westrup

# MACHINE CATEGORIES

## **EQUIPPED FOR CHANGE**



# AIR SCREEN CLEANERS

#### YOUR OPTIONS

Westrup offers a comprehensive range of air screen cleaning equipment for pre-cleaning, fine cleaning and grading for different types of crops. The air screen cleaners and graders can be designed specially to your needs ensuring the stability of your seed cleaning process.

#### YOUR SOLUTION

Our range of air screen cleaners and graders consist of basic machines and modular solutions.

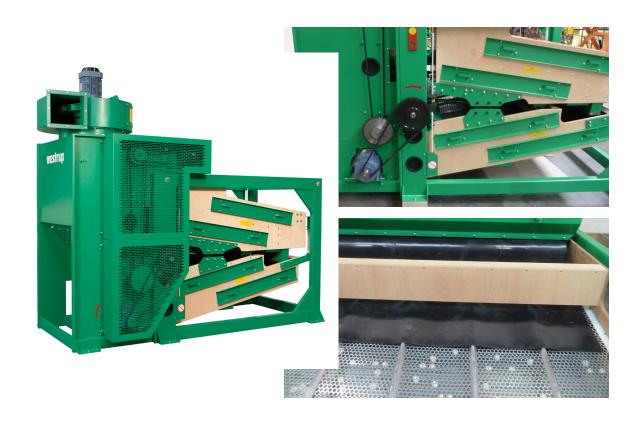
**BASIC MACHINES**: A basic machine can easily be part of a complex cleaning operation. Whether to choose a basic machine depends on your crop, your requirements and your processing needs.

MODULAR SOLUTIONS: Westrup's modular system offers you a choice of more than 60 different modules. When choosing a modular solution, we design the best cleaner or grader for your specific requirements. We select the exact combination of feeding, pre- and final aspiration and sieve modules that will make up the solution that suits your business goal.

**NAVIGATOR 4.0:** Our automation system, Navigator 4.0, enables you to achieve process stability. With easy access to machine settings, preset recipes and intelligent alarms you have full control of your air screen pre and fine cleaners.

Adding the Adaptive Aspiration Control will allow you to maintain a constant air flow in the product sorting zones, decreasing the amount of good product found the in waste.

# AIR SCREEN PRE-CLEANERS



#### REMOVAL OF LARGE IMPURITIES

Air screen pre-cleaners are used to remove large impurities from incoming seed and grain to relieve the following machines and ready the product for storage.

Westrup offers a comprehensive range of air screen pre-cleaning equipment for different purposes, among these for cleaning, sizing, pre-cleaning, market grade cleaning and food grade cleaning. Capacities range from low capacity machines suitable for grain storage facilities to high capacity machines suitable for high intake plants.

CAPACITIES: from 12-480 t/h based on wheat

TYPES: AS, CC, SD, SP & PC

# AIR SCREEN FINE CLEANERS



#### REMOVAL OF LIGHT IMPURITIES

Air screen fine cleaners remove light impurities by using a precise air stream to lift light foreign material away from the prime product and sieveboats with scalping and sand screens to remove small and large impurities.

Westrup offers many versatile air screen fine cleaning machines suitable for many purposes, amongst these precision cleaning, fine cleaning and sizing.

CAPACITIES: from 1.7-48 t/h based on wheat

TYPES: AP, CC, FP, FAU, GAU, UB, UC & UP

# MODULAR GRADERS



### CALIBRATION OF PRODUCT

Graders are used for separating the product into different grades.

Our modular graders are very compact machines ensuring an accurate sizing into 4 different fractions in just one operation. The machines are suitable for many types of crops especially sunflower seeds, soya beans and corn.

CAPACITIES: from 3.5-38 t/h based on corn [2

grades)

TYPES: GD & GP

## INDENTED

# **CYLINDERS**

#### SEPARATION BY LENGTH

Our modular indented cylinders, type TR, offer the option of building several units together to meet specific grading requirements. We also offer an indented cylinder, type H-500, as a stand-alone machine.

These machines handle the separation of short product, long product or both short and long product according to the cylinder combination.

The trough posisition can be manually or electrically adjusted from the outside, by using a reader-friendly scale. This way it becomes easy to achieve the required separation of a wide range of products.

CAPACITIES: from 1-25 t/h based on wheat

(short separation)

TYPES: TR & H-500



### GRAVITY

# **SEPARATORS**

### SEPARATION BY WEIGHT

Gravity separation is used for fine grading and removal of impurities with identical particle size but with differences in density. Our gravity separators have a highly efficient air intake with a built-in fan ensuring a uniform air distribution across the entire deck.

Weight separation is often performed in addition to air screen cleaning and length separation to achieve the desired product purity.

CAPACITIES: from 1.5-18 t/h based on wheat

TYPE: KA



# FLAT SCREEN **SIZERS**

#### FLEXIBLE CLEANING

Flat screen sizers are used for calibration of different crops. We offer very flexible units for pre-cleaning, fine cleaning and sizing, which are easily tailored to any product by choosing suitable screens for the product in question.

CAPACITIES: from 0.7-1.5 t/h based on wheat

TYPE: FB & VBS



## SPIRAL

# **SEPARATORS**

## SEPARATION OF FLAT FROM ROUND SEED

A spiral separator is designed to separate round seeds from flat seeds by means of gravity. We offer various spiral inclinations depending on the type of product to achieve the highest purity of prime product.

This machine can be built with 2 spirals (HT-2) as shown on picture or with up to 8 spirals in one machine.

CAPACITIES: from 0.1-1.6 t/h (HT-2) based

on soya beans

TYPE: HT



## STRAW

## **SEPARATORS**

### REMOVAL OF STRAW AND COAR-SE IMPURITIES

Our straw separator is an efficient pre-cleaner suitable for intake plants with high moisture-content crops containing a particularly high amount of straw and coarse impurities.

The large diameter rotating straw drums and manually adjustable product flow plates gives an optimal removal of straw and other large particles. Two mesh sizes are available to meet the requirements of any crop.

CAPACITIES: from 100-250 t/h based on wheat

TYPE: HG



## DE-AWNERS

## REMOVAL OF AWNS, HUSKS AND CLIPPING OF SEED

De-awners are used for pre-treatment of various grain types; the purpose of the de-awning operation is to remove awns om barley kernels, loose husks from wheat and to clip oat kernels.

The de-awner can be used where heavy de-awning i required but also for products where only a light de-awning is needed. The degree of de-awning depends on the amount of time the product takes to pass through the housing of the machine.

CAPACITIES: from 6-25 t/h based on wheat

TYPE: CW. CW-D & CWJ



## BRUSHING

## **MACHINES**

#### POLISHING AND SPLITTING SEED

Brushing machines are very useful in grass seed installations, especially for splitting twin kernels.

The machines are very easy to clean and therefore very suitable for basic seed plants and installations for the production of flower and garden seed.

The rotating shaft can be installed with different types of brushes or steel beaters to ensure a highly efficient treatment of a wide range of products.

CAPACITIES: from 0.5-1.5 t/h based on grass

seed

TYPE: HA



# FLUID BED DRYERS

#### A DRYER AFTER TREATMENT

Our fluid bed dryer is designed as a surface dryer to use after a chemical treatment process and can be used for most kinds of treated seeds.

The inlet section is built to ensure an even spread of product over the full working width of the machine.

For very fragile seeds, it is recommended to fit the FBD with variable speed to protect the seeds from being damaged during processing.

CAPACITIES: from 6-15 t/h based on corn

TYPE: FBD



### DRUM

# **CLEANERS**

## REMOVAL OF COARSE IMPURITIES

The drum cleaner (DC) and drum pre-cleaner (DP) are used to remove coarse impurities, such as paper, pieces of wood or corn cobs from the main product.

Both drum cleaners are suitable for intake sections and silos to relieve the following machines and conveyors.

CAPACITIES: from 100-200 t/h based on wheat

TYPE: DC & DP



## BELT & SCREW

# **CONVEYORS**

## TRANSPORTION OF PRODUCT BETWEEN PROCESSES

We offer different types of screw and belt conveyors to transport product safely from one process to the next.

Different widths are available to match capacity requirements, the type of product processed and the needs of the plant.

TYPE: BT & SN



## TRANSPORTATION

## **ELEVATORS**

## TRANSPORTATION OF PRODUCT BETWEEN PROCESSES

Our elevators are suitable for transport of a wide range of products, including oleaginous seeds.

Different widths and heights are available to match capacity requirements, the type of product processed and the needs of the plant.

TYPE: EL



## BOX TIPPERS

#### **EMPTYING SEED BOXES**

A box tipper is used for emptying seed boxes. After the seed box has been placed in the integrated box rotator, the box tipper rotates the box until it is completely empty.

Our box tipper is designed to minimise dust emission when emptying boxes, as the housing has two connections to the aspiration system. Different widths are available.

TYPE: KV



#### **HEAD OFFICE**

Denmark

SOROEVEJ 21 DK-4200 SLAGELSE DENMARK

PHONE: +45 58 52 25 64 FAX: +45 58 52 52 51 E-MAIL: INFO@WESTRUP.COM

#### **WESTRUP CHINA**

Jin Jianjun

PHONE: +86 0937 26 25 352

MAIL: CHINA@WESTRUP.COM

#### **WESTRUP FRANCE**

Christine Coutard

PHONE: +33 (0)2 41 66 08 19 FAX: +33 (0)9 70 32 06 21 MAIL: FRANCE@WESTRUP.COM

#### **WESTRUP GERMANY**

Frank Düing

PHONE: +49 171 1897 340 FAX: +49 3222-5002722 MAIL: GERMANY@WESTRUP.COM

#### **WESTRUP SOUTH PACIFIC**

Jim Hole

PHONE: +61 (0) 298 445 430

MOBILE: +61 (4000) 35 326

FAX: +61 (2) 98 445 445

MAIL: AUSTRALIA@WESTRUP.COM

#### **WESTRUP USA**

Jonathan Mohn

PHONE: +1 (972) 881 8557 MOBILE: +1 (605) 695 1095 MAIL: US@WESTRUP.COM

