

# INNOVATIVE SOLUTIONS – EXTRAORDINARY RESULTS

## CIMBRIA LABORATORY AND SMALL BATCH SYSTEMS

### CENTRICOATER – CC LAB

The CC Lab is a manually-operated CENTRICOATER, for use in a laboratory, and for coating of single batches. The required amount of seed is measured manually by the operator. It is filled into the pre-bin. The slurry is prepared separately, and loaded into a syringe. After starting the drives, the seed is emptied into the mixing chamber, and the slurry is added. This is all done manually by the operator. After a certain time – the mixing time – the operator empties the CENTRICOATER and fills the coated batch into a prepared bin, placed at the discharge spout of the CC Lab.



### LAB GRAVITY SEPARATOR

Grains of approximately equal size and surface roughness can be graded into six fractions on this machine. Capable of yielding much better grading results than, for example, an air sifter, this machine is used predominately where the accuracy of air grading is no longer sufficient.

The rectangular deck is fitted with either a net or textile cloth cover, with mesh widths as required for the crop to be processed. An air stream is blown through the net or cloth from underneath. The drive motor imparts a shaking motion to the deck thereby transporting the produce in an upward direction towards the “heavy grain” output side.

A swinging chute takes the grain from the feed hopper to a single loading point on the deck, from where it spreads over the entire working surface in layers of different specific weight. The heavy grains sink on to the wire net (or cloth) which pushes them upwards towards the heavy grain output side, floating in the top layer of the mixture, the light-weight particles drift downwards in the direction of the table slope which can be adjusted in both length and inclination. From the deck side they drop into the light grain collecting hoppers.

The outflowing grains are gathered in lateral receptacles arranged alongside the machine.

### LAB CYLINDRICAL SCREENING MACHINE – LAB ZS

Lab Cylindrical screening machines are used for sorting and grading of seeds and cereals such as grain, maize, sunflower seed, rice and similar commodities as well as generally granular products such as recycling products.

The incoming material is sorted according to its width (round perforation) and respectively its thickness (slotted perforation).

All kernels thinner than the screen holes fall through the screen, and all thicker kernels remaining in the screening cylinder are transported to the end-outlet.

By means of the permanent circulation of the product and the resulting centrifugal force, each kernel is forced to be in contact with the screen perforation, enabling sorting operations to be carried out with high accuracy.



# INNOVATIVE SOLUTIONS – EXTRAORDINARY RESULTS

## CIMBRIA LABORATORY AND SMALL BATCH SYSTEMS

### CIMBRIA DELTA SUPER 101

Cimbria DELTA Super 101 has been developed for high quality fine cleaning of malting barley, seed grain, legumes, grass and garden seeds.

The machine's efficient screen system with its accurately matched stroke and frequency is complemented by Cimbria's highly developed pre- and post-suction system. One airlifting blower at the bottom of the machine ensures unrivalled air cleaning and grading.

This DELTA cleaner can, in a few minutes, be converted to different cleaning programmes, e.g.:

- Beans, lupine seed, maize
- Oats, wheat
- Malting barley
- Rye grass, Red fescue
- Rape, peas, lentils



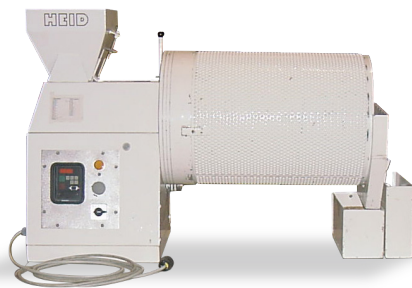
### LAB INDENT CYLINDER – LAB HSR

Lab Indent cylinders are used for length grading of all granular materials such as wheat, oat, maize, rice, fine, lentils, stones from peas, sticks from sunflower or sugar beet, plastic particles etc., as well as for the extraction of unwanted short or long admixtures.

The granular material to be graded flows through a feeding device into the interior of the rotating cylinder whose cover is provided with special deep drawn “tear-drop or spherical“-shaped pockets for the most precise length separation.

The grains that embed themselves fully into the indents, will be lifted and after a certain distance (adjustable to suit) will fall out of the pockets under gravity into the trough (Trough-Product) and will be discharged by means of a conveying screw.

Those kernel, however which are longer than the indent diameter will immediately slide out and remain on the inside surface of the indent cover (Shell-Product). This shell product flows to the discharge point of the cylinder and will be discharged into the outlet housing.



### LAB CHROMEX

Color sorting is necessary nowadays to ensure the best purity of bulk products, as well as ensuring that the strictest food hygiene and health requirements of end-products are met.

Utilizing top of the line Full-Color RGB cameras, with optical resolution of 0.06 mm the SEA CHROMEX is able to determine and sort the smallest differences in color or shade for your processing system. The combination of Full-Color vision system with NIR and InGaAs technologies makes the SEA CHROMEX the most advanced vision-based sorter on market, representing the fruits of almost 50 years' experience of color sorting technology.

Excellent for all food and industrial processing systems, SEA CHROMEX reaps the benefits of the new EXAGON interface that makes setting and adjustment extremely simple.

