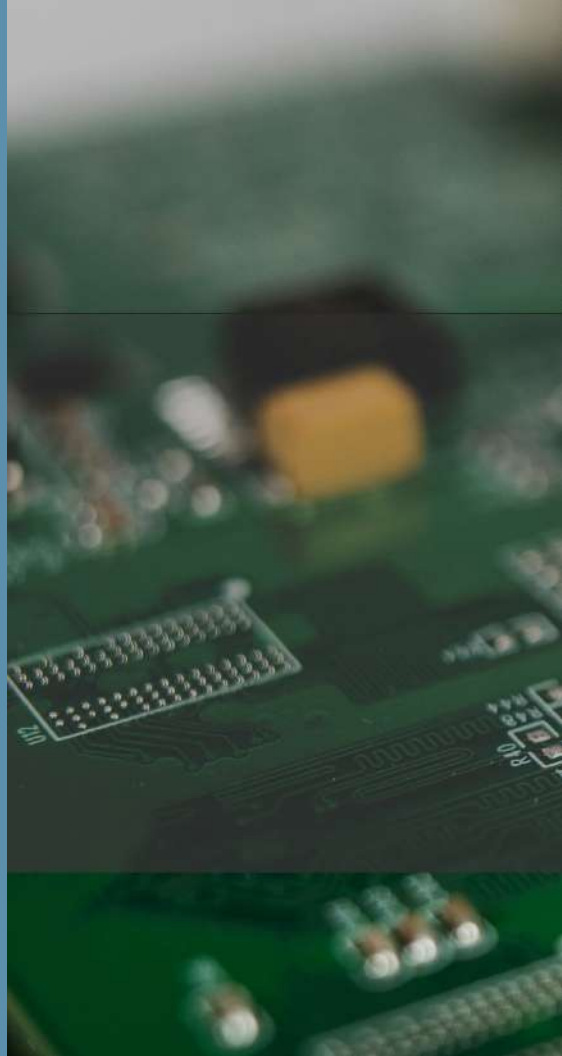


VISTA SORT



See the difference.™



# COMPANY PROFILE

VistaSort's focus on process separates us from other manufacturers and drives us to design for applications with specific purposes. VistaSort color sorters are custom built for the required process whether for a food product or recyclable material and is adaptable for a variety of commodities.

Based on advanced CCD technology, our optical sorters have been developed with exceptional accuracy to increase the purity of products such as beans, pulses, grains, peanuts, rice, leaf tobacco and plastics. Because of this success, we have our optical sorters installed in more than sixty countries around the world.

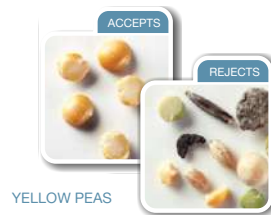
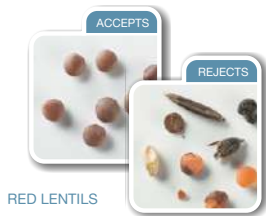
Our commitment to serve customer needs is highlighted with the addition of an optional Infra-Red camera

# TECHNOLOGY

Research and development on the LED lighting systems with the world's top lighting manufacturers has taken color sorting to new levels. The advancement of a more optimized optical system integrated with the calibration systems in German professional camera applications, has allowed our equipment to achieve the highest signal/noise ratio and vastly improved the stability of color sorting.

The human interface of our machines is very easy to operate, enabling operators of all experience levels to test and use the color sorter. Multilingual support provides all of our customers with improved service. Our optimized processing method provides superior color selection and ensures that our products meet the most stringent industry requirements.





# APPLICATIONS

The VistaSort will remove foreign material (sticks, debris, stones), color defects (caused by disease, immaturity or moisture damage), splits, and uncorticated seed in Pulse Crops such as Lentils, Beans and Peas. In Cereal Grains, we can remove all types of contaminants (sticks, hulls, stones), ergot, foreign material (i.e. wild oats), discolored seeds, as well as immature and diseased kernels.

There is often little difference to distinguish between good and undesired materials. The VistaSort achieves the highest standard of sorting in the industry.





# COMPONENTS

## EJECTORS

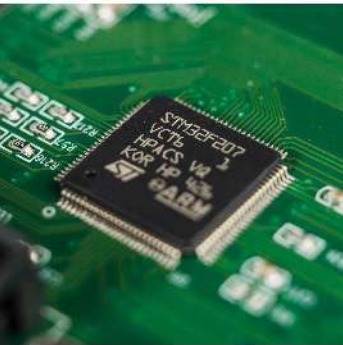
VistaSort imports the latest in electromagnetic solenoid valves from Italy. These ejectors provide high precision and accuracy along with a 10 billion ejection life.

## DSP + FPGA

VistaSort uses the latest in DSP and FPGA chips from the USA to provide the computing power to collect and process the large amounts of data required by the high throughput of our sorters.

## CCD CAMERAS

Imported from Japan, VistaSort's cameras use a high-end 2048 pixel CCD camera and provides a  $0.04\text{mm}^2$  pixel resolution. When the VistaSort's intelligent sorting algorithms are combined with the high resolution cameras, industry leading color detection results.





## IR CAMERAS AND HIGH INTENSITY HALOGEN LIGHTING

The addition of high resolution Infra-Red cameras to the VistaSort provide superior foreign material detection. Using the latest in high intensity halogen lighting for the IR system ensures the system can detect the smallest differences in IR defects.

## INTELLIGENT IMAGE PROCESSING ALGORITHM

We have developed a complex algorithm so that even the smallest of impurities can be detected.

## OPTICAL SYSTEM

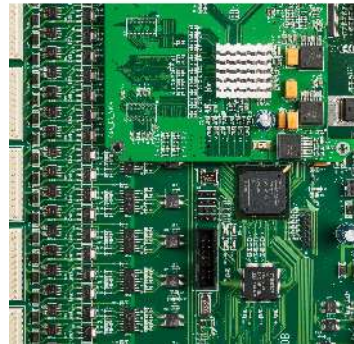
Compact system design, a precise calibration system, combined with an intuitive machine interface makes our machine operator friendly.

## 300MM WIDE CHUTE

Our 300mm wide chute is built with a special anodizing process and was designed to meet specifications required for many applications around the

## DUST EXTRACTION

Redesigned chute top and discharge dust extraction ensure a minimum of dust to interfere with the detection of defects.



# SPECIFICATIONS

VISTASORT IR MACHINE MODEL	CCD - 1 - 72 IR	CCD - 2 - 144 IR	CCD - 3 - 216 IR	CCD - 4 - 288 IR	CCD - 5 - 360 IR
PRODUCT THROUGHPUT (TONNE/HR)	0.5~4	1~8	1.5~12	2~16	2.5~20
SORTING ACCURACY (%)	≥99.99	≥99.99	≥99.99	≥99.99	≥99.99
REJECTION BAD:GOOD (With Re-Sort)	10:1	10:1	10:1	10:1	10:1
VISIBLE CAMERA RESOLUTION (mm <sup>2</sup> )	0.04	0.04	0.04	0.04	0.04
INFRA-RED CAMERA RESOLUTION (mm <sup>2</sup> )	0.16	0.16	0.16	0.16	0.16
MAX POWER CONSUMPTION (kW)	1.4	1.6	1.8	2.1	2.4
POWER SUPPLY (voltage/frequency)	120V/60Hz or 240V/50Hz	120V/60Hz or 240V/50Hz	120V/60Hz or 240V/50Hz	120V/60Hz or 240V/50Hz	120V/60Hz or 240V/50Hz
AIR PRESSURE MPa (psi)	0.6 - 0.8 (90-115)	0.6 - 0.8 (90-115)	0.6 - 0.8 (90-115)	0.6 - 0.8 (90-115)	0.6 - 0.8 (90-115)
AIR VOLUME L/Min (cfm)	300-750 (10-25)	600-1500 (20-50)	1000-2000 (35-70)	1500-2400 (50-85)	2000-3000 (70-105)
WEIGHT Kg (lbs)	250 (550)	400 (880)	600 (1320)	800 (1760)	1000 (2200)
WIDTH X DEPTH X HEIGHT Dimensions mm (inches)	932 X 1610 X 2060 (36.5 X 63.5 X 81)	1246 X 1610 X 2060 (49 X 63.5 X 81)	1560 X 1610 X 2060 (61.5 X 63.5 X 81)	1874 X 1610 X 2060 (74 X 63.5 X 81)	2188 X 1610 X 2060 (86 X 63.5 X 81)

SEEDS ○ GRAINS ○ PULSES ○ BEANS ○ NUTS ○ RICE ○ COFFEE ○ TEA ○ TOBACCO ○ PLASTICS

Output, sorting accuracy and rejection are dependent on percentage of impurities.

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