

VISTA SORT^{IR}







COMPANY PROFILE

As a leader in supplying World Class Machinery, LMC has been offering solutions to the Food and Grain Industries for over 70 years.

LMC's focus on the process separates it from other manufacturers and drives us to design applications with specific purposes. LMC equipment is 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. And because of this success, we have our optical sorters installed in more than sixty countries around the world.

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), discoloured 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.





BARLEY



MUSTARD



NAVY BEANS



SUNFLOWER



PEANUTS



WHEAT



YELLOW PEAS



CANARY SEED



COMPONENTS

EJECTORS

Imported from Italy. The ejectors contain a high-frequency electromagnetic solenoid valve that operates with a 10 billion ejection life, millisecond precision and a consistency of near-zero error to ensure high accuracy.



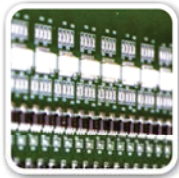
DSP + FPGA

Our control chip is made in the USA. The combination of DSP and FPGA produces powerful computing capabilities. It has extremely fast data collection and can process large amounts of information and perform various operations simultaneously.



CCD CAMERAS

A Japanese high-end 2048 pixel CCD chip camera can identify spots as small as 0.04mm. When coupled with intelligent algorithms, the optical design provides a more accurate color selection.



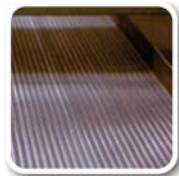
INTELLIGENT IMAGE PROCESSING ALGORITHM

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 world.

LMC VISTASORT CCD TECHNICAL SPECIFICATION

| PRODUCT NAME | VISTASORT | VISTASORT | VISTASORT | VISTASORT | VISTASORT |
|--|---------------|---------------|---------------|---------------|---------------|
| MODEL | CCD - 2 - 126 | CCD - 3 - 189 | CCD - 4 - 252 | CCD - 5 - 315 | CCD - 6 - 378 |
| PRODUCT OUTPUT (MT/H) | 1.0~5 | 2.0~10 | 3.0~15 | 4.0~20 | 5.0~25 |
| 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 |
| WEIGHT Kg (lbs) | 670 (1480) | 820 (1810) | 970 (2140) | 1120 (2470) | 1170 (2800) |
| SMALLEST RESOLUTION (mm ²) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| POWER (kW) | 1.4 | 1.6 | 1.8 | 2.0 | 2.2 |
| WARRANTY | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR |
| POWER SUPPLY (voltage/frequency) | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz |

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

LMC VISTASORT CCD TECHNICAL SPECIFICATION

| MODEL | WIDTH X DEPTH X HEIGHT Dimensions mm (inches) | AIR REQUIREMENTS | POWER CONSUMPTION |
|-----------|--|---|-------------------|
| CCD-2-126 | 1320 x 1500 x 2253 (52 X 59 X 89) | 600 - 1500 L/Min, 0.6 - 0.8MPa 20-50 cfm, 90-115 psi | 1.4 KW |
| CCD-3-189 | 1660 x 1500 x 2253 (65 X 59 X 89) | 1000 - 2000 L/Min, 0.6 - 0.8MPa 35-70 cfm, 90-115 psi | 1.6 KW |
| CCD-4-252 | 2020 x 1500 x 2253 (80 X 59 X 89) | 1500 - 2400 L/Min, 0.6 - 0.8MPa 50-85 cfm, 90-115 psi | 1.8 KW |
| CCD-5-315 | 2256 x 1500 x 2253 (89 X 59 X 89) | 2000 - 3000 L/Min, 0.6 - 0.8MPa 70-105 cfm, 90-115 psi | 2.0 KW |
| CCD-6-378 | 2438 X 1500 X 2253 (96 X 59 X 89) | 2500 - 3400 L/Min, 0.6 - 0.8MPa 90-120 cfm, 90-115 psi | 2.2 KW |

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

LMC VISTASORT IR TECHNICAL SPECIFICATION

| PRODUCT NAME | VISTASORT IR | VISTASORT IR | VISTASORT IR | VISTASORT IR | VISTASORT IR | VISTASORT IR | VISTASORT IR |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| MODEL | CCD-1-72 IR | CCD-2-144IR | CCD-3-216 IR | CCD-4-288 IR | CCD-5-360 IR | CCD-6-432 IR | CCD-7-504 IR |
| PRODUCT OUTPUT (MT/H) | 0.5~2.5 | 1.0~5 | 2.0~10 | 3.0~15 | 4.0~20 | 5.0~25 | 6.0~30 |
| SORTING ACCURACY | ≥ 99.99 | ≥ 99.99 | ≥ 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 | ≥ 10:1 | ≥ 10:1 |
| WEIGHT Kg (lbs) | 250 (625) | 400 (880) | 600 (1320) | 800 (1760) | 1000 (2200) | 1200 (2640) | 1400 (3080) |
| SMALLEST RESOLUTION (mm ²) | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| WARRANTY | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR | ONE YEAR |
| POWER SUPPLY (voltage/frequency) | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz | 120V/60Hz |

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

LMC VISTASORT IR TECHNICAL SPECIFICATION

| MODEL | WIDTH X DEPTH X HEIGHT Dimensions mm (inches) | AIR REQUIREMENTS | POWER CONSUMPTION |
|--------------|--|------------------------------------|-------------------|
| CCD-1-72 IR | 888 x 1634 x 1969 (36 x 65 x 78) | 300 - 750 L/Min 10 - 25 cfm | 1.5 KW |
| CCD-2-144IR | 1188 x 1634 x 1969 (48 x 65 x 78) | 600 - 1500 L/Min 20 - 50 cfm | 1.6 KW |
| CCD-3-216 IR | 1488 x 1634 x 1969 (60 x 65 x 78) | 1000 - 2000 L/Min 35 - 70 cfm | 1.7 KW |
| CCD-4-288 IR | 1788 x 1634 x 1969 (72 x 65 x 78) | 1500 - 2400 L/Min 50 - 85 cfm | 1.8 KW |
| CCD-5-360 IR | 2088 x 1634 x 1969 (84 x 65 x 78) | 2000 - 3000 L/Min 70 - 105 cfm | 1.9 KW |
| CCD-6-432 IR | 2388 x 1634 x 1969 (96 x 65 x 78) | 2500 - 3500 L/Min 90 - 125 cfm | 2.0 KW |
| CCD-7-504 IR | 2688 x 1634 x 1969 (108 x 65 x 78) | 3000 - 4000 L/Min 105 - 145 cfm | 2.1 KW |

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

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 improve 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 support. Our optimized processing method provides superior color selection and ensures that our products meet the most stringent industry requirements.



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