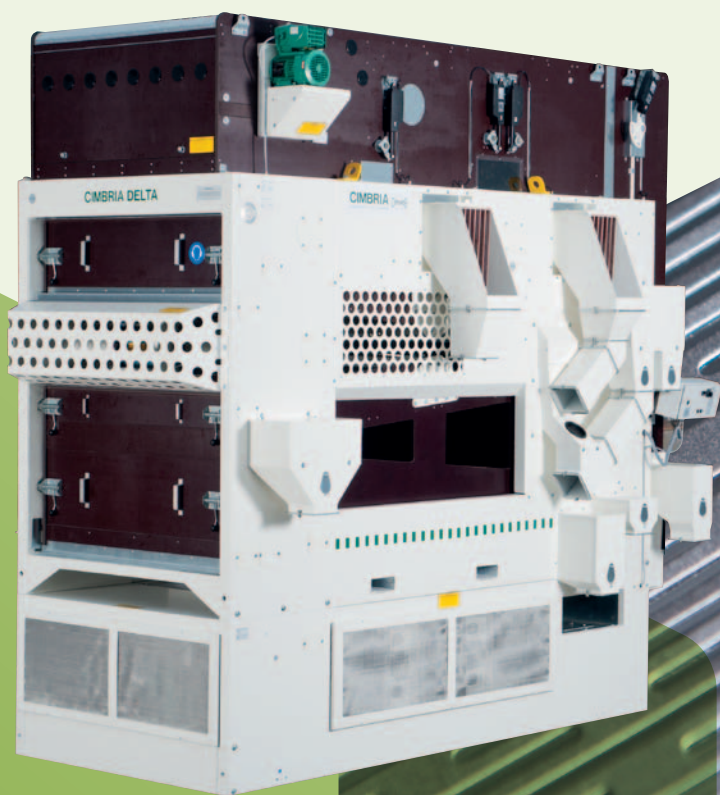


# DELTA CLEANERS

## 100 110 120 SERIES

SEED PROCESSING 





# EFFICIENCY AND PURITY IN THE CLEANING PROCESS



## CONSULTANCY BASED ON EXPERIENCE

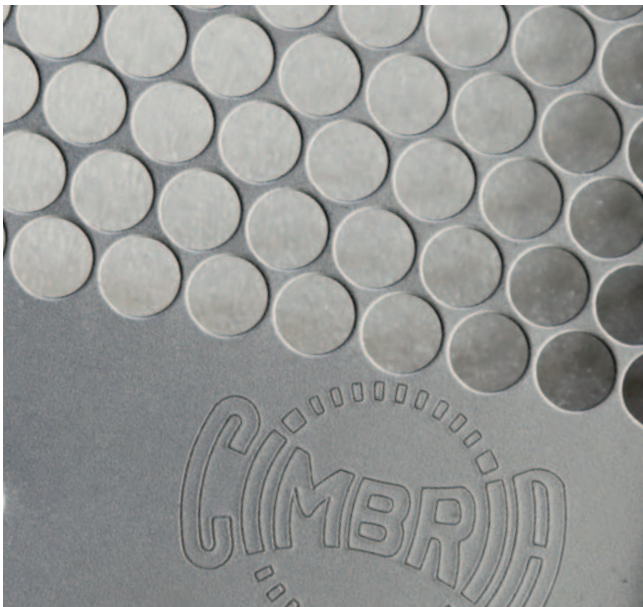
Accuracy and careful cleaning are key words in our development and production of the Cimbria Delta cleaners, and the quality of all material and components is uncompromisingly high. We offer advice and design of plants for all sorts of cleaning purposes based on R&D achievements and many years of experience.

Cimbria has a wide and experienced service network which is continuously informed of the latest technical product developments and cleaning processes. The service organization is at your disposal to ensure the best and quickest service.

## TECHNICAL KNOWLEDGE AND EXPERIENCE

The wide range of Cimbria Delta screen cleaners ensures excellent efficiency and purity in the cleaning of all kinds of crops by removing undesired elements and potentially dangerous impurities with high precision.

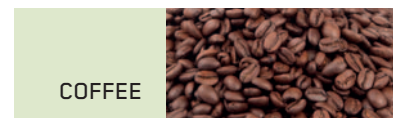
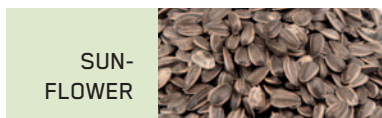
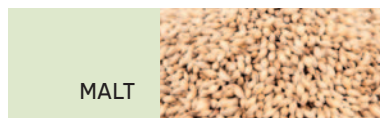
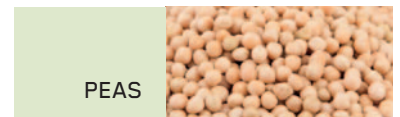
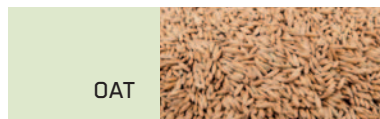
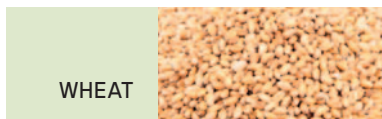
The efficient and gentle Delta cleaning process ensures the quality and germinating capability of the seed by keeping the quantity of damaged seeds at an absolute minimum. The result is increased product value and higher earnings.



### DELTA CLEANERS

- Research, test and training takes place at Cimbria's full-scale seed-grain plant. On request, local test centers carry out test cleaning of any given product and determine the optimum screen perforations for special processes.
- The Delta Cleaners are available in different series with more than 30 different models with capacities from 1 t/h finecleaning up to 450 t/h precleaning.

## EXAMPLES OF PRODUCTS CLEANED IN A DELTA CLEANER





## DELTA CLEANER CONSTRUCTION

The Cimbria Delta cleaners are constructed of standard modules which can be built together and ensure that specific needs for a particular cleaning process will be met at all times.

The wide range of Cimbria Delta screen cleaners ensures excellent efficiency and purity in the cleaning of all kinds of crops by removing undesired elements and potentially dangerous impurities with high precision.

### INLET WITH SHAKER FEEDER

Optimal feed over the full width of the cleaner is achieved with a shaker feeder. The shaker feeder is designed to handle all kinds of grain and seed through a gentle and controlled feeding. The feeding rate is controlled through a stepless speed adjustment, ensuring the required capacity for any application.



### PRE- & AFTER-SUCTION

All Cimbria cleaners are equipped with a two-pass air separation system. The pre-suction is designed to remove dust and light foreign material at the inlet of the machine to reduce the amount of dust and fines inside the machine. This ensures a nice and even flow of product on the screens. The after-suction is designed to collect remaining husk and fines in the clean grain at the final outlet of the cleaner.



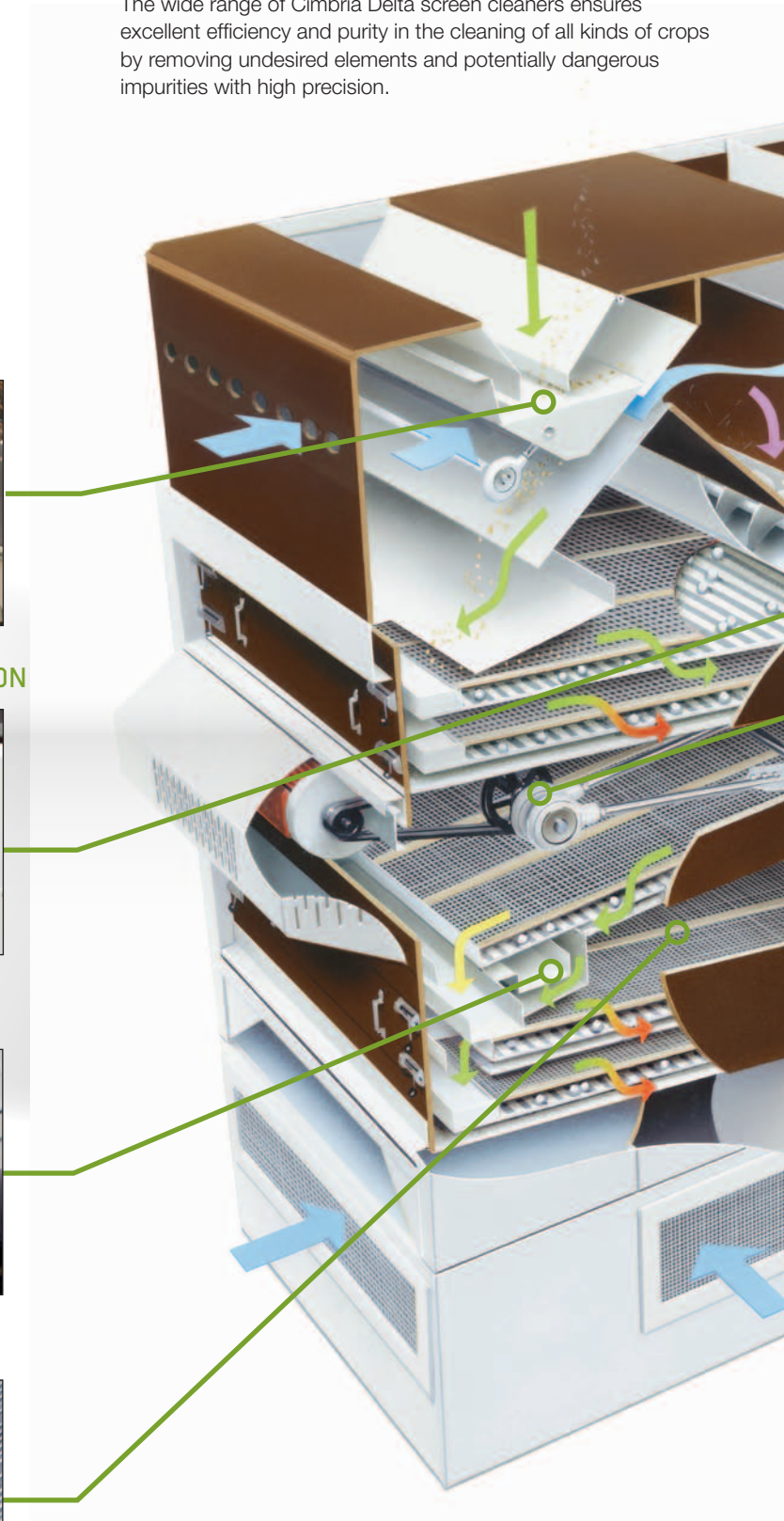
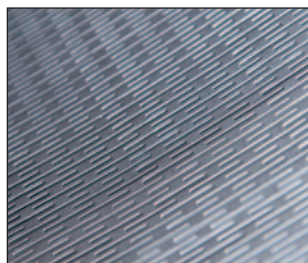
### FLOW

Cimbria Delta cleaners are designed with a flexible flow system which offers the operator the possibility of using the optimum flow for a specific application. With easy changeable outlets and dividers the operator can choose between up to 16 different flow options on specific models. The optimum flow ensures maximum capacity and quality.



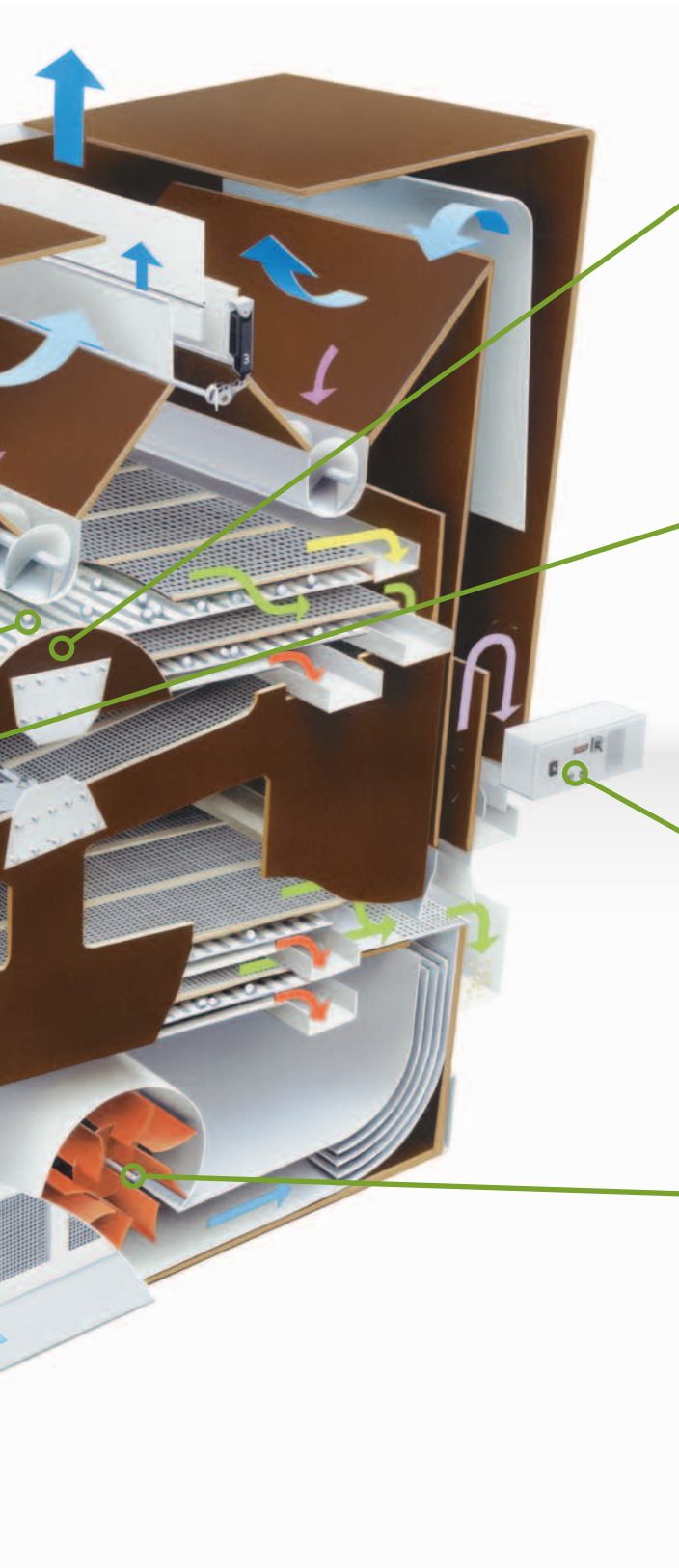
### SCREENS

The Cimbria screens are designed for highest possible efficiency and are effectively kept clean by rubber balls in special designed ball boxes. A high percentage of open area ensures maximum capacity in the machine.



DELTA  
CLEANERS

COMPLETE RANGE  
OF PRODUCTS AND  
TOTAL SOLUTIONS



SCREEN SHOES



The screens shoes are made in coated marine plywood to ensure a long lifetime. With its strong and flexible structure, this material is extremely resistant against the constant movement in the machine. Wear areas inside the screen shoes are protected by easy replaceable plates in hardened steel.

ECCENTRIC SYSTEM



The eccentric system is designed to drive the screen shoes and create a gentle flow of product through the machine. The weight of each screen shoe is optimized to ensure a well-balanced and smooth motion. Supplied as standard with flywheel to recapture the force created by the movement of the screens shoes and reduce the power consumption.

ELECTRONIC  
CONTROL SYSTEM



Cimbria fine cleaners are supplied with an electronic control system. The system consists of a control panel which operates actuators and motors with integrated frequency control. The actuators operate numerous air gates inside the machine, and with digital adjustment settings ranging from 0-100, the accuracy in the settings are very high.

AIRLIFTING SYSTEM



The airlifting system consist of the airlifting unit providing a positive air flow from below the product and the negative air from the after-suction above. The unit is equipped with two staggered fans which ensures a homogenous air flow through the product on the final air screen. This combined with the electronic control system provides the most precise air separation adjustments on the market.

OPERATOR SAFETY



Operator safety is our highest priority. The Cimbria cleaners are designed with covers to protect the operator from all moving parts. Samples from each outlet of the machine can be obtained with a special designed sample takers to ensure a user friendly and safe operation.



## DELTA CLEANER MODELS



DELTA 100 SERIES

### CIMBRIA DELTA SUPER CLEANERS

The Delta 100 Series has the most advanced air system on the market. This series is suitable for cleaning of all kinds of grain and seed. Ideal for difficult separations.

- Shaker feeder
- Air lifting fan
- Pre- and After-suction
- Electronic control system
- Flexible screen flow



DELTA 110 SERIES

### CIMBRIA DELTA FINE CLEANERS

The Delta 110 Series is similar in design to the 100 Series, except it does not include the air lifting fans. This series is suitable for cleaning of grain and seed.

- Shaker feeder
- Air lifting fan
- Pre- and After-suction
- Electronic control system
- Flexible screen flow



DELTA 120 SERIES

### CIMBRIA DELTA SCREEN GRADERS

The Delta 120 Series is designed for a precise grading of grain and seed.

- Shaker feeder
- Air lifting fan
- Pre- and After-suction
- Electronic control system
- Flexible screen flow



## OPTIONAL ACCESSORIES

### INLETHOPPER- & BUFFER BINS

Inlet hopper and buffer bins can be supplied with the Delta cleaner. This helps to ensure an even distribution of product in the full width of the cleaner. Buffer bin capacity of up to 2,5 m<sup>3</sup> can be installed, supported only by the frame of the cleaner. Further buffer bin capacity is available but will need additional external support.

### FANS

Aspiration can be supplied with the Delta cleaner; several different aspirations systems are available, and the solution for any application can be found within our range of fans.

### SPOUTING

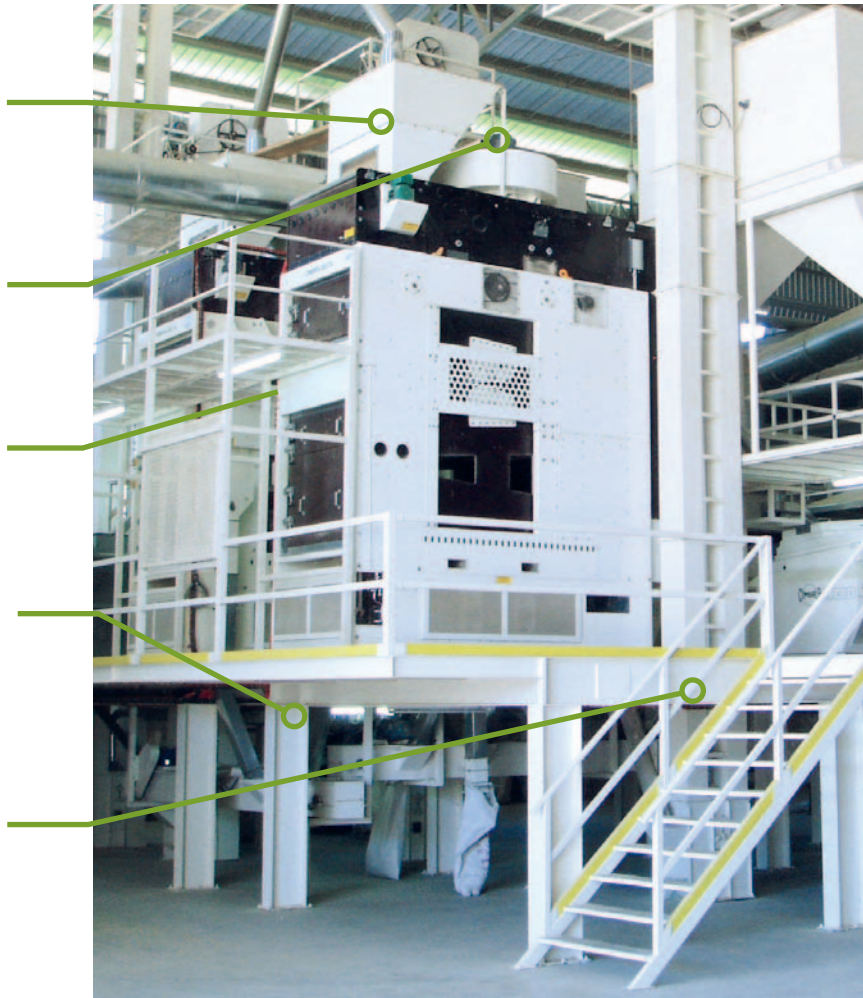
Spouting can be supplied with the Delta cleaner for easy connection with other equipment in the plant. Outlets on the Cimbria cleaners interconnect with the comprehensive Cimbria Q-spout system.

### STAND

A stand can be supplied with the Delta cleaner to ensure a solid and steady foundation for the installation. A stand can help ensuring the space needed to install conveyors for waste and clean product. Stands in different standard heights are available and customised stands can be offered to fit height requirements in a plant.

### PLATFORM

An access platform can be supplied with the Delta cleaner;. This ensures safe access to all needed areas of the cleaner. A platform will help ensuring a safe environment for the operator, and can help reduce the time needed for service and maintenance as well as the time needed to change screens. Platforms in different layouts are available, and customised platforms can be offered to fit layout requirements in a plant.





**A/S CIMBRIA**

Cimbria House  
Faartoftvej 22  
P.O. Box 40, 7700 Thisted  
DENMARK  
Phone: +45 96 17 90 00  
holding@cimbria.com  
www.cimbria.com

**CIMBRIA UNIGRAIN A/S**

Praestejorden 6  
7700 Thisted  
DENMARK  
Phone: +45 96 17 90 00  
unigrain@cimbria.com

**SOLUTIONS.  
TOGETHER.**