 29° and 35° east and the average height above sea level is 1,100 metres. The central part of the country is dominated by Lake Kyoga, which is also surrounded by extensive marshy areas. Uganda's location within the Nile basin means that it has a good climate for agricultural production,

rainfall throughout the year, a good-sized population (currently estimated at 35-40 million) and favourable soil conditions. Uganda takes its name from the Buganda Kingdom, which encompasses a large portion of the south of the country, including the capital Kampala. The official language is English. Luganda, a central language, is widely spoken throughout the country, and multiple other languages are also spoken, including Swahili. Key agricultural activities include raising dairy and beef cattle, bee-keeping, poultry farming and cash crop farming, which includes coffee, tea, sugar cane and most of the cereal grains. Maize is one of the major staple foods in Uganda. Its production has increased over the years. As trends in food consumption amongst the population have changed, so maize has evolved

from a purely subsistence crop to a successful commercial crop. It is mainly used for food, the brewing industry, relief via WFP, as well as export to its neighbours: Kenya, South Sudan, Rwanda and Burundi. Coffee is Uganda's top-earning export crop. The country produces both Robusta and Arabica.

Government and non-government institutions have worked together to improve the agricultural value chain. These efforts include modern land preparation and improved post-harvest handling to minimize wastage. Such institutions include the National Agricultural Research Organization (NARO), East Africa Grain Council (EAGC), Africa Fine Coffee Association (AFCA) and Uganda Coffee Development Funds (UCDF). Along with other private-sector firms including Savannah

Commodities, Agroways Uganda, KACOFA, Mbale Import and Exporters, Ibero Uganda and Kawacom, Cimbria East Africa Ltd. (CEA) has focused on providing post-harvest solutions and value addition through cleaning, drying, grading, good storage and milling.

Cimbria East Africa has achieved tremendous growth in Uganda, and the country is working hard to realize sustainable agricultural productivity, economic growth, food security, eradication of poverty, improved farming technology, political stability and a healthy population. With these goals in mind, Cimbria expects more equipment supply in the near future, improved after-sales service and a consistent supply of quality machines to boost its position still further.



MAIZE HAS INVOLVED  
FROM A PURELY  
SUBSISTENCE CROP  
TO A SUCCESSFUL  
COMMERSIAL CROP

Tilda Rice plant

## NEW SUPER LEGUME PROCESSING PLANT IN ITALY

Roberto Arcozzi - info@cimbria.it



FROM HARVEST  
TO FINISHED  
PRODUCT READY  
TO BE COOKED  
AND SERVED

The economic crisis that has hit the country during recent years has led to a shift away from the consumption of more expensive food items such as meat to other products which are not only cheaper, but also provide a balanced and healthy nutritional intake.

More specifically, there has been a growth in demand for pulses, leading to a significant increase in the amount of land in Italy cultivated for this purpose.

It is in this context that Conserve Italia has chosen Cimbria to create a new legume processing plant that can transform the harvested produce into a finished product that is ready to be cooked and served on consumers' tables.

Conserve Italia is one of the most important food and agriculture industry groups in Europe. With 48 cooperatives accounting for 14,500 associated farmers, and well-known brands sold directly to large retailers, the group has an annual turnover well into a billion Euros, shared between fruit preserves, vegetable products and pulses.

The new Cimbria plant has been installed at Conserve Italia's industrial site in Ravarino in the province of Modena and is set to process chickpeas, lentils and cannellini beans.

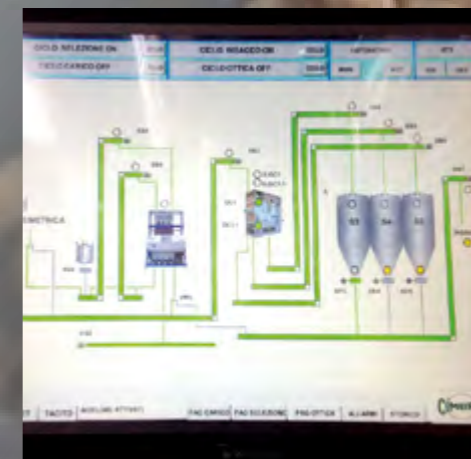
The new plant's cycle begins with a receiving hopper, where the unprocessed crop is unloaded and then conveyed to a Delta pre-cleaner to be stored in large bags or bins while awaiting the fine cleaning process.

### Fine cleaning uses the following machines:

- Delta 104 Fine Cleaner
- TS 180S De-stoner with recirculation GA 110 Gravity table
- Delta 126 Grader.
- SEA CHROME 4 T+T Electronic Colour Sorter

The conveying equipment is made up of Pendulum bucket Elevators, Low-speed Bucket Elevators (EC8), GT 400 Belts. Rejects are sent to special bins by means of screw conveyors. The plant has two bag filters to draw off all the dust from the supporting frames and the electronic control and command panel.

The design, assembly, start-up and commissioning of the plant were all performed by Cimbria Italia. The plant has achieved new heights - in particular it now also includes a SEA Colour Sorter - thus consolidating Cimbria's esteemed position as a leading company in Italy's seed industry.



Conserve Italia Manager Mr. Renzo Benotti with Cimbria Heid Italia Managing Director Mr. Roberto Arcozzi

# DUPONT PIONEER PARNDORF

Franz Harold - fha@cimbria.at



Maize seed is one of the most important and valuable product in the seed business. It is thus good to know that it will be cleaned, sorted and treated on the best seed processing equipment available.

In 2011, the first stage of an additional maize seed plant in Parndorf (Austria) was completed by Cimbria, including reception, husking, sorting, ear corn drying, shelling & pre-cleaning.

For this year's harvest, the final stage of the line has now been completed. Cimbria has installed the entire plant for fine-cleaning, grading, gravity separation, colour sorting and chemical

treatment. Special focus was of course applied to gentle and genuine handling of the sensitive and valuable maize seed.

Apart from the maize seed plant, Cimbria won an additional order to renew the fine cleaner and all the gravity separators on the main processing line in Parndorf, which meant installing a Delta 116 as well as six GA 210s.

Gaining the confidence of DuPont Pioneer, one of the 3 biggest seed producers in the world, is a great source of pride to Cimbria, and provides us with the motivation for future projects.

# DANTOASTER DRYING TECHNOLOGY

Frode Kirkegaard - FKI@cimbria.com



The DLG group is one of Europe's biggest agricultural companies and is owned by around 30,000 Danish farmers. DLG supplies farmers with feed from its own factories, seed corn, fertilizer, agricultural lime, herbicides, fuel and a range of other items used in day-to-day operations.

Cimbria has delivered and installed a 30 t/h Cimbria DANTOASTER dryer at DLG Vrå in Denmark in time for the 2013 harvest. The existing Cimbria dryer was retrofitted and converted from a dryer to a cooler to be located after the Dantoaster.

# MISSION: SECURE HARVEST

Frode Kirkegaard - FKI@cimbria.com



On Thursday 7th March 2013 a fire broke out at Skjelfoss Korn. Within a short space of time the factory, raw grain silos, grain dryers, control room and administration were in flames. As a result of the fire, it was necessary to react quickly in order to ensure that drying facilities were available for the 2013 harvest. Although there were plenty of other orders keeping the factory busy, Cimbria managed to produce 2 dryers for Skjelfoss Korn: One AMG-24, 55 t/h and one AMG-12, 28 t/h. Both dryers are gas-fired.

The primary goal was to get the biggest 55 t/h dryer up and running for this year's harvest. In the event, both dryers were delivered and installed by the time of the 2013 harvest, the largest of which was commissioned in time for the harvest.

Cimbria fitters pictured here during installation of the first dryer.



The Dantoaster during final installation



Fully installed Dantoaster



This is what Skjelfoss Korn looked like after the fire had been extinguished.



Kim-Reidar Martinsen, day-to-day manager at Skjelfoss Korn, can be seen here in front of the two newly installed dryers and the temporary conveying system – ready for the harvest.



Four steel silos, which Cimbria Unigrain has previously delivered to Skjelfoss Korn, can be seen in the foreground.

The two new dryers that were the first to be installed after the fire are visible in the centre of the picture - ready to handle the majority of the 2013 harvest.

# NEW MONSANTO INSTALLATIONS

Arne Mose Sørensen - ams@cimbria.com



In 2013 Cimbria participated and contributed to Monsanto's expansion of seed plants in France, Central and Eastern Europe. Monsanto investment in Europe significantly increases their ability to meet demand from local farmers for their high-quality conventional hybrid corn.

## Nagyigmand Hungary

The project scope of works included detailed design, engineering services, equipment supply, implementation and construction supervision for green ear corn receiving, husking & sorting, drying, shelling tower, bulks storage facility and upgrade of the conditioning tower. For the latter, Cimbria also provided the mechanical construction works. Mobilization at site started in March 2013, manufacturing of equipment during 1st and 2nd. Quarter of 2013, and installation completed by autumn 2013.

## Cimbria Scope of Works

### Detailed Design & Engineering

- Cimbria to provide engineering and design works for mechanical works 3D CAD modelling of the conditioning tower based on 3D scans.

### Mechanical Works

- Green ear corn receiving system with vibrating conveyor, belt conveyors etc. to Husker building.
- Dryer loading conveyor, incl. tripper car, shuttle conveyor with let downs.
- New Ear Corn drying bins with heat exchangers, connected to new corn cob burners that will cut production-related energy bills.
- Shelling tower conveying systems of seed, waste and cobs to new cob burner storage.
- Large Bulk Storage Facility and seed conveyor handling system for in-feed and reclaim to existing conditioning tower

- New seed conditioning equipment and conveying systems for the tower.
- Aspiration systems for all new processes.
- Supervision of local installation of all mechanical equipment, commissioning, staff training and full project documentation

## Sinesti Romania

The project scope of works include detailed design, engineering services, on site supervision, supply, implementation and construction works for expansion of conditioning tower capacity to meet increasing demand. Mobilization at site started in March 2013, manufacturing of equipment during 1st. and 2nd. Quarter of 2013, and installation completed by autumn 2013

## Cimbria Scope of Works

### Detailed Design – Engineering & Project Management

- Cimbria to Provide Engineering and Design Works for Mechanical Works.
- Site erection Supervision.

### Mechanical Works

- Demolishing of existing processing line and relocation of equipment
- Installation of additional processing line, Fine cleaner, Graders, Colour sorter
- New Bins and a lot of conveying system
- Complete new White Dust Filter system, and Red Dust Filter System included waste handling to waste bin
- Undertaking is erection supervision of all by Cimbria delivered mechanical equipment, commission, staff training, and full project documentation.

## Peyrehorade France

The project scope of works include detailed design, engineering, services, project management of the dryer and bulk silo installations, supply, implementation and construction works for Ear corn receiving, Husk & sort, drying, shelling tower , bulks storage facility and transfer system to existing Conditioning Towers

Mobilization at site started in March 2013, manufacturing of equipment during 1st. and 2nd. Quarter of 2013, and installation completed by autumn 2013.

## Cimbria Scope of Works

### Detailed Design – Engineering & Project Management

- Cimbria to Provide Engineering and Design Works for Mechanical Works.
- Project Management.
- Project Management of dryer and bulk silo installation.
- Contract administration.
- Health & Safety & Environmental (HSE), Full time HSE Engineer.
- Site meetings, HSE meetings, and provide project reporting
- Scheduling, Cost and Quality Control.
- Site office and Site facilities.

### Mechanical Works

- Green corn receiving system with vibrating conveyor, belt conveyors etc. to Husker building.
- Dryer loading conveyor, incl. tripper car, shuttle conveyor with let downs.
- New Ear Corn drying bins with blowers , and Gas burners
- Shelling tower and conveying system for cobs to new Cob bins.
- Large Bulk Storage Facility and corn conveyor handling system for

in-feed and reclaim to existing conditioning tower.

- Provide bridge over warehouses to existing facility.
- Undertaking Project Management for dryer and bulk silo mechanical installations. This include: local installation crew under Cimbria responsibility crane, lifts, etc. for installation all mechanical equipment, commission, staff training, and full project documentation.
- Provide erecting supervision for all by Cimbria delivered equipment.

## MKP Turkey

The project scope of works include detailed design, engineering, services, on site supervision, supply, implementation and construction works for expansion of conditioning tower capacity to meet increasing demand. Mobilization at site started in March 2013, manufacturing of equipment during 1st. and 2nd. Quarter of 2013, and installation completed by autumn 2013.

## Cimbria Scope of Works

### Detailed Design – Engineering & Project Management

- Cimbria to Provide Engineering and Design Works for Mechanical Works
- Site Supervision

### Mechanical Works

- Equipment for extension of existing ear corn dryer
- Installation of equipment for filling, and shell out for New ear corn dryer (constructed in concrete)
- New conveyors and Sorting Table for Husk and Sort building
- Complete New White Dust Filter system
- Undertaking is supervision of all mechanical equipment, commission, staff training, and full project documentation



Bird's eye view Nagyimand site



Sinesti site



Peyrehorade France



MPK Site Turkey

## NEXT BIG STEP IN CENTRAL ASIA

Friedrich Kienmeier - frk@cimbria.at



Thanks to good references in Turkey and Kazakhstan, Turkmenistan has also recognized Cimbria as a reliable partner for agricultural industrialization.

Turkmenistan, with usable agricultural land covering approx. 320,000 km², is not the largest farming country in the world, yet - and perhaps due to this very fact - the Agricultural Ministry of Turkmenistan has seen the potential to increase efficiency of limited land resources by using some of the most efficient and reliable equipment in the world. Only top seed processing lines produce very good seed to increase crop yield that will boost agriculture. Thanks to good references in Central Asian countries such as Kazakhstan and Turkey, the Agricultural Ministry of Turkmenistan decided to order 8 Cimbria seed plants

with capacities of 10 tph (basis wheat). This is certain to boost the quality of seed production in the country. Each plant will be equipped with:

A Precleaner Cimbria Delta D143.1, a Cimbria De-Awner Delta 184, a Cimbria Super Fine Cleaner Delta 106, a Cimbria Indent Cylinder Battery HSR 10020 R-L, a Cimbria Gravity Separator GA210 with partial Dust Hood, a Cimbria Continuous Coater KB 10 plus accessories and, last but not least, Cimbria Cyclofans for Aspiration.

These plants will be installed at strategic locations in Turkmenistan. Cimbria is looking forward to this major step, which represents one of the first steps in this part of the world.

## NEW EQUIPMENT FOR BELARUS

Franz Franer - ffr@cimbria.at



Belarus, often referred to as White Russia, is no longer a white spot on our Cimbria map. Apart from equipment already delivered in recent years, this year - in collaboration with our Belarusian partner, Ramos Agro - we managed to convince the state-owned company Grodno to select Cimbria as its supplier.

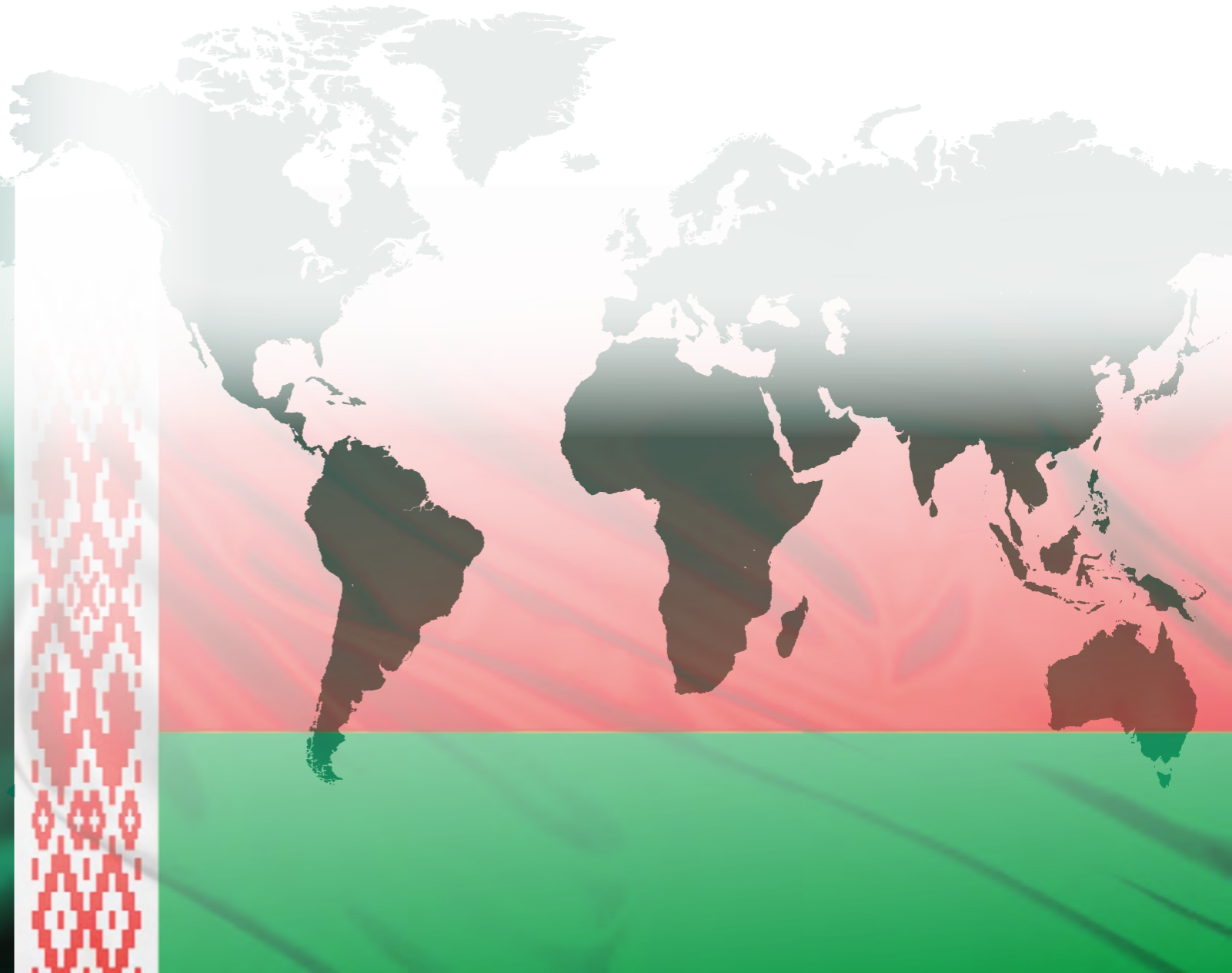
As mentioned, Grodno is a state-owned company. Needing to expand their business and in line with Belarus legislation, the client opened a tender procedure which was won by Cimbria. Despite the usual restrictions on budget, we managed to find a solution which fulfils requirements and satisfies the budget.

The existing dryer will get a powerful neighbour, namely a Cimbria Dryer ALG-18 (15 tph wheat intake capacity from 20% to 14% moisture reduction), which will boost capacity and save energy.

The flexibility of our Cimbria dryer makes it possible for the dryer to work on 20-tonne wheat batches.

Grodno also needed a second treating and packing line. A Cimbria CentriCoater CC150 with four liquid dosing lines and one powder feeder will upgrade production to one of the best in the whole country. The well-coated seed is conveyed either to a modern fully automatic packing machine or into a big-bag filling station.

Despite local and international competition, Cimbria was once again able to introduce high quality equipment, yet still meet sensitive budget requirements, whilst also taking sustainability into account.



## SILO PROJECTS IN EGYPT

Henning Roslev - Bukh hrb@cimbria.com



During the last 25 years Cimbria has been very active in Egypt, with contracts being implemented within the milling industry, seed sector and for major grain storage projects.

Due to the current political and financial situation in Egypt, it had been expected that activities would decline this year, but this has not been the case by any means.

In 2013 Cimbria completed a 30,000-tonne silo project in the Nile delta, whilst the installation of a 45,000-tonne silo plant is fully underway in the delta area. Both silo projects have transport capacities of 200 tonnes per hour and include a Delta 167 cleaner, JKF aspiration, Unitest temperature measurement and Unitronic MCC with PC and SCADA control. A contract for another 45,000-tonne silo project has been signed with a similar scope of supply.

Processing and conveying equipment were also installed in the snack food industry and seed cleaners within the seed sector.

Financing for new silo projects has been provided by the United Arab Emirates. Following an international tender, Cimbria has just received a letter of award for a new contract covering 3 silo plants with a total capacity of 225,000 tonnes.

In 2012 Cimbria established its own sales office in Egypt to strengthen its position in the country, and this initiative has been an important factor in securing orders and service for Egyptian customers.



YET ANOTHER  
ACTIVE YEAR  
IN THE EGYPT  
SEED AND GRAIN  
SECTOR

## PROCESSING IN UKRAINE

Henning Roslev - Bukh hrb@cimbria.com



Production of grain and, in particular, maize has been increasing rapidly during the last 3 years in Ukraine, which has resulted in the sale of a number of Cimbria seed processing plants during 2013.

For Ukrainian company "CLL Mais" a complete seed processing project, primarily for maize, was delivered and commissioned in 2013. Cimbria carried out detailed engineering, and the plant consists of the following:

Fine cleaning with a capacity of 10 tph is performed by means of a Delta fine cleaner. Grading is carried out in four fractions by means of a Delta grader with a large screen area and weight separation by means of four GA 210 gravity separators. A Cimbria

SEA colour sorter will separate bad maize kernels. Cimbria PBE Z elevators have been installed to lift maize seeds gently from one machine to another and into a Cimbria Centriccoater with an automatic chemical mixing system for chemical treatment.

Finally, a fully automatic bagging and packing machine with a capacity of not less than 700 bags per hour has been delivered for bagging and automatic placing of bags on pallets.

The delivery also includes a Cimbria Unitronic control system with SCADA and is prepared for remote internet connection, which makes it possible for Cimbria engineers in Denmark to assist in the event of problems on site.



Complete seed  
processing line  
under construction

## A/S CIMBRIA

Cimbria House  
Faartoftvej 22  
P.O. Box 40, 7700 Thisted  
DENMARK  
Phone: +45 96 17 90 00  
[holding@cimbria.com](mailto:holding@cimbria.com)  
[www.cimbria.com](http://www.cimbria.com)



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