



CIMBRIA

NEWS 2014/15

CIMBRIA.COM



TABLE 0

5 GLOBAL PERSPECTIVE - LOCAL FOCUS

6 SHARING KNOWLEDGE

This year Cimbria International Sales Event 2014 took place in Prague, Czech Republic.



8 CIBRIA AWARDS

9 CIBRIA IBÉRICA

Cimbria sets up new office in Spain



10 GEOGRAPHICAL EXPANSION IN UKRAINE

12 MAIZE SEED PLANT FOR SAATBAU LINZ

Cimbria has successfully commissioned and inaugurated a turnkey maize seed plant for Saatbau Linz in Geinberg, Austria



14 TURNING ANGRY BIRDS INTO HAPPY BIRDS

15 TEAMWORK IN SWEDEN

16 SUNFLOWER SEED PROCESSING IN RUSSIA



18 LOADING CHUTES FOR BIG BUSINESS

Sales increase in loading chutes for ship-loading and stockpiling



20 MAINTENANCE SECURES SUCCESS

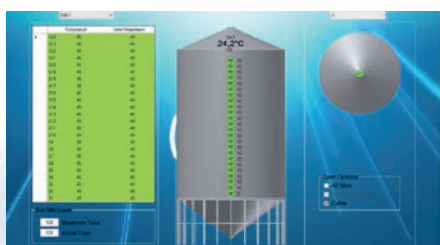
21 LONG TIME PARTNERSHIP

**YOUR
PRODUCT
OUR
KNOWHOW**

F CONTENTS

22 SAFE STORAGE PREVENTS LOSSES

The Unitest 5G is a fully-automatic system for the monitoring of temperature in grain and other crops.



24 ELECTIONS AND EXTENSIONS

25 MALAWI CERTIFIED SEEDS

26 MOBILE SEED PROCESSING PLANTS

27 NEW OPTIMISM IN EGYPT

A 90,000-tonne silo built in 2014 follows 13 earlier supplied silo projects supplied by Cimbria on Egyptian ground



28 CONVEYING INSULATION MATERIAL

28 UPGRADING FLOUR MILL

29 MICRO-FACTORIES FOR SMALL COFFEE FARMERS



29 STORAGE IN AFRICA

30 ADDING TEMPORARY PROTECTION

31 NEW DESTONER TECHNOLOGY



32 PROBLEM SOLVING IN CANADA

Cimbria has been able to solve problems by means of equipment innovation

33 FLEXIBLE SOLUTION

New seed processing plant for Czech Republic

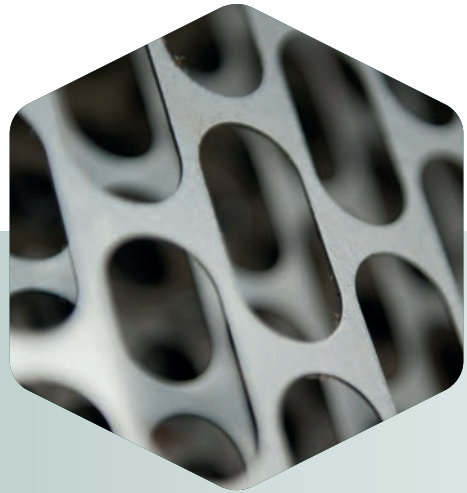
34 SEA CHROME WORLD CLASS SORTING TECHNOLOGY



36 EAR CORN PROCESSING IN FRANCE



38 SEED TREATMENT IN BRAZIL



CIMBRIA NEWS 2014/15

GLOBAL PERSPECTIVE – LOCAL FOCUS



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.

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.

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.

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".

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 addition to Cimbria's more than 900 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.

In this magazine you can read about a selection of our new technologies and latest installations.

The Cimbria Group of Companies in:

Denmark ■ Austria ■ Czech Rep. ■ India ■ Italy ■ Spain ■ 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 ■ Sweden ■ Taiwan ■ Turkey ■ United Kingdom ■ USA ■ Vietnam.



SHARING KNOWLEDGE

Lars Nørgaard - lno@cimbria.com

Cimbria International Sales Event – CISE – is held every second year at different venues. The 2014 event took place in Prague in the Czech Republic during the period 8-10 October.

This seminar is attended by representatives from our extensive network of dealers and agents, as well as of course from our own companies.

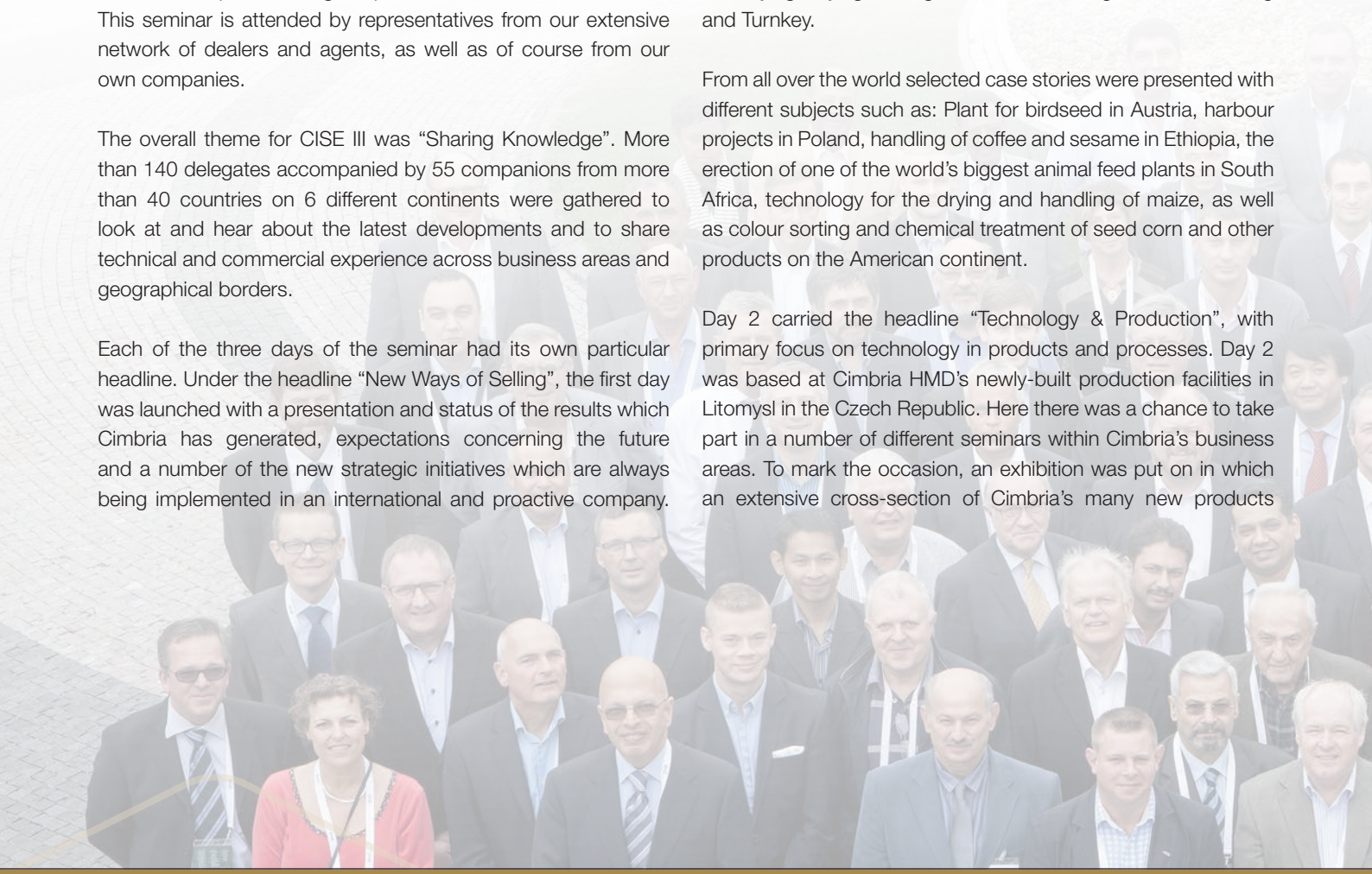
The overall theme for CISE III was “Sharing Knowledge”. More than 140 delegates accompanied by 55 companions from more than 40 countries on 6 different continents were gathered to look at and hear about the latest developments and to share technical and commercial experience across business areas and geographical borders.

Each of the three days of the seminar had its own particular headline. Under the headline “New Ways of Selling”, the first day was launched with a presentation and status of the results which Cimbria has generated, expectations concerning the future and a number of the new strategic initiatives which are always being implemented in an international and proactive company.

This was followed by a review of the wide range of services and products which Cimbria offers within its six business areas: Conveying, Drying, Storage, Electronic Sorting, Seed Processing and Turnkey.

From all over the world selected case stories were presented with different subjects such as: Plant for birdseed in Austria, harbour projects in Poland, handling of coffee and sesame in Ethiopia, the erection of one of the world’s biggest animal feed plants in South Africa, technology for the drying and handling of maize, as well as colour sorting and chemical treatment of seed corn and other products on the American continent.

Day 2 carried the headline “Technology & Production”, with primary focus on technology in products and processes. Day 2 was based at Cimbria HMD’s newly-built production facilities in Litomyšl in the Czech Republic. Here there was a chance to take part in a number of different seminars within Cimbria’s business areas. To mark the occasion, an exhibition was put on in which an extensive cross-section of Cimbria’s many new products



and technologies was presented, with guided tours also being arranged in the new and highly-specialised production facility.

“Sales Development” was the headline for the final day on Friday. In this case the main theme was further presentation of a number of exciting new products, focusing on the many benefits they currently offer to the market and will continue to do so in the future.

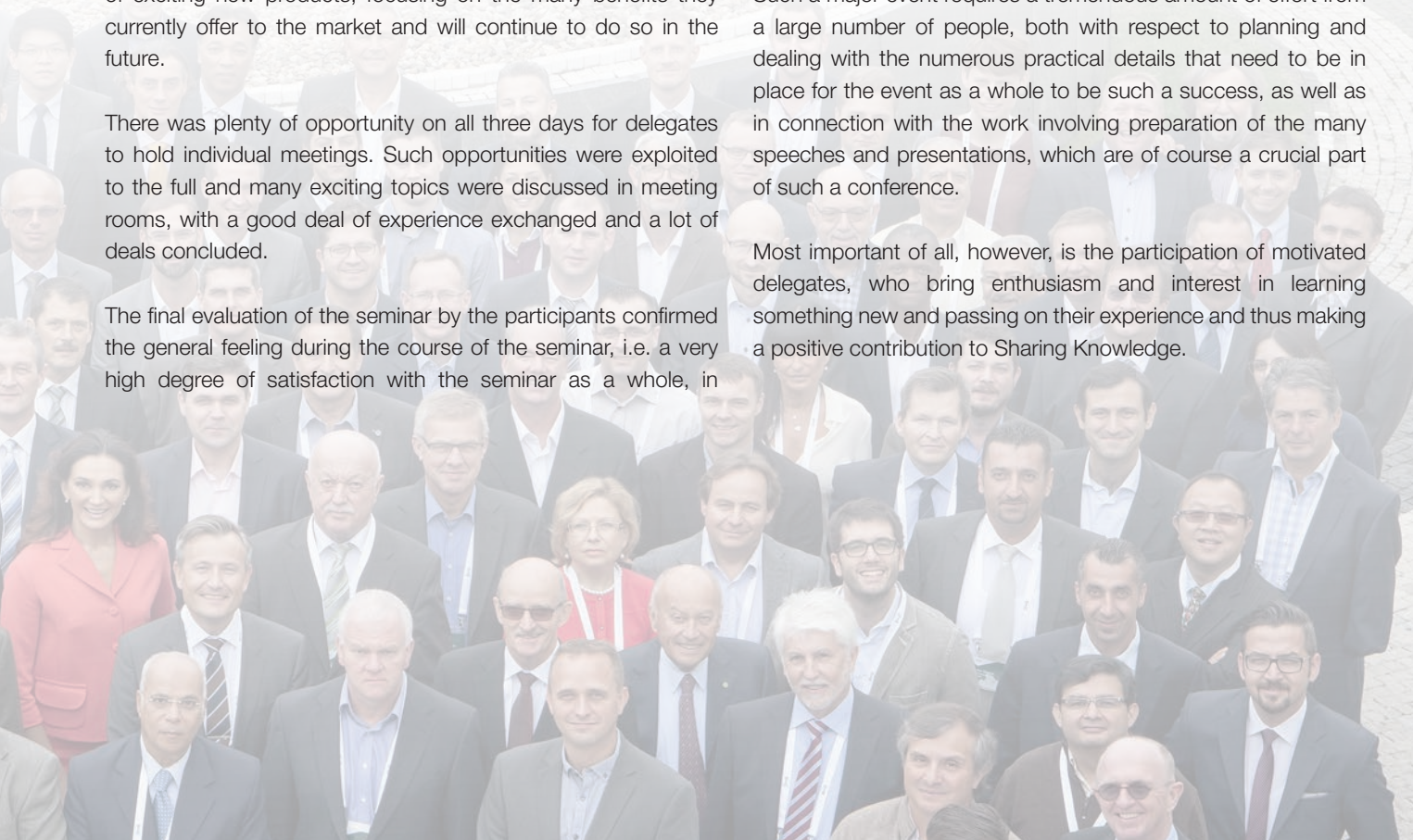
There was plenty of opportunity on all three days for delegates to hold individual meetings. Such opportunities were exploited to the full and many exciting topics were discussed in meeting rooms, with a good deal of experience exchanged and a lot of deals concluded.

The final evaluation of the seminar by the participants confirmed the general feeling during the course of the seminar, i.e. a very high degree of satisfaction with the seminar as a whole, in

addition to which plenty of good, constructive input was received which helps point the way to what we can further improve on in the future. Furthermore, there was no lack of good suggestions concerning possible venues for the next edition of CISE.

Such a major event requires a tremendous amount of effort from a large number of people, both with respect to planning and dealing with the numerous practical details that need to be in place for the event as a whole to be such a success, as well as in connection with the work involving preparation of the many speeches and presentations, which are of course a crucial part of such a conference.

Most important of all, however, is the participation of motivated delegates, who bring enthusiasm and interest in learning something new and passing on their experience and thus making a positive contribution to Sharing Knowledge.





CIMBRIA AWARDS

Lars Nørgaard - lno@cimbria.com

Cimbria International Sales Event – CISE – is held every second year at different venues. The 2014 event took place in Prague in the Czech Republic during the period 8-10 October.

This seminar is attended by representatives from our extensive network of dealers and agents, as well as of course from our own companies.

The overall theme for CISE III was “Sharing Knowledge”. More than 140 delegates accompanied by 55 companions from more than 40 countries on 6 different continents were gathered to look at and hear about the latest developments and to share technical and commercial experience across business areas and geographical borders.

Each of the three days of the seminar had its own particular headline. Under the headline “New Ways of Selling”, the first day was launched with a presentation and status of the results which Cimbria has generated, expectations concerning the future

and a number of the new strategic initiatives which are always being implemented in an international and proactive company. This was followed by a review of the wide range of services and products which Cimbria offers within its six business areas: Conveying, Drying, Storage, Electronic Sorting, Seed Processing and Turnkey.

From all over the world selected case stories were presented with different subjects such as: Plant for birdseed in Austria, harbour projects in Poland, handling of coffee and sesame in Ethiopia, the erection of one of the world’s biggest animal feed plants in South Africa, technology for the drying and handling of maize, as well as colour sorting and chemical treatment of seed corn and other products on the American continent.

Day 2 carried the headline “Technology & Production”, with primary focus on technology in products and processes. Day 2 was based at Cimbria HMD’s newly-built production facilities in Litomyšl in the Czech Republic. Here there was a chance to take part in a number of different seminars within Cimbria’s business areas. To mark the occasion, an exhibition was put on in which



Dinner at the Ambassador Palace in Prague

Cimbria award winners and management. From the left: Mr. Guillaume Schraauwers, Mrs. Florence Golebiowski, Mr. Thierry Herault from Atrissens, France, Mr. Andreas Fröhlich, Cimbria, Austria, Mr. Roberto Arcozzi, Cimbria, Italia, Mr. Lars Nørgaard, Sales Director, Mr. Karsten Larsen, CEO

CIMBRIA IBÉRICA



Lars Nørgaard - lno@cimbria.com

The Iberian peninsula has been an interesting market for Cimbria for many years, not least in Spain, where for decades many customers in the agricultural sector have purchased Cimbria technology. In spite of the general economic challenges of recent years, investments in agriculture have not been affected to the same degree as in other areas, and the Spanish food industry therefore remains well-equipped to face the future.

Farming in the area has always been – and continues to be – characterised by major regional differences in both structural and climatic conditions and variations that enable the production of a large range of agricultural products such as rice, vegetables, sunflower, olives, wine and fruit, as well as the more traditional products such as grain and maize, etc.

In line with Cimbria's sales strategy, which aims to ensure representation in all primary markets, we set up a Liaison Office in Spain on 1 October 2014.

The office – Cimbria Ibérica – is situated in Valencia, and day-to-day management is the responsibility of José Sancho (Pepe) González and Ignacio L Pons Llopis. Thanks to many years of experience, both men are very well-known faces in the industry, and with their extensive knowledge of Cimbria's products and process technologies, they are in a good position to provide expert advice to our current and future customers in Spain and Portugal.

It is therefore with great pleasure that we can now bid Pepe and Ignacio welcome as part of Cimbria's internal organisation.



Daily management. From left: Ignacio L Pons Llopis and José Sancho (Pepe) González





GEOGRAPHICAL EXPANSION IN UKRAINE

Oksana Stretovysh - Oksana_Stretovysh@cimbria.com.ua

Ukraine is one of the world's leading grain exporters. The country, however, is facing obvious difficulties this year because of the ongoing conflict in the east of the country. Despite the situation, Cimbria has managed to complete three seed plants and one silo plant during the course of 2014 in Ukraine, all situated in the eastern part of the country.

12 t/h seed processing line for the Kernel Group of Companies

This year Cimbria completed a 12 t/h seed processing line with soya as the main product for the Kernel Group of companies. The Kernel Group is one of the leading agricultural holdings in Ukraine, providing inland silo services with a total of 2.8 million tonnes of grain storage capacity concentrated in key farming regions. Kernel has been actively adding new modern facilities and focusing on increasing its presence in the regions. The construction of the project commenced in 2013 and final commissioning was completed in March

2014. The scope of supply includes: a Super Fine Cleaner, a Grader for grading in 3 sections, an Indent Cylinder, a Gravity Separator and a Centriccoater. Furthermore, the order included a Centriccoater C 50 for an additional line for maize treatment with a capacity of 6 TPH. Moreover, Kernel intends to extend an existing line with additional Cimbria equipment. The contract for extension was signed in October 2014.

10 t/h seed processing line for Agrotrade

A contract with the company Agrotrade (Kharkiv region) for seed processing line equipment delivery (10 t/h) was signed in 2012. All equipment was delivered on time, but its implementation was postponed until 2014. According to the contract, Cimbria supplied a Fine Cleaner, an Indent Cylinder, a Gravity Separator, a Centriccoater, pendulum bucket elevators for the soft transport of seeds, and a Delta Grader Special with 24 square metres of screens for separating into 4 grades. In addition, monitoring of the various processes within the entire facility using the latest PC-based technology is also incorporated. The plant has been in operation since late November 2014.

15-t/h seed processing line with 4 storage bins for Harveast company

Another example of Cimbria's expansion to the east is the Harveast company in the Donetsk region. The contract includes a 15-t/h seed processing line with 4 storage bins. The



The electrical and commissioning engineer Sergey Sluchevsky from Cimbria supervising the construction and testing of Harveast Company installation

plant is designed to operate with wheat as a main product, but also with peas and barley.

The project specifies that after pre-cleaning (50 t/h), the grain is conveyed into 4 silos with a volume of 500 t each for temporary storage. Fine cleaning and further grain handling are performed by means of a De-Awner (for barley), a Super Cleaner and a Gravity Separator with a capacity of 15 t/h. A pendulum bucket elevator performs gentle grain conveying to a Cimbria Centricoater with a capacity of 15 t/h. After treatment, the grain enters a big-bag filling unit. Additionally, a Cimbria Unitest temperature monitoring system with a special design with an increased number of measuring points and an electrical MCP/PLC control panel are also included in the project.

In spite of the currently unstable situation in the region, which is located close to the centre of the conflict, Harveast Company continued all construction work in 2014. Commissioning and first grain intake took place in July 2014 and the plant has now been in operation in connection with the latest harvest.

10-tph seed line and storage plant for Ecoprod

Cimbria won a new contract with the company Ecoprod (Donetsk region). This project included a 10-tph seed processing line and a storage plant with a capacity of 16,000 t, consisting of three flat-bottom silos for wheat and sunflower.

The storage plant project includes an intake line with a capacity of 220 t/h with a Cimbria Drum Scalper and a Cimbria MEGA Cleaner. The conveying system consists of elevators in heavy duty industrial design and chain conveyors with a capacity of 220

t/h. Furthermore, the new storage plant is equipped with 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.

Work on the new storage plant started in late summer of 2014.

During the installation work, Ecoprod's management visited both Cimbria Manufacturing and Cimbria Unigrain engineering department in Thisted, Denmark. Ecoprod's owner, Mr. Ivan Melnik, was extremely impressed with the Cimbria factory.

We hope that the good performance of Cimbria facilities will help to support our clients in the future growth of their companies.



Ukrainian office administrative manager Irina Tsarenko and Mogens Kristensen, Cimbria in Thisted with the 2 owners of Ecoprod Mr. Ivan and Viacheslav Melnik (father and son)



Ecoprod site under construction



Agrotrade installation



MAIZE SEED PLANT FOR SAATBAU LINZ

Andreas Fröhlich - afr@cimbria.com

In September 2014, Cimbria commissioned and successfully inaugurated the turnkey maize seed plant for Saatbau Linz in Geinberg.

Considering that the southern part of Austria has always been known as the best maize region in the country, it was a courageous step by Saatbau Linz to install this new facility in the north of the country. This was primarily due to the farsightedness of Saatbau's management, which took both climatic changes and the related major growth potential in this region into consideration when arriving at their decision. The southern part of Germany, mainly Bavaria, will become an increasingly attractive maize area in the future, with Geinberg as the most likely processing facility for their maize.

Within a period of just 6 months – from March until end of August – Cimbria erected the entire plant. The following amazing figures were reported during the erection period:

- 12,300 m² of building area, 12,000 m² of asphalt
- 1,400 t of steel
- 16,600 t of concrete = 1,100 trucks
- 115 km of cables
- Up to 185 workers on site at the same time
- Total electrical installation approx. 2,000 kW = 2 MW
- Heating capacity of dryer 14,000 kW = 14 MW



Intake with walking floor, 25 t/h



Husking and sorting, 25 t/h



Ear corn dryer, filling capacity 1,200 t



Shelling and pre-cleaning, 40 t/h



Calibration, 8 t/h in 3 grades



Fine cleaning and gravity separation 8 t/h

In the first season, Saatbau Linz used the plant for a harvest of approx. 8,500 t wet ear corn, aiming at around 13,000 t for next year. The new plant enables our treasured customer to further develop its strong position in the European market for maize seed, counting on their excellent varieties being constantly developed in Saatbau's R&D stations.

The opening ceremony, which featured a large number of national and international guests from the seed sector on a guest list totalling more than 500 people, clearly shows the importance of the new plant for the entire region.

Outstanding features of the plant:

- Complete traceability of the seed from the field throughout the entire plant until the final seed bags.
- Fully automated filling of the ear corn dryer, enabled by optical sensors and cameras.
- Very gentle seed handling with pendulum bucket elevators and letdown ladders in the entire fine cleaning, calibration, chemical treatment and bagging-off section.
- Recirculation systems in the aspiration units for excellent working conditions inside the building throughout the typical processing period, which is during the winter.



Chemical treatment 18 t/h



Bagging and palletizing, 1,000 bags/hour



Aspiration with recirculation system



TURNING ANGRY BIRDS INTO HAPPY BIRDS

Andreas Fröhlich - afr@cimbria.com

Bird food is a very popular product amongst both young and old alike, whether it is for feeding pigeons in the town, parrots and canaries in flats or simply the various birds frequenting residential gardens. The small bags are an excellent and profitable seller in the supermarket, but production costs have to be very moderate, thus requiring cost-efficient installations for cleaning and mixing of all the necessary components. And this is where Cimbria comes in ...

The various components for bird food enter the plant either via the truck reception hopper or from an existing silo, in both cases passing a magnet and Delta 146 pre-cleaner prior to entering the square silo.

For silo filling, chain conveyors with trapezoidal bottom and intermediate pneumatic outlets are used. The square silo is divided

into 34 cells, with outlet hoppers having adjustable automatic regulation slides and pneumatic shutters for time-controlled dosing through which the components are dosed onto belt conveyors, before finally reaching the mixers placed on load cells for weight-check.

The control unit permanently monitors the opening width of the regulation slide, the "open time" of the pneumatic shutter and the weight of product arriving in the mixers, whilst of course also including the residual material coming from the conveyors. The system can thus quickly react and correct values in order to achieve the required accuracy.

The final product can be filled in containers, big bags, paper bags, plastic foil or bins for sale in supermarkets.





TEAMWORK IN SWEDEN

Frode Kirkegaard - fki@cimbria.com

Through a business partner of many years, Falkenberg Silo Montage (FSM) in Sweden, Cimbria Unigrain received an enquiry for the establishment of a raw product storage facility for Svenska Foder AB in Åhus, Sweden, at the beginning of 2014. Svenska Foder wanted a proposal for how the raw product hall for animal feed production could most efficiently be filled with the different types of raw product that are regularly received from ships. The capacity had to be 300 TPH - 450 m3/h. Following a number of meetings with Svenska Foder, Cimbria received a signed delivery agreement in March.

Cimbria Unigrain delivery:

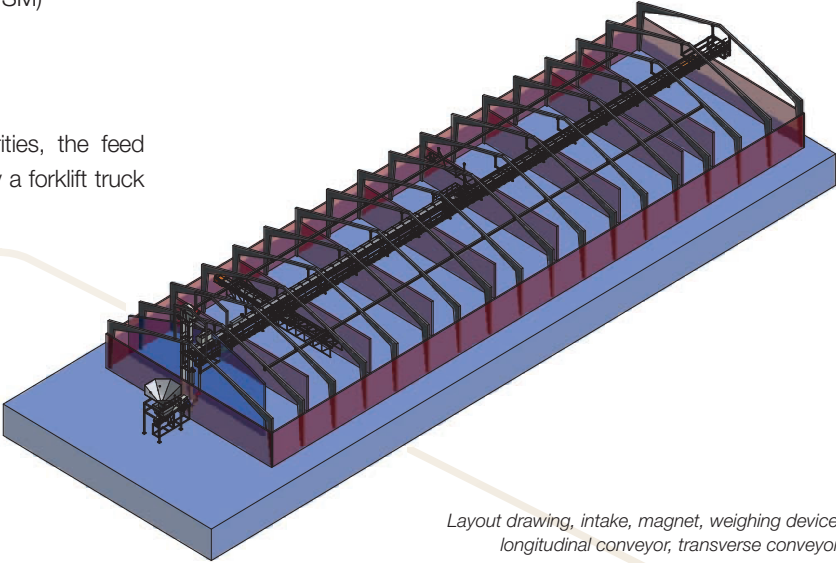
- Detailed design, project management and documentation
- Delivery of equipment and control unit
- Erection management (Erection carried out by FSM)
- Running-in and hand-over

Design of the plant:

According to a requirement from the port authorities, the feed hopper on the quay had to be able to be moved by a forklift truck

when ships were not unloading product to the raw product hall. From the feed hopper the product is led to a chain conveyor and a screw conveyor that feeds the intake elevator, which in turn delivers the product down to a weighing device, a cascade magnet and onwards to the fixed longitudinal conveyor belt. The fixed longitudinal conveyor belt delivers the product in the middle of the hall to the mobile conveyor belt. The ends of the mobile conveyor belt can thus fill the hall in the longitudinal direction. In order to fill the hall in the optimum manner in the transverse direction, the product is delivered to a mobile transverse conveyor belt.

This facility in Åhus can be added to the numerous other plants that Cimbria Unigrain has previously delivered to Svenska Foder.



Layout drawing, intake, magnet, weighing device, longitudinal conveyor, transverse conveyor.



Chain conveyor 300 TPH from the ship hopper to the storage facility



Longitudinal belt conveyor 300 TPH with spot filter

SUNFLOWER SEED PROCESSING IN RUSSIA



Arne Jensen - aje@cimbria.com

In 2014, Cimbria successfully commissioned and handed over a new 90,000 m³ silo facility for storage, drying and processing of sunflower seed at JSC “Chisminskoye”, an oil mill which produces worm-press, refined, deodorized packaged oil and sunflower-seed based products. The mill is located in Chishmy in the Republic of Bashkortostan, and is owned by the Sigma Holding Company.

The Sigma Holding Company is an active member of the South Ural Chamber of Commerce and Industry and is recorded on the

“Goodwill” list of reliable business enterprises. During its many years of activity the company has gained social recognition and the confidence of its partners in the Chelyabinsk Region, other Russian regions and abroad.

The Sigma Company was incorporated in 1991 as a manufacturing and commercial company, and thanks to continuous, steady development, the company has managed to keep investing in the development of its main production sphere. Today, Sigma Holding Company is the largest vegetable oils manufacturer in South Ural and Bashkiria.



The silo 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 screen cleaner. For drying, the design includes two Cimbria ECO Master Dryers 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 and PC control and automation system.

Cooperation between Cimbria and JSC "Chisminskoye" started in 2012 with the supply of a 50-TPH (13-7% in sun flower seed) Cimbria ECO Master Dryer, a Cimbria Drum Scalper, 2 Mega cleaners, as well as several bucket elevators and chain conveyors.



90,000 M³
SILO INSTALLATION
FOR STORAGE, DRYING
AND PROCESSING
OF SUNFLOWER SEED



LOADING CHUTES FOR BIG BUSINESS

Henrik Frandsen - hfr@cimbria.com

Cimbria has secured a number of recent orders for loading chutes for ship-loading and stockpiling. The orders comprise various V-type and A-type chutes for a number of different applications. Since introducing the A-type chute – specifically aimed at stockpiling and lighter ship-loading applications – these models have resulted in increasing sales within this segment. In nearly all cases, the standard chute design has been customized to suit the end users' demands, and this flexibility in the modular system has had a big impact on securing orders.

The loading chutes have been supplied for products as diverse as cement, fertilizer, woodchips, iron ore, soybeans/soya meal and grain.

X500T/19 for Norcem, Brevik, Norway

Norcem in Norway contacted Cimbria for a solution concerning the loading of ships with cement.

Norcem requested wear resistant metal contact parts and the inlet and cones are therefore produced in Hardox 400. Furthermore, the ship-loader is equipped with a wave compensator. It loads 550 t cement per hour and has a length of 14.6 m. It was delivered in June 2014 and Cimbria had two servicemen in Brevik to install the loading chute.

V800F/28 for Cargotec, Sweden

For a project in Borneo, Indonesia, Cargotec Sweden Bulk Handling needed a loading chute to load fertilizer into ships. The solution was a V800F/28, supplied by Cimbria in November

2014. The chute was equipped with a cardan joint designed for operational movement between -10 and +10°, and a parking angle of 67°.

Due to the product characteristics, all metal contact parts were made in stainless steel.

The capacity of the ship-loading chute is 1000 t/h, and the length is 20 m. The mounting frame of the ship-loading chute is prepared for a service platform that Cargotec will supply.

2 x V1200F/23 for Mega Mänty, Finland

In February 2014 Mega Mänty Oy from Finland ordered 2 loading chutes of type V1200 for Raumaster Oy. The loading chutes are for a project in Stockholm, Sweden, for loading woodchips. The capacity of each loading chute is 3000 m³/h and they have a length of 17.3 m. The woodchips come from a 2400-mm wide belt conveyor.

At the request of the customer, the loading chutes have no outer modules and have extended flaps at the outlet to control the product pile. The first unit was delivered in May 2014 and the second unit in November 2014.

A650F/29 and V500T/ for Agrichema, Germany

In cooperation with Cimbria's German partner, Agrichema, two orders for A and V loading chutes respectively were secured during 2014 for two reputable project companies in Germany.

For the first customer, two type A650F loading chutes with 29



Loading chute with interchangeable outlets ready for installation



Loading chute installed in the Port of Liepaja at conveyor showing the cardan joint



Test of V1200 loading chute in Litomysl

modules were manufactured and delivered during early summer. The loading chutes will be used for open loading of iron ore with a capacity of 1500 t/h, and they have a length of nearly 20 m. Due to the highly abrasive nature of the product, the chutes were constructed with abrasive-resistant Vautid in the inlet, and Hardox 400 guide cones. Furthermore, the customer required the chutes to be equipped for installation in conditions down to -35°C.

For the second customer, one loading chute type V500T with 19 modules was supplied. In this case, requirements involved loading cement into tanker ships. This means that the loading chute is fitted with a type T-outlet and a wave compensator to ensure stable loading even as the ships rise and fall with the waves. Furthermore, the chute was supplied with a cardan joint designed for operational movement between -10° and 0°, and a parking angle of 45°. The capacity of the loading system is 500 m³/h, and the overall length is nearly 17 m. At the request of the customer, all metal contact parts were made from St 52.

Both orders were pre-commissioned at the factory in Litomyšl, and the chutes were accepted by the customers' inspectors.

V800FF/21 for CAIASA, Paraguay

CAIASA in Paraguay is a joint venture involving Louis Dreyfuss, Bunge and AGD. They contacted Cimbria Bulk Equipment's partner in Argentina – Anton Jorgensen – as they needed a solution for loading open barges with up to 1000 t/h of soybean and 760 t/h of soybean meal. With these capacities in mind, a V800 was proposed. The customer requested a solution with integral filter, which was solved by offering the FF-outlet with 7 filter units, but they also requested an outlet suited to the rectangular openings in the barges used when they need to load in rainy conditions. This was solved by constructing the loading chute with interchangeable outlets, with a quick-lock system at the outlet flange.

*Loading chute
installed at
Norcem*

V650F/36, Firma Liucija, Lithuania

For a project in the Port of Liepaja in Lithuania, a loading chute type V650F with 36 modules including a cardan joint was supplied for loading of grain into ships.

The total length of the chute and the cardan joint is approx. 26.5 m. The equipment is capable of loading up to 1200 m³/h, and the cardan joint is designed for operational movement between -20° and +20°, and a parking angle of 20°.

As the loading chute was going to be installed in a zone defined as containing a risk of dust explosion due to the grain, the loading chute is equipped with electrical components with ATEX-approval and antistatic modules.





MAINTENANCE SECURES SUCCESS

Michael Petzmann - mpe@cimbria.com

Kaveri Seeds – Preventive maintenance as a key factor in success!

In summer 2014, Kaveri Seeds – the market leader in hybrid seeds (field crops and vegetable seed) in India – once again approached Cimbria with regard to new requirements. Negotiations were intense and tough, however, well aware of the efficiency and durability of Cimbria equipment on the part of Kaveri and well aware of Kaveri's market position on the other, both parties finally came to an agreement with regard to the contract conditions.

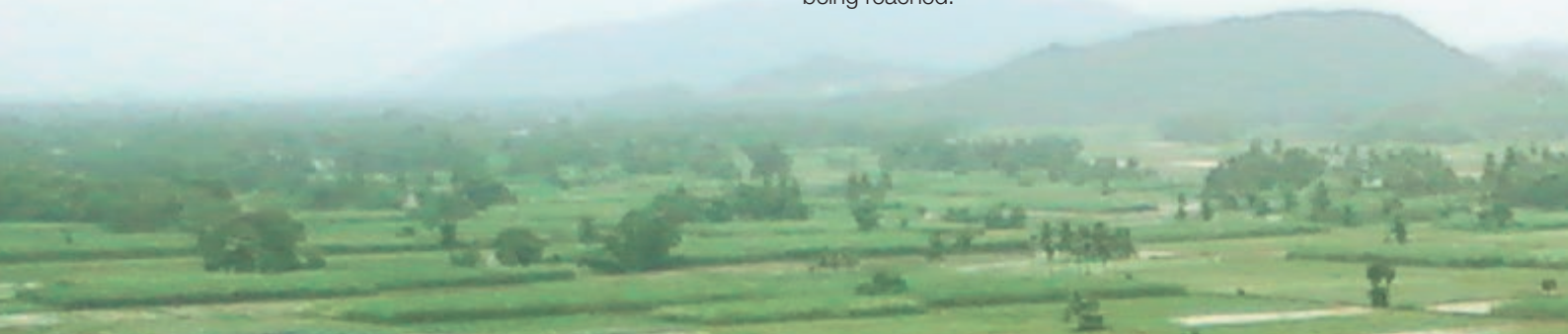
Kaveri Seeds was founded in 1976 by Mr. Gundavaram Venkata Bhaskar RAO, and a prolonged push for development and success has taken this company to the top of the Indian seed business.

The order follows a previous order from 2009 in which Cimbria won an order from Kaveri Seeds for 2 lines with an intake capacity of 10 tph based on wheat. Both lines were delivered on a turnkey basis, including the intake pit, all equipment for cleaning and separation up to the Cimbria Centricoater, EC5 bucket and

pendulum bucket elevator. Almost 6 years after the first kernel ran through the Cimbria machines, the entire installation still looks new and the machines are producing the guaranteed output. This is feasible with continuous and careful preventive maintenance, and Mr. Deshpande has the right team and formula for this procedure.

Later in 2014 Cimbria Heid installed yet another line at Kaveri Seeds with an intake capacity of 10 tph based on wheat. As a result of some modifications to the line from 2009, such as EC8 low-speed elevators, bigger square pipe cross section etc., Kaveri Seed is now able to exceed the guaranteed output capacity of 5 tph of paddy seed, with 6.5 tph being achieved currently. This 30% increase in capacity was achieved by exchanging experience as part of steady, beneficial and close communication and cooperation between Kaveri Seeds and Cimbria.

Kaveri Seeds continues to grow. The next demand was for 1 line with an intake capacity of 10 tph based on wheat and 1 line of 20 tph, also based on wheat. Results and satisfaction with existing Cimbria lines laid the foundation for a new agreement being reached.



LONG TIME PARTNERSHIP



Michael Petzmann - mpe@cimbria.com

Cimbria has been supplying turnkey seed processing plants in India for the last decades. The first modern seed processing line for M/s Prasad private limited was installed in 2006 and ever since Mr. Prasad has been a constant partner. We supplied the first 10 TPH seed processing plant to him in 2006 with Pre-cleaners, Fine Cleaners, Destoners, Gravity Separators and Treaters followed by a Batch Dryer with intermediate silos. To date, we have delivered a total of 8 processing lines to him.

In 2014 Cimbria installed 3 seed processing lines of 5 TPH, 10 TPH and 15 TPH respectively (a total of almost 70 MT input on wheat seed) on the Indian market. The installations all include Delta Pre-cleaners, Delta Fine Cleaners, Gravity Separators and Continuous Coaters with Super Cyclofans.

This was the second biggest installation of its kind in India, following an accumulated installation of 45 MT seed processing capacity in 2007.





SAFE STORAGE PREVENTS LOSSES

Michael Kjær Sogaard - mks@cimbria.com

The Unitest 5G is a newly developed state of the art temperature measurement system.

The Unitest 5G is a fully-automatic system for the monitoring of temperature in grain and other crops or woodchips. The system can be used in all types of grain storage facilities and can be installed in both new and existing installations.

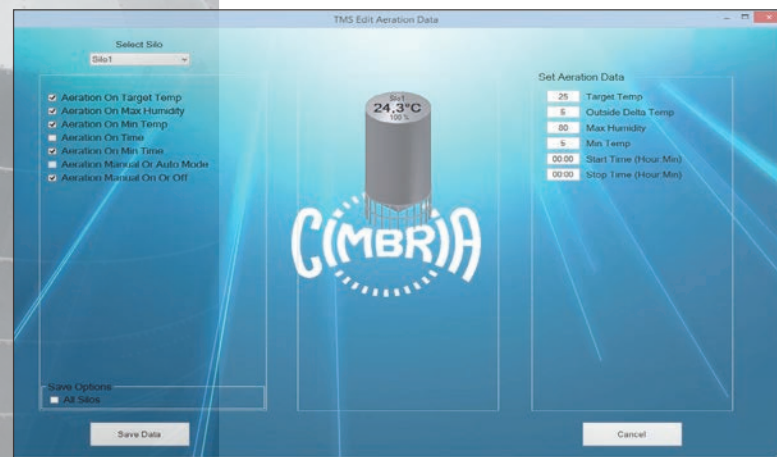
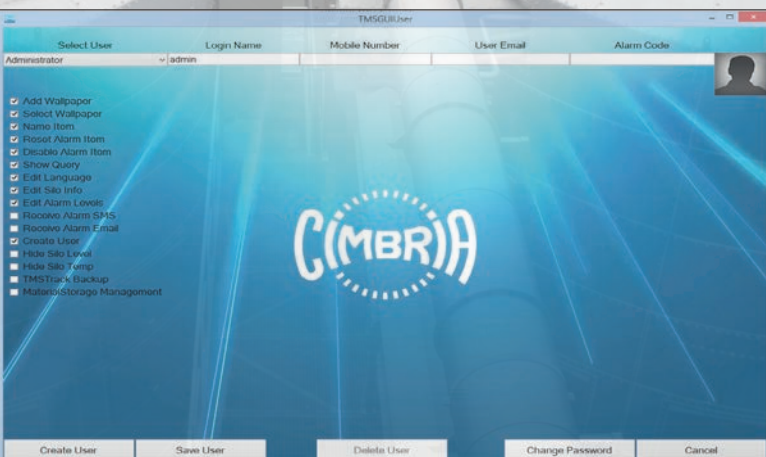
The temperature is constantly monitored by means of a number of sensors which are fitted in carrying cables specially designed for the installation in question.

Unitest 5G software ensures great user-friendliness, it can easily be adapted to all languages, and with the help of icons we have simplified the use of the system to ensure global user understanding. Unitest 5G software is available with multi-access level, whereby the use of passwords provides protection against unauthorised use.

Automatic ventilation of silos is important when heat is generated, but it is also of great importance that this takes place at the right time and at the right outdoor temperature. Unitest 5G has been developed with focus on this aspect, such that unnecessary ventilation is avoided. This ensures that savings are achieved in terms of electricity consumption.

Unitest 5G is not just a temperature measurement system; it can also be used to measure product level and thus calculate volume. The software update also enables better access to statistics, hard copies/extracts from the database, the option of email reporting, as well as easy implementation with existing systems, e.g. SCADA.

Globally, the Unitest system has been installed on more than 6000 plants, which means that Cimbria occupies a position amongst the absolute leaders in the field.

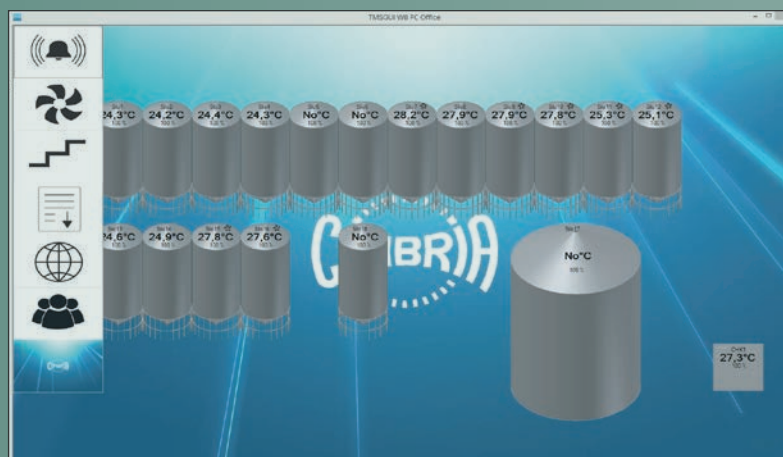
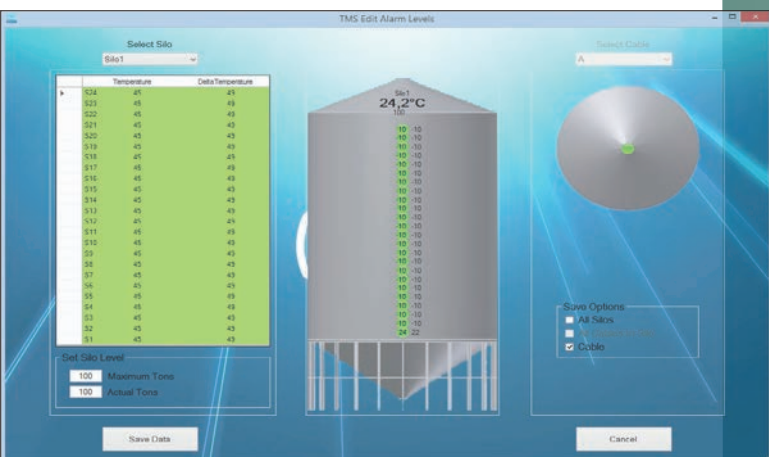


During the development of Unitest 5G it has been essential not only to look forward, but also to cast a glance backwards to ensure that our existing customers are taken into account, and that they are also able to have the new software implemented without necessarily having to replace existing hardware.

UNITEST 5G FEATURES

- Temperature measurement
- Level control
- Storage statistics
- From single to multi-user
- SQL database for easy and hassle-free data storage
- Data acquisition at the main office
- Multi-language
- New graphical user interface (GUI)
- 3D view
- Automatic back-up procedure

APPROX. 25% OF AGRICULTURAL PRODUCTION WORLDWIDE IS LOST EVERY YEAR, IN PART DUE TO POOR STORAGE. THIS IS APPROXIMATELY EQUIVALENT TO CONSUMPTION IN EUROPE.





ELECTIONS AND EXTENSIONS

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

Due to political issues, 2014 was extremely challenging in all industries in the Turkish market. With government elections taking place, companies in the seed industry appeared to prefer to wait for the outcome of these elections.

In Cimbria Turkiye, however, we still had a good year, with orders coming from existing customers wanting to extend their processing lines.

Terpe Turkmen A.S.

In 2014 TEPE Turkmen A.S. ordered five wheat seed plants consisting of a Delta Cleaner, Delta De-Awner, Delta Super Fine Cleaner, Indented Cylinder, Gravity Separator, Continuous Coater, and Super Cyclofans. The order follows a delivery of eight similar seed processing plants supplied in 2013.

Maro Tarim A.S.

Maro Tarim processes wheat seed and it purchased its first line in 2012. Earlier this year, it increased its capacity by adding a new Gravity Separator type GA210 to its existing line.

Abalioglu A.S.

ABALIOGLU Group began operations in 1969 with its feed mill in Denizli as the first private sector feed company in Turkey. Having

sustained its industrial and entrepreneurial spirit for 40 years, ABALIOGLU is continuing its sound development and pioneering investments – not only in the feed sector, where it is the market leader, but also in the agricultural, livestock and food sectors. In fact, ABALIOGLU occupies 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 purchased its first Cimbria continuous flow dryer in 2013 and is very satisfied with the results. A completely new plant is now being built in Aliaga/Izmir for processing sunflower oil, where a Cimbria ECO-Master has been installed to dry the sunflower.

Tekcan Tarim

Tekcan decided to increase its wheat seed and sunflower seed capacity by adding a new Indented Cylinder, Gravity Separator and Cylindrical Screening Machine.

ATLAS TOHUMCULUK

Atlas processes wheat and it decided to extend its plant by ordering the following machines: A Delta Combi-cleaner, a Delta Super Fine Cleaner, a Gravity Separator and Super Cyclofans.





MALAWI CERTIFIED SEEDS

Andreas Fröhlich - afr@cimbria.com

The long term relationship between Seed Co., Cimbria and our good partner GST (Grain and Seed Tech) has brought another complete seed processing line to Africa, this time to Malawi in the south-eastern part of the continent.

Seed Co. develops and markets certified crop seeds, mainly hybrid maize seed, but also cotton seed, wheat, soya bean, barley, sorghum and ground nut seed.

Most of its hybrid and non-hybrid cereals and oil crop seed varieties are proprietary, having been developed and bred at its own research stations through market-oriented research and breeding programs.

Seed is produced under contract from Seed Co.'s own parent seed by an established producer network. Research has been,

and will continue to be, the cornerstone of Seed Co.'s success and leading market position in the southern African region. Its business model and brand have evolved over the years, such that Seed Co. is distinguished from its competitors in Zimbabwe and the region:

- Sustainable stakeholder and social responsibility programmes
- Sound understanding of developing markets
- Strong research capacity
- Product range and adaptability
- Strong well-established brand
- Good relationship with input suppliers

Seed Co. is a public listed company incorporated in Zimbabwe and quoted on the Zimbabwe stock exchange.



The new seed plant in Malawi consists of 2 processing lines, each for processing 10 t/h wheat. One line is additionally equipped for maize seed processing of 4 t/h in 3 grades.



MOBILE SEED PROCESSING PLANTS

Franz Franer - ffr@cimbria.com

- If the prophet refuses to come to the mountain, then the mountain has to come to the prophet.

Cimbria has without doubt proven its ability to provide highly efficient seed processing plants on a large scale to the industry.

But of course the high individual efficiency of Cimbria equipment also ensures great success even in small-scale plants such as mobile units.

The following examples show a variety of different plants with different capacities and different purposes:



Bratney, USA, 15-tph wheat plant



ESE & NSIA, Africa - 4 Wheat Seed Plants.



Bratney, USA



Bratney, USA



Techmach, South Africa



Oromia, Ethiopia - 5-tph Wheat Seed Plant



Germany - 5-tph Wheat Seed Plant



NEW OPTIMISM IN EGYPT

Henning Roslev Bukh - hrb@cimbria.com

The political situation in Egypt has improved a lot under new President Abdel Fattah el-Sisi's strong leadership, which means general business activity is picking up significantly. This means more optimism in the private sector, and thus investments which have, in turn, led to several orders for Cimbria, in particular in seed cleaning and grading equipment.

During 2014 a 90,000-tonne silo complex built by Cimbria near Alexandria was opened by a number of senior officials, including H.E. Dr. Khaled Hanafi, Minister of Supply & Home Trade, H.E. Governor of Alexandria, M.G Tarek Mahdy and Mr. Mahmoud Abdelhameed, Chairman of the Egyptian Holding Company for Silo Storages.

This silo plant is the latest in a long line of silo complexes built by Cimbria for EHCSS. Actually, Cimbria has now successfully built 13 silo complexes for EHCSS during the last 9 years, representing a total capacity of 630,000 tonnes.



From the Left: H.E Governor of Alexandria, M.G Tarek Mahdy, H.E Dr. Khaled Hanafi, Minister of Supply & Home Trade, Mr. Mahmoud Abdelhameed, Chairman EHCSS.



Cimbria participated in the Grain Tech exhibition in Cairo during 2014, which resulted in many new enquiries. From the left: Senior Sales Manager Henning Roslev Bukh and Regional director Sami Salaeeldin

CONVEYING INSULATION MATERIAL



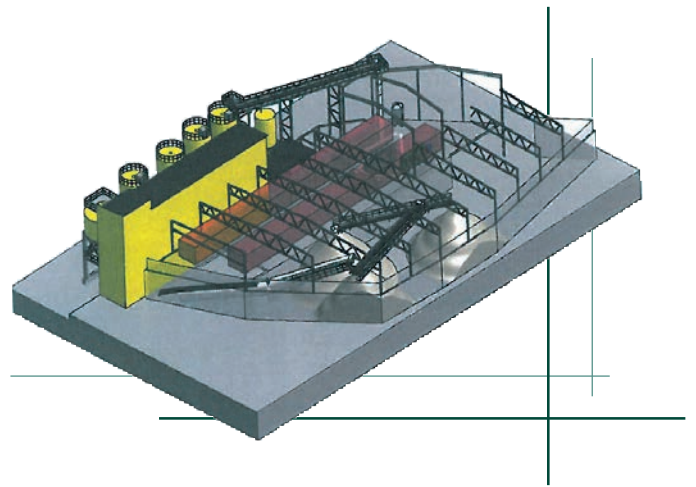
Børge H. Svendsen - bhs@cimbria.com

Cimbria has supplied conveying equipment to Syklus, Fredrikstad, Norway. This equipment was designed to convey the crushed glass to the processing furnaces, where the crushed, ground glass is transformed at high temperature to Glasopor foam glass. Glasopor is a heat-insulating and sound-insulating material that can be used in various insulation tasks.

There has been great demand for this product, which means that the current finished goods stock facility is to be freed up for expansion of the production facilities. As a result hereof, a large outdoor stock facility will be established in 2014/2015.

In connection with the expansion of production facilities, Cimbria has also been charged with delivering conveying equipment, steel structures, electrical systems, motor cabinets and control

systems. The conveying equipment consists of approx. 200 m of various types of belt conveyors, of which the distribution belts are fitted in a 115-m long lattice structure at a height of 20 m.



UPGRADING FLOUR MILL



Børge H. Svendsen - bhs@cimbria.com

The hammer mill in Køge, Denmark, grinds grain 365 days a year, 24 hours a day, which means that good, reliable machinery is required.

As a result hereof, Cimbria has delivered and installed a new plant for reception of grain. The new plant includes chain conveyors, bucket elevators, baffle plate weigher, sampler, magnetic separator, Delta cleaner and new pipework with a capacity of 100 t/h.

The plant in Køge grinds wheat and rye in particular, but also

other types of grain and species such as white wheat and spelt are processed.

In connection with the installation of the new equipment for grain reception, the company has taken the opportunity to replace 3 existing loading chutes with newer models, with 3 Moduflex type S300TSMJ loading chutes replacing a number of Moduflex loading chutes from 1992.

The Moduflex loading chutes are manufactured in accordance with EU regulation no. 1935/04, and thus meet all requirements concerning contact with foodstuffs.



MICRO-FACTORIES FOR SMALL COFFEE FARMERS

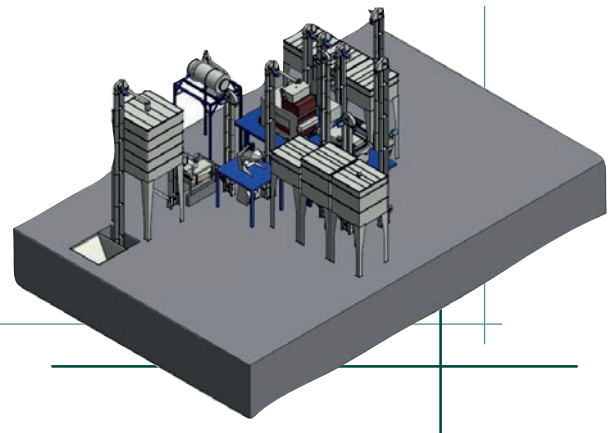
Wieland Bogdan - wbo@cimbria.com



Entrepreneur roasters from the US, Japan, Europe, Australia, Korea and other regions now pay more for high quality coffee from farmers. International traders come to buy from the producer directly, paying higher prices and promoting coffee-growing areas worldwide.

This direct relationship enables the farmers to receive an extra \$100 per 46 kilos, and high quality coffee in small batches is often sold for between \$300 and \$350 per 46 kilos. Roasters are learning from plantations. They can then explain to their clients where the drink comes from, its quality and features, as well as social aspects centred on the creation of the coffee family. Buyers mainly visit micro-coffee plants that are owned by small-scale farmers, but aid organizations also flock to this system.

Cimbria is now focusing on and developing small processing lines specifically for this market, and has already sold several units to Central and South America. The small processing lines have a hulling capacity of 1 t/h with greater potential depending on the initial setup. Since specialty coffees are picked carefully, the equipment can then be reduced to a minimum.



STORAGE IN AFRICA

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

Andrew T. Kalama- Andrew@cimbria.co.ke



UGANDA

Uganda remains a bright business hub. Savannah Commodities Uganda Limited's 20 MT storage facility is due to be commissioned by February 2015, whilst Agroways Uganda Limited's 10 MT silo extension will be commissioned by April 2015.

Besides primary grain processing, the corporate sector has been working hard to improve the final product. Therefore most of the organizations are looking forward to the addition of value, i.e. production of maize grits for the brewing industry, production of wheat and maize flour and production of pulses.

Equatorial Nut Processors Limited – Kenya

During the last year we have successfully installed a special product for processing corn, Soya Blend (CBS) Plant

Our main supply speciality:

- Combi Cleaner Delta 143.1
- Day Bins (pre-storage)
- De-stoner type TS90s
- Course milling, dosing and mixing
- Plant control and automation





ADDING TEMPORARY PROTECTION

Michael Augustin - mau@cimbria.com

At the beginning of July, Cimbria's Hungarian partner, CHH Technology Ltd. submitted an interesting request to Cimbria. A well-known company in Hungary wanted to add a new type of spraying system to their conveying belts. The purpose of spraying was to add a low-concentrate chemical (5% A.I. in water) to provide temporary protection for the seed during storage in silos before further seed processing is carried out.

At the initial meeting with the client the basic design was settled, and indeed it sounded quite simple. A FLOW D10 dosing line in combination with a seed sensor (detecting seed on the belt) was to be used, with spraying done as long as the seed is on the belt. During subsequent meetings the nature of the task became more and more challenging, and the order needed to be split into 2 independent orders, with each order in turn needing to be modified and upgraded.

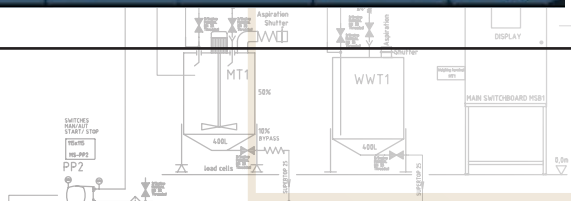
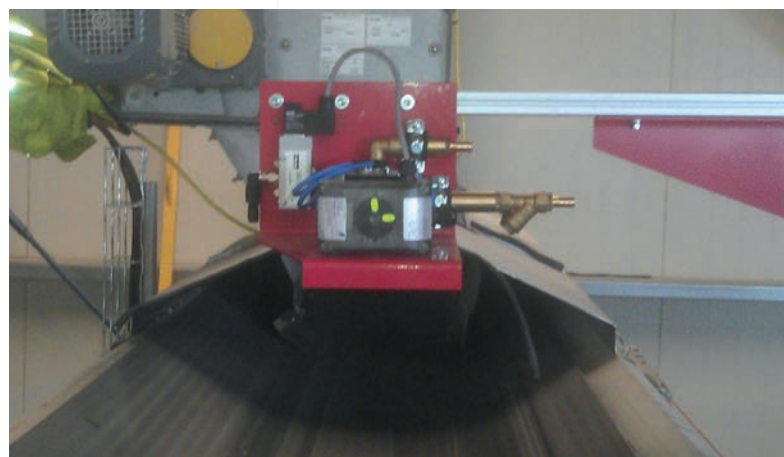
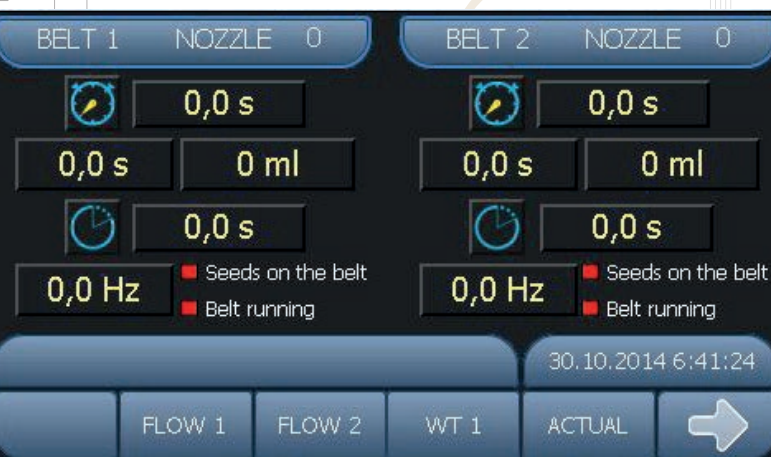
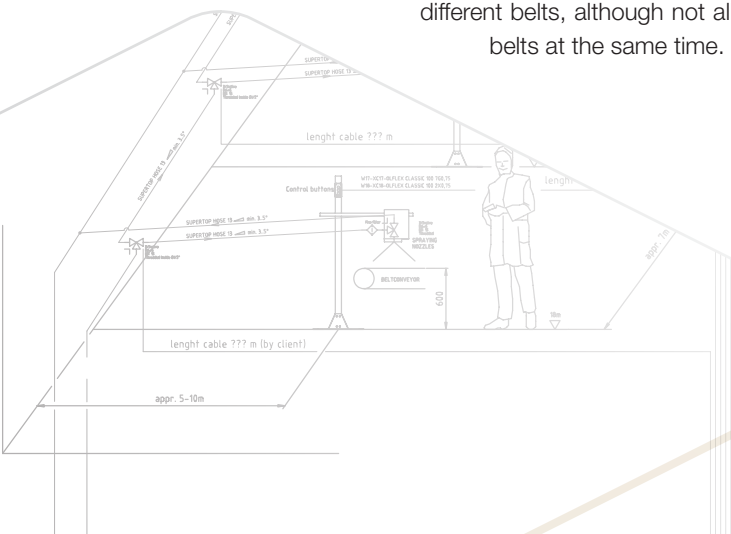
The first system simply sprays onto 3 different belts, although not all the belts at the same time.

The second system sprays onto 2 different belts, but this time onto both belts at the same time.

The first system continued to function using one FLOW D10, but here additional automated ball valves needed to be added to select one of the 3 conveyor belts for spraying. Furthermore, the second system was now complemented with a second FLOW D10 to enable independent spraying of both belts at the same time.

The only common item in both systems was the use of the same slurry mix for each installation. Therefore a slurry preparation tank (located downstairs) with the slurry level regulated by a transfer pump feeding a worktank (located upstairs at conveyor belt level) was added to feed the FLOW D10(s).

Finally, each spraying system needed to be equipped with a PLC-operated electrical panel (incl. recipe library and remote maintenance access) using an HMI interface for entering data, adjusting and calibrating the FLOW D10 and monitoring the operation.





NEW DESTONER TECHNOLOGY

Stefan Bruna - sbr@cimbria.com

New Destoners for higher capacities

Growing industrialization in the seed and food sector has brought increasing demand for high-capacity machinery, including destoners. Cimbria has therefore developed a new generation of destoners, which use a pressure fan from below to create the necessary fluidized bed.

Based on the huge experience with pressurized air systems that Cimbria has gained from our unique gravity separators, we have now decided to also use this system of creating the fluidized bed

for larger-scale destoners. In general, a combination of pressurized air systems and air dispersal can be controlled much more easily and more precisely than comparable vacuum systems.

As a first step, the TS 400 with its brand new and unique design has been developed and was presented during Cimbria's International Sales Event (CISE III) in October 2014 in Prague. This machine will replace the TS 360. Besides the functional advantages, it offers a 10% increase in capacity, corresponding to 22 t/h in wheat.





PROBLEM SOLVING IN CANADA

Mark Metcalfe - mmetcalfe@nexeed.ca

Cimbria and Nexeed have been able to help customers solve problems by means of equipment innovation.

Long-time customer Vandaele Seed faced a particularly challenging separation task when last year's rye suffered an infestation of ergot. Having experienced the value of Cimbria equipment in many other installations, Vandaele was confident of the ability of Nexeed and Cimbria to deliver their first optical sorter which could carry out separation that they were previously unable to make using mechanical equipment. Successful commissioning was completed, and the rye, which was previously not acceptable, can now be upgraded, thus providing significant value. Another processing challenge emerged as specifications changed for certain special crops, such as linseed and canary

seed, with a new, lower tolerance for certain noxious weed seeds which are very difficult to remove. When presented with this challenge, Nexeed suggested applying the Cimbria Heid HSR Indented Cylinder with its unique teardrop-shaped pocket to provide a competitive advantage in separation. Application of this technology has helped several customers gain access to these high-value markets.

In order to tackle further problems, Nexeed has installed a Cimbria SEA Chrome 3 Optical Sorter in its Winnipeg facility. This machine is available to provide local access for testing the technology when new challenges in separation emerge. So far, more than 15 different commodities have been tested, with the list growing by the week.

**THE SEA
CHROME 3 OPTICAL
SORTER HAS BEEN
INSTALLED TO
PROVIDE LOCAL
ACCESS FOR
TESTING THE
TECHNOLOGY**

FLEXIBLE SOLUTION



Vladimír Naplava - navzas@navzas.cz

Cimbria's representative in the Czech Republic, NAVZAS s.r.o., headed by Mr. Vladimír Naplava, installed a complete seed processing plant for 8 t/h grain for ELITA semenářská, ČSO Ořechov, with start-up due in time for this year's grain harvest.

The main focus during the planning and erection phase was on high functional flexibility of the line for various seeds. Another issue was of course quick and easy cleaning of the plant, simple and automated handling, as well as clean and safe working conditions for the customer's operators.

An intake pit with a suitable holding capacity of 40 t enables a complete truck to be unloaded within a matter of minutes, thus allowing the truck to leave immediately after rapid emptying without any waiting time.

Subsequently, the grain can either be fed directly to the processing line, or stored in intermediate day-bins (total capacity 50 t) for further buffer capacity, for instance to allow the plant to be supplied with grain from these bins during a night shift.

The fine cleaning section consists of a de-awner, a Delta fine cleaner, an indent cylinder and a gravity separator. The conveying equipment consists of Cimbria belt conveyors and bucket elevators.

Waste products from the processing plant are filled in seed containers, thus always keeping them separated into reusable and unusable waste.

Seed processing is completed by a Centricoater batch treader, which can either be fed from the storage bins after fine cleaning, or from seed containers by means of a box tilter. Finally, treated seed is then filled into containers again.

Exhaust air from the aspiration system is filtered and returned to the building with a residual dust content of max. 1 mg/m³. The plant thus offers optimum working conditions inside the building at any time.



SEA CHROME – WORLD-CLASS SORTING TECHNOLOGY



Michela Pelliconi - mpelliconi@seasort.com

Ever since its launch in 2013, the SEA CHROME has proven its worth and represents a genuine “sorting revolution”. Recent developments have kept the equipment several steps ahead of competing technologies.

As the only colour sorter in the world, the SEA CHROME can now be configured with visible full-colour + NIR + InGaAs cameras. This multi-spectrum version of the SEA CHROME is available with up to 5 frequencies working in the visible and NIR spectrum.

After only one year on the market, SEA CHROME already has multiple references in many countries worldwide, including Argentina, Brazil, Canada, the Czech Republic, Ethiopia, France,

Germany, Italy, Kenya, Mexico, Turkey, Ukraine, UK, USA, Uganda and Vietnam. This has resulted in a remarkable boost to Cimbria’s position within optical sorting.

Thanks to its Full-Colour technology system, the SEA CHROME sorter is able to “see” like the human eye and to recognize 16 million individual colours. This is why SEA CHROME is able to match the increasingly stringent requirements of the food and seed industry which ensure that safety and purity requirements are met.

SEA CHROME technology is installed to improve quality within several seed and food applications (grains, seeds, beans, coffee,



nuts, etc.), as well as in industrial fields (plastic, metals, etc.) as it becomes increasingly synonymous with versatile and reliable sorting.

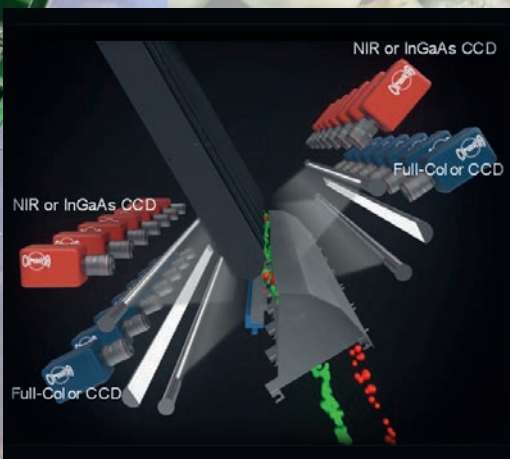
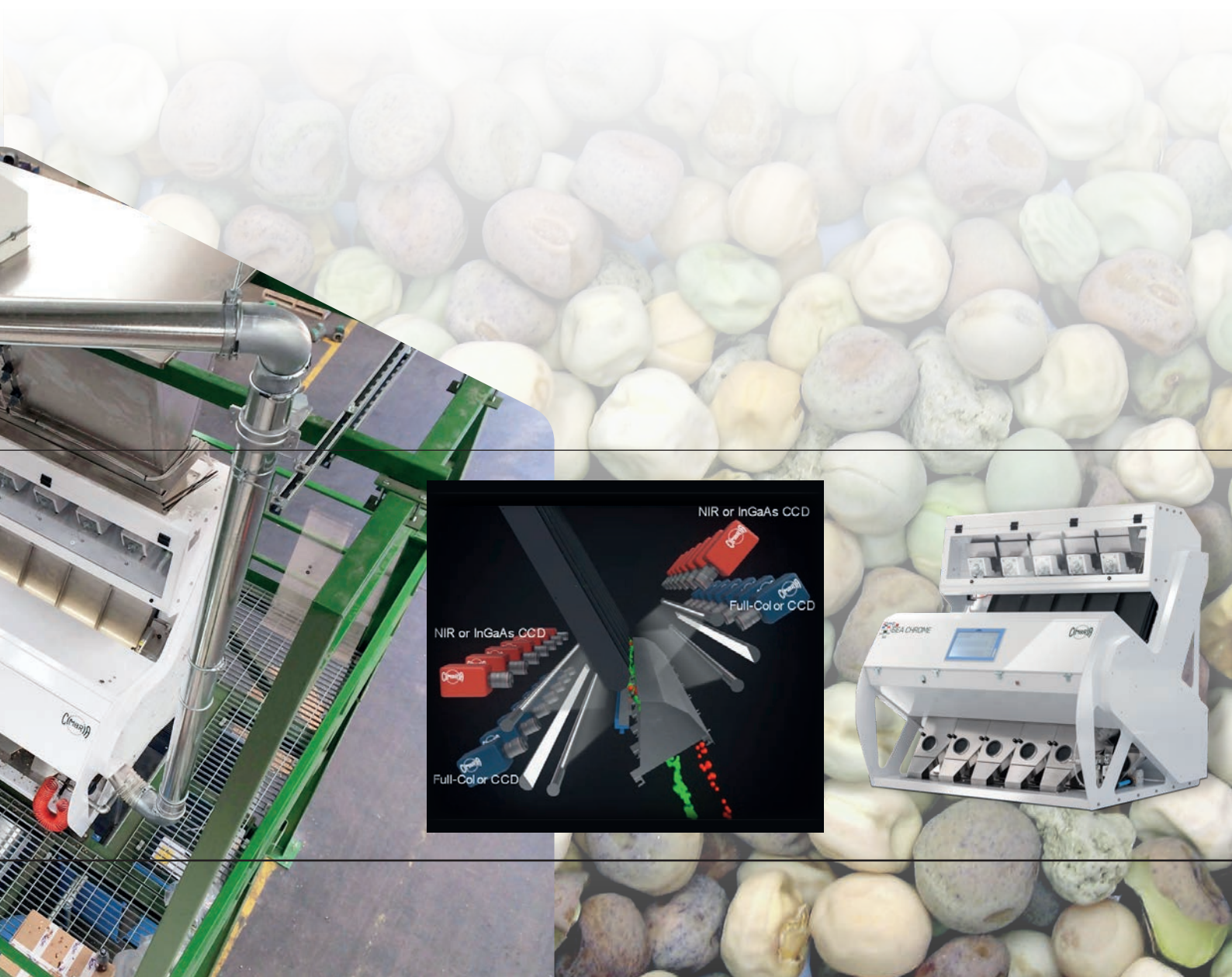
Optical sorting to secure marketable maize The Italian maize crop in 2014 was in many ways highly satisfactory. However, in the northeast and northwest of Italy, in particular, the harvest was severely affected by mycotoxins, with the presence of significant quantities of deoxynivalenol (Fusarium) due to heavy rain and low temperatures during the cob ripening period.

In order to comply with the tolerance limits of current regulations, the maize processing industries were forced to reduce mycotoxin values.

Several SEA CHROME and SEA NEXT sorting machines have been successfully installed in Italian drying and storage plants producing maize, mainly for animal feed.

Other SEA CHROME sorting machines have been installed in several corn milling plants producing maize for human consumption as flour and hominy grits (corn flakes). In this case, the sorting machines are used for the removal of mycotoxins (deoxynivalenol, fumonisin and aflatoxin), separation of allergens (soybeans and wheat), as well as ensuring a uniform maize colour and avoiding the presence of dark tips.

The waste maize rejected during the sorting processes is instead sent to biogas facilities for electricity production.





EAR CORN PROCESSING IN FRANCE

Arne Mose Sørensen - ams@cimbria.com

Increased demands for ear corn processing capacities has contributed to 2014 being once again a busy year for Cimbria. We have participated in further expansion of seed plant investments in France, Central and Eastern Europe in order to significantly increase the production capacity.

Monsanto: Peyrehorade Site, France

The project scope of works includes detailed design, engineering services, onsite supervision, commissioning and training, procurement, supply, implementation and construction works for ear corn receiving, husking & sorting, drying, shelling tower, bulk storage facility and transfer system to existing conditioning towers.

Mobilization at the site started in early 2014, manufacturing of equipment took place during the first and second quarters of 2014, and installation was completed by autumn 2014.

Cimbria Scope of Works

- Detailed Design – Engineering & Project Management
- Cimbria to provide engineering and design for mechanical works
- Site supervision, commissioning and onsite training

Mechanical Works

- Green corn receiving system with vibrating conveyor, belt conveyors, etc., to husker building
- Dryer loading conveyors, incl. tripper car, shuttle conveyor with letdowns

- 2 new ear corn drying bins with heat exchangers
- Shell-out conveying system to bulk silos
- Shelling tower and conveying system for cobs to new cob boilers
- Major extension of existing bulk storage facility and corn conveyor handling system for in-feed and reclaim to existing conditioning tower
- Provision of connection to existing facility
- Undertaking of site supervision for installation of all mechanical equipment, commissioning, staff training and full project documentation

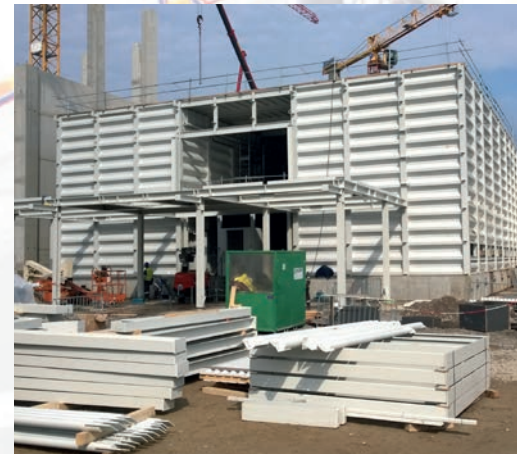
Monsanto: Trebes Site 2013 and 2014

The project scope of works includes detailed design, engineering services, project management of the entire project, procurement, supply, implementation and construction works for ear corn receiving, husking & sorting, single-pass dryer, equipment in shelling tower, bulk storage facility and transfer to new conditioning towers.

Mobilization at the site started in March 2013, manufacturing of equipment took place during the first and second quarters of 2013, and installation was completed by autumn 2014 for phase I. Phase II Extension of dryer, bulk storage and new conditioning tower will continue in 2014 and be completed by autumn 2015.

Competior Agricole, Marlenheim Site, France

The project scope of works includes detailed design, engineering



services, project management of the entire project, procurement, supply, implementation and construction works for ear corn receiving, husking & sorting, double-pass dryer, shelling line and transfer to new conditioning line, control and automation.

Mobilization at the site started in February 2014, manufacturing of equipment took place during the first and second quarters of 2014, and installation was completed by autumn 2014.

Cimbria Scope of Works for Trebes Site and Competitor Agricole, Marlenheim Site

- Detailed Design – Engineering & Project Management
- Cimbria to provide engineering and design for mechanical works
- Project management
- Project management of entire project
- Contract administration
- Health & Safety & Environment (HSE), Full-time HSE Engineer
- Site meetings, HSE meetings, Tool Box meetings and provision of 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 letdowns

- New ear corn drying bins with heat exchangers and gas burners
- Shelling tower and conveying system for cobs to cob bins
- Big-bag system filling & unloading (Marlenheim Site)
- Large bulk storage facility and corn conveyor handling system for in-feed and reclaim to existing conditioning tower (Trebes Site)
- Bulk intake for oil seed and conveying system (Trebes Site)
- Provision of transfer system to new conditioning tower (Trebes Site)
- Conditioning line pre-bins and weighing system
- Installation of processing lines, Fine-cleaner, sizers, graders, colour sorter
- Seed treatment system and formulation mixing system
- Structural steel platform, bins, etc.
- Complete white dust filter system and red dust filter system including waste handling to waste bin, etc.
- Compressed air system
- MCC, PLC PC control system, including all power and control cabling
- Undertaking of site management, HSE organization, site supervision and all local installation crew within the scope of Cimbria's responsibility, including crane, lifts, etc., for installation of all mechanical equipment and electrical equipment, commissioning, staff training and full project documentation





SEED TREATMENT IN BRAZIL

Franz Franer - ffr@cimbria.com

A multinational seed company has commenced a project in Brazil for supplying their clients with machines for seed treatment in order to improve their seed quality and increase efficiency of their chemical products for seeds.

In close collaboration with our local partner Momesso, Cimbria supplied advanced Centricoater technology for a number of projects for chemical treatment. A total of six Centricoaters were delivered. Four of these were installed in the south of the country and the last two were installed in central Brazil. The end

clients required a minimum production capacity of 10 T/h and particular precision in terms of applying chemicals, as well as previewing the use of inoculants with high viscosity and products in powder formulation. To match these requirements, the project was designed with a CC250 with volumetric dosing lines, direct dosing lines and two powder feeders. All engineering and assembly details were developed by the multinational company in collaboration with Momesso. Likewise, all layouts and equipment for assembly and conveying were included in the project. The



Volumetric and direct dosing lines



Complete Installation of CC250 including intake and packing line



entire project, including a number of further machines to be delivered, will be realized step-by-step over a period of 3 years (2014, 2015 and 2016).

In 2014 another multinational seed company was also supplied with a Delta 108 and six Indented Cylinders type HSR 6010 L, along with Cimbria Supercyclofans.

Momesso has been working with equipment for seed treatment for farms and industrial use for 25 years, and for the last 5 years they have been delivering full scale project installations for clients, including layouts, engineering concepts, as well as machines and accessory equipment for assembly and conveying. The company operates from the south to the north of Brazil, covering all regions with a team of more than 80 people focused on providing the seed industry quality solutions.



A/S CIMBRIA

Faartoftvej 22

P.O. Box 40, 7700 Thisted

DENMARK

Phone: +45 96 17 90 00

holding@cimbria.com

www.cimbria.com



SOLUTIONS. TOGETHER.

CONVEYING | DRYING | SEED PROCESSING | ELECTRONIC SORTING | STORAGE | TURNKEY