MULTI-FUNCTIONAL COLOUR SORTING EQUIPMENT CATALOG

FOR BEANS, NUTS, SEEDS, SPICES, WHEAT, SEAFOOD SORTING

BROUGHT TO YOU BY:

AGRO TECH SOUTH AFRICA

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14 CORE TECHNOLOGIES

Deep-learning Algorithm
Realize the learning of multidimensional characteristics such as color, shape, texture, area, etc. Continuously improve and iterate data.

AMD Cloud Database
AMD invested to build an open mass sorting application database, cloud interactive storage, a wide range of material solutions are exclusively created for you. We share the convenience and value of the big data era with users.

Intelligent Control Dimming System
AMD intelligent control light source system has been upgraded again. High brightness, high penetration light source, intelligent control system matches material sorting requirements and changes in the environment, and the penetration ability of dark light and dark light absorbing parts is comprehensively improved.

AMD S-Class Vision System
Designed for HD recognition of extremely small and light foreign objects, it perfectly achieves ultra clear, stable, and precise recognition. Precise targeting, precise hitting.

All Things Connected
Real-time online AMD cloud platform, remote interconnection, control, maintenance, early warning, upgrade, operation and maintenance data, intelligent online inspection, etc., can easily have real-time services, your exclusive online butler.

Target Position 3.0 Algorithm
Based on the characteristics of the material and adopting surface information extraction and multi-point ultra high speed processing technology. The center of mass dynamic 3.0 processing algorithm can quickly locate impurities and accurately strike them.

Balanced Feeding System
Intelligent analysis adaptive material level flow rate system, balance the flow of the production line to ensure the best sorting effect, better production capacity, and unattended.

Breathable Bionic Wind Net System
Engineering bionic design, intelligent breathing air network system, multi-directional separation design, non-stop cleaning, more thorough cleaning.

Spectral Fusion Detection Technology
AMD is the first to break through the spectral fusion identification technology. Spectral fusion is more complementary, color, material, shape sorting, and impurity identification capabilities have been significantly improved.

Super Alloy UHF Solenoid Valve
Customized spray valves for materials, adopt high-density arrangement layout, filamentary airflow hitting technology, and accurately remove. Wear-resistant and high- temperature resistant superalloys, matched for life.

Intelligent Collection Auto Learning System
The AMD Kunpeng intelligent sample collection autonomous learning system expands and eliminates sample data through methods such as characteristic labeling, morphological labeling, and associated/non associated feature labeling of biological samples. Continuously optimizing the sorting effect, bringing a simple and effective control experience.

Bicolor Space Algorithm
The dual color space algorithm can intelligently extract subtle feature differences of materials, select the best recognition color gamut and image capture, and comprehensively solve the problem of sorting extremely small differences in color, shape, material, etc

AMD Open Source Large Model
AMD has independently developed a user sharing online data platform, with a total open source sample data volume exceeding 20 billion, and a leading database volume and segmented categories. Empowering users with massive data support, the sorting effect can continuously evolve.

HD Deep Learning Technology
Adopting the latest HD deep learning algorithm and multi-dimensional fusion algorithm, it can detect subtle details and achieve perfect quality.

OPTICAL SORTING SOLUTIONS FOR VARIOUS GRAIN MATERIALS


X640 X-RAY DETECTOR

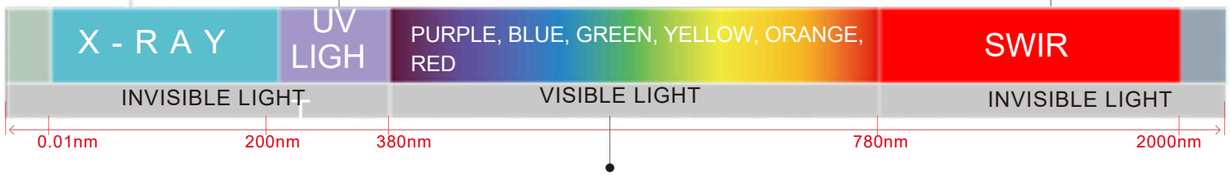

KXA6


Y+ AFLATOXIN GRAIN SORTER


LI


NI InGaAs SORTER


RCI



VIS-LIGHT BASED SORTER


Z


RC


NY


LG


LM


LQ


LY

AGRO TECH SOUTH AFRICA

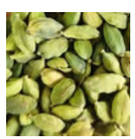
HOUSE-HOLD **MINI SORTING MACHINE**

LAB UNIT

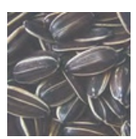
- **Ultra-high Integration For Greater Efficiency One-piece**
- **Molding, Compact Structure, Convenient And Practical**

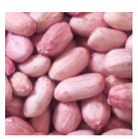
The AMD® Z series mini products are specially customized for users with refined sorting needs. It inherited various mature technologies of AMD with small stature and great intelligence. Its small structure, convenient and practical, minimalist design allow to achieve extraordinary sorting performance. And the brand-new platform architecture brings standardization, modularization, high stability, low failure rate.

SORTING APPLICATIONS


Cardamoms


Cashews


Sunflower Seeds


Peanuts


Mung Beans


Corns

●●●

CORE TECHNOLOGIES

Compact design, convenient installation and operation, super intelligent control and easy to get started, it meets the needs of small batch processing and sorting of various materials.

Built by a national level specialized and innovative enterprise platform in China, Z series provides small and refined mini sorting solutions.

Proven great quality and reliability.

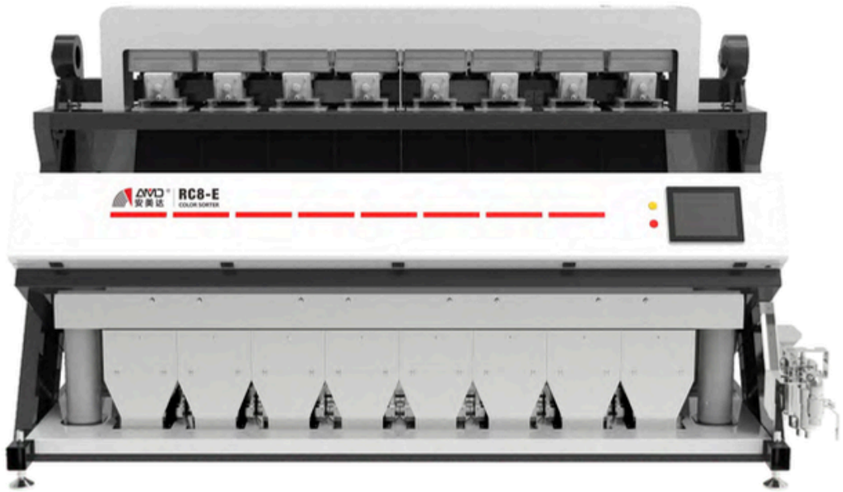
PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LC60	0.5-1	≥ 99.9%	220/50	1	280	873*1615*1530
RC1	1-2	≥ 99.9%	220/50	1.5	650	1944*1784*1530

Note: The above parameters will vary according to the impurity content of raw materials.

RC | MULTI-FUNCTIONAL VERTICAL COLOR SORTER

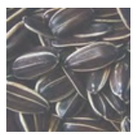
WIDELY APPLICABLE COST-EFFECTIVE MACHINE

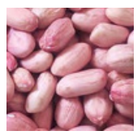


The AMD® RC-E series are multi-functional color sorters designed for various types of grains. It adopts customized lenses and high-speed electromagnetic execution structures. It can automatically remove impurities from the raw materials, with high sorting accuracy, high efficiency, easy operation and maintenance. Combining over 20 years of visible light technology and massive material application, RC-E has excellent color sorting performance

SORTING APPLICATIONS


Coffee Beans


Seeds


Peanuts


Mung Beans


Dried fruits


Corns

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TOP FEATURES

- Intelligent Algorithms
  More efficient operation and more accurate recognition.
- Standard Modular Hardware Platform
  High stability, low failure rate.
- Pure Sorting Performance
  Ultra-high sorting accuracy, ultra-low carryover ratio.
- Expandable And Compatible Design
  Expandable 3-lens structure, compatible with 4-lens algorithm

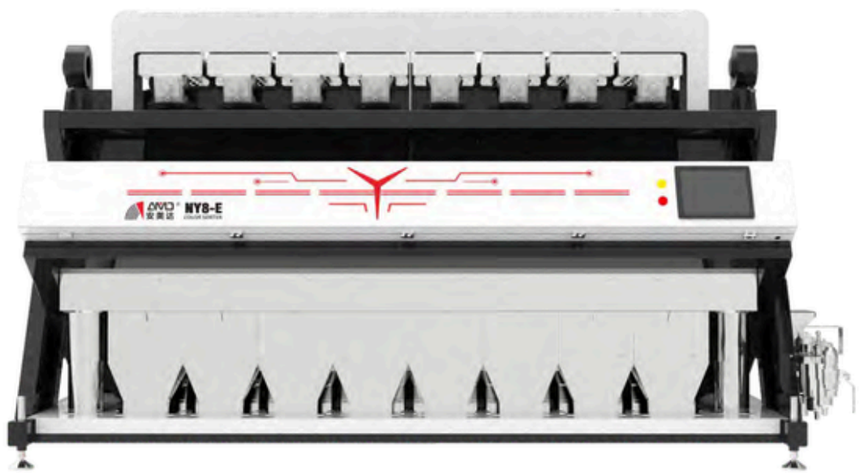
PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
RC2E	1-2.5	≥ 99.9%	220/50	1.5	800	1403*1829*1887
RC3	2-3.5	≥ 99.9%	220/50	2.2	960	1718*1829*1887
RC4	2.5-4	≥ 99.9%	220/50	2.9	1120	2033*1829*1887
RC5	3-5	≥ 99.9%	220/50	3.7	1280	2348*1829*1887
RC6	3.5-6	≥ 99.9%	220/50	4.4	1440	2663*1829*1887
RC7	4-7	≥ 99.9%	220/50	5.2	1600	2978*1829*1887
RC8	4.5-8	≥ 99.9%	220/50	5.9	1800	3293*1829*1887
RC10	5-10	≥ 99.9%	220/50	7.3	2150	3933*1829*1887
RC12	6-12	≥ 99.9%	220/50	8.8	2500	4563*1829*1887

Note: The above parameters will vary according to the impurity content of raw materials.

NY | VERTICAL HIGH-END
SORTING MACHINE

HIGH DEFINITION HIGH-END



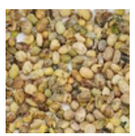
NY(KP-E) Deep Learning Technology Available

Equipped with industry-leading deep learning technology and a collection of leading edge technologies, the AMD® NY series are high-end sorting equipments designed for various grains. They adopt a rich and diverse technical architecture, which can meet the high-precision and high-definition sorting needs of users in color, shape, texture, square, material, etc.

SORTING APPLICATIONS

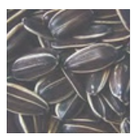
AI Sorting

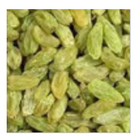

Soybean Accept

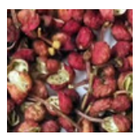

Soybean Reject


Chickpea Accept


Chickpea Reject

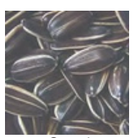

Sunflower Seeds

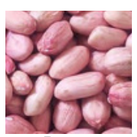

Grapes


Peppercorn

Color Sorting


Coffee Beans


Seeds


Peanuts


Mung Beans


Dried fruits


Corns

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CORE TECHNOLOGIES

- The industry's first deep learning technology, multi-dimensional recognition, only for the best sorting effect.
- The fusion of ultra definition and ultra precision technology can achieve perfect sorting results.
- 20 billion level self-collected open source material database, which can be shared among users.
- Industry leading hardware configuration, with core components customized by high-end brands.

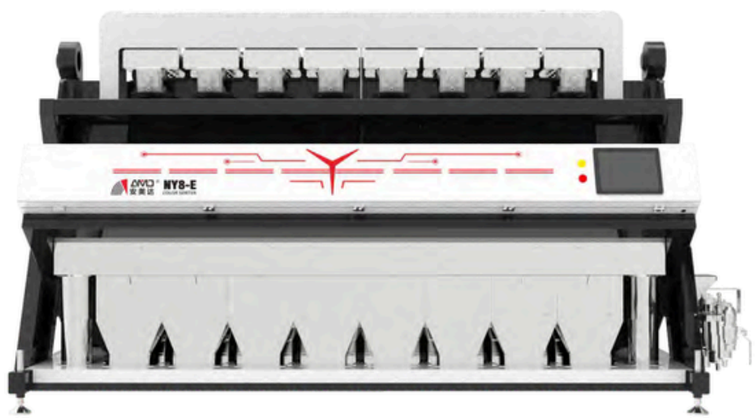
PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
NY3-E / NY3(KP)-E	2-3.5	≥ 99.9%	220/50	2.2	947	1847*1777*1887
NY4-E / NY4(KP)-E	2.5-4	≥ 99.9%	220/50	2.9	1162	2162*1777*1887
NY5-E / NY5(KP)-E	3-5	≥ 99.9%	220/50	3.7	1300	2478*1777*1887
NY6 -E/ NY6(KP)-E	3.5-6	≥ 99.9%	220/50	4.4	1450	2819*1829*1887
NY7-E / NY7(KP)-E	4-7	≥ 99.9%	220/50	5.2	1620	3132*1823*1887
NY8-E / NY8(KP-E	4.5-8	≥ 99.9%	220/50	5.9	1820	3447*1823*1887
NY10-E / NY10(KP)-E	5-10	≥ 99.9%	220/50	7.3	2170	4087*1823*1887
NY12-E / NY12(KP)-E	6-12	≥ 99.9%	220/50	8.8	2520	4840*1881*1887

Note: The above parameters will vary according to the impurity content of raw materials.

NI | VERTICAL INFRARED SORTING MACHINE

MULTIDIMENSIONAL SPECTRUM KERNEL-SHELL SEPARATION



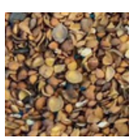
Configuration options are available to meet different sorting requirements.

N I Single-lens dual-band infrared imaging +multi-dimensional camera

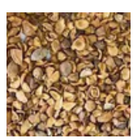
NI D Dual-lens dual-band infrared imaging +multi-dimensional camera

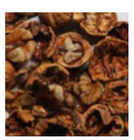
AMD® NI series products adopt multi-dimensional spectrum design, new modular platform structure, independent lighting and cooling system, and are widely used in the separation of kernels and shells of various nuts such as pistachios, almonds, walnuts, etc.

SORTING APPLICATIONS


Raw Material of Almonds


Almond Kernels


Almond Shells


Raw Material of Walnuts


Walnut Kernels


Walnut Shells

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CORE TECHNOLOGIES

- Applied high-end infrared technology, the sorting performance of non-kernel impurities is better, and it helps to achieve ultimate quality.
- The NID series are equipped with dual-lens, dual-band infrared imaging, and multi-dimensional camera, which can achieve better sorting performance for diaphragma juglandis and shell wrapped kernels.
- Equipped with InGaAs lens, the NI sorter can effectively separate kernels and shells of nuts that are similar in color.
- Integrating ultra definition and ultra precision technology, each breakthrough is only for better sorting and processing.

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
NI1 / NID1	0.5-1.5	>99.9%	220/50	3.2 / 3.3	600	1220*1829*2090
NI3 / NID3	1.5-2.5	>99.9%	220/50	4.6 / 4.9	1084	1750*1829*2090
NI5 /NID5	2.5-4.5	>99.9%	220/50	9.4	1460	2480*1829*2090

Note: The above parameters will vary according to the impurity content of raw materials.

LG | BELT TYPE AI-POWERED SORTING MACHINE

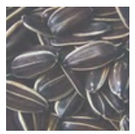
FAST BELT TYPE SHORT FOCUS LENS

LG Deep Learning Technology

The AMD® LG series products adopt deep learning and multi-dimensional UHDR technology, allowing users to share the industry's largest, most comprehensive, and most precise open-source model database. They have multi-dimensional and multi- characteristic identification of materials including color, shape, texture, area, light and shade, etc. Problems such as micro color difference, micro shape difference, and impurities of the same color that are hard to identify in conventional sorting can be easily solved.

SORTING APPLICATIONS


Beans


Seeds


Peanuts


Dried Fruits


Seafood


Nuts


Spices

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CORE TECHNOLOGIES

- Four dimensional ultra definition recognition technology, strong integration of ultra clear and ultra precision, achieving extraordinary quality.
- 20 billion level self-collected open source material database, which can be shared among users.
- Optional high-end infrared configuration, better separation of foreign objects and impurities, easily achieving ultimate quality.
- New optimized architecture design, stronger adaptability to harsh sorting conditions, allowing users to enjoy a superior sorting experience.
- Higher throughput and better sorting effects endow product quality with stronger competitiveness, making it a great choice for high-end users.

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LG1(KP+Hi)	0.5-1	≥ 99%	380/50	2.5	860	3273*1110*1782
LG2(KP) / LG2(KP+Hi)	0.5-1.5	≥ 99%	380/50	3.6	1000	3273*1410*1820
LG4(KP) / LG4(KP+Hi)	1-3	≥ 99%	380/50	4.4	1210	3403*2010*2085
LG6(KP) / LG6(KP+Hi)	2-4	≥ 99%	380/50	5.5	1480	3410*2610*2316
LGS2	1-2	≥ 99%	380/50	4.8	1360	3615*1410*2666
LGS2(KP) / LGS2(KP+Hi)	1-2	≥ 99%	380/50	5.5	1380/1440	3615*1410*2666
LGS4	1-3	≥ 99%	380/50	6.2	1686	3590*2010*2947
LGS4(KP) / LGS4(KP+Hi)	1-3	≥ 99%	380/50	7.6	1800/1880	3590*2010*2947
LGS6	2-4	≥ 99%	380/50	8.4	2140	3615*2610*3176
LGS6(KP) / LGS6(KP+Hi)	2-4	≥ 99%	380/50	9.8	2170/2230	3615*2610*3176

Note: The above parameters will vary according to the impurity content of raw materials.

BELT-TYPE INFRARED SORTING MACHINE

HIGH PRECISION HIGH PURITY

Configuration options are available to meet different sorting requirements.

LI Single-lens dual-band infrared imaging +multi-dimensional camera

LID Double-lens dual-band infrared imaging +multi-dimensional camera

The AMD® LI series is designed for the professional sorting and processing of nuts, using a new four-dimensional integrated recognition technology and high-end infrared recognition technology. With a strong combination of software and hardware, it can sort nuts with crushed shells, shell-wrapped kernel, diaphragma juglandis, small lesions, small atrophy and other difficult sorting problems. Non-destructive protection during the full process, slow and gradual buffering design, care for every material. Non-destructive processing present the best sorting effect for users.

SORTING APPLICATIONS

Hickories

Pecans

Walnuts

Almonds

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CORE TECHNOLOGIES

- Adopting high-end customized infrared configuration, the sorting effect of non- kernel impurities is better, and the ultimate quality can be easily achieved.
- Non-destructive protection during the full process, slow and gradual buffering design care for every material, truly achieve non-destructive processing.
- Unique four-dimensional ultra definition integrated technology, which can identify material details, color differences, and texture differences more accurately.
- 20 billion level self-collected open source material database, which is industry leading and also can be shared among users.
- The industry-leading multi-dimensional deep learning recognition technology can solve the problems of internal and external impurity sorting better.

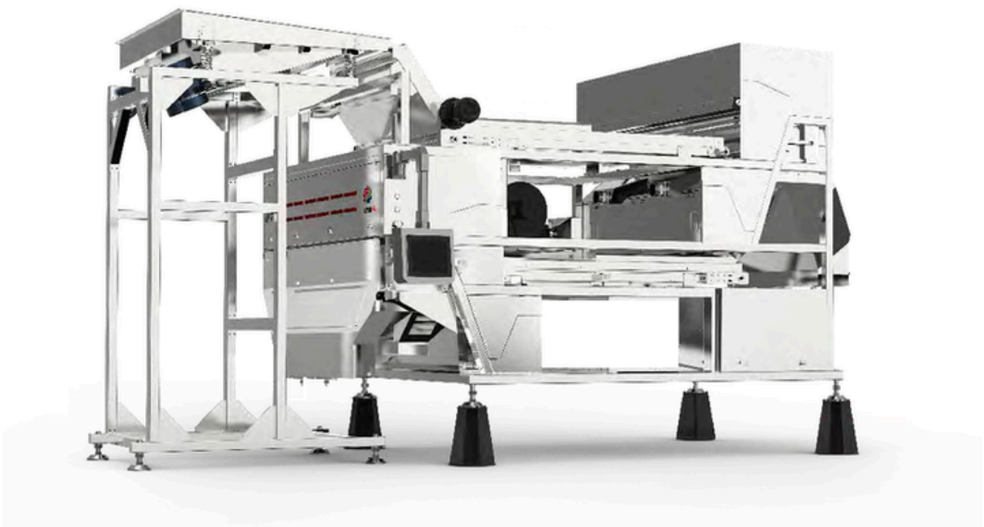
PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LI1(KP+Hi) LID1(KP) / LID1(KP+Hi)	0.8-1.5	≥ 99%	380/50	7.3	960	3389*1110*1898
LI2(KP+Hi) LID2(KP) / LID2(KP+Hi)	0.8-1.5	≥ 99%	380/50	8.1	980	3389*1410*1898
LI3(KP+Hi) LID3(KP) / LID3(KP+Hi)	1-2.5	≥ 99%	380/50	8.7	1200	3542*1710*1996
LI4(KP+Hi) LID4(KP) / LID4(KP+Hi)	1-2.5	≥ 99%	380/50	9.3	1800	3561*2010*2277

Note: The above parameters will vary according to the impurity content of raw materials.

LY | BELT-TYPE
SORTING MACHINE

LONG FOCUS LENS CAMERA

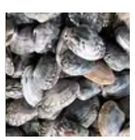


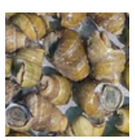
More configuration options are available to meet different sorting requirements.

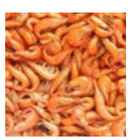
LY(KP+Hi) Deep Learning Technology Available

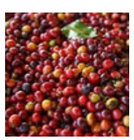
The AMD® LY series is suitable for conventional color sorting of fresh and wet materials, while LY (KP+Hi) applies deep learning technology which allows to achieve multi-dimensional recognition and sorting. The unique multi-dimensional UHDR technology can achieve the learning of multiple characteristics such as color, shape, texture, area, etc. And accurately remove spots, leaves, and damaged fruits in fresh and wet materials. This solution will greatly optimize the processing and sorting process of fresh and wet materials, bring users an unprecedented value experience.

SORTING APPLICATIONS


Clams


Pond Snails


Shrimp


Coffee Cherry


Dehydrated Vegetables


Frozen Peas

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CORE TECHNOLOGIES

- Pioneering deep learning technology in the industry, with more accurate multi- dimensional recognition, only for the best sorting effect of fresh and wet materials.
- Flexible spray valve intelligent control technology with anti crushing track design, non-destructive processing of fresh and wet materials throughout the entire process, ensuring optimal quality
- The three proofings structure design allows for a longer visual distance, making it waterproof, moisture-proof, and corrosion-resistant. It has mature specialized design for sorting water contained materials, and ensures the durability of the equipment.
- Ultra definition recognition technology, the strong integration of ultra definition and ultra precision technologies has achieved excellent quality of fresh fruits.

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LY1 / LY1(KP+Hi)	1-2	≥ 99%	380/50	2.5	900/950	3673*1158*1795
LY2 / LY2(KP) / LY2(KP+Hi)	1-2	≥ 99%	380/50	2.9	980	4328(4496)*1458*2145
LYS2 / LYS2(KP) / LYS2(KP+Hi)	1-2	≥ 99%	380/50	4.8	1440	4643*1690*2745
LY4 / LY4(KP) / LY4(KP+Hi)	1-3	≥ 99%	380/50	3.7 / 4.4	1220/1240	4724*2290*2145
LYS4 / LYS4(KP) / LYS4(KP+Hi)	1-3	≥ 99%	380/50	6.2/ 7.6	1800/1820	5014*2140*2745
LY6 / LY6(KP) / LY6(KP+Hi)	2-4	≥ 99%	380/50	4.8 / 5.5	1560	4837*2740*2145
LYS6 / LYS6(KP) / LYS6(KP+Hi)	2-4	≥ 99%	380/50	8.4 / 9.8	2200	5065*2740*2777

Note: The above parameters will vary according to the impurity content of raw materials.

LM | LOW SPEED BELT-TYPE AI-POWERED SORTER

SLOW-SPEED BELT FAR FOCAL LENGTH

DEEP LEARNING TECHNOLOGY

Multifunctional **High Capacity** **AI-Powered**

AMD® has designed the customized LM series for the processing of high value materials that are prone to be damaged, injured and breakaged. Its unique ultra clear multidimensional recognition technology can identify the shape, color, and texture differences of materials more accurately. Perfect protection throughout the entire sorting process can achieve non-destructive and ultra precision processing, and technology empowers high-quality sorting.

SORTING APPLICATIONS


Pine Nuts


Cashews


Walnuts

●●●

CORE TECHNOLOGIES

- Perfect protection throughout the entire sorting process, its slow buffering design can care for every single material, achieving true non-destructive sorting.
- Unique UHD technology, which can identify differences in material shape, color, and texture more accurately.
- 20 billion level self-collected open source material database, industry-leading and iterative sharing.

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LM1(KP+Hi)	0.4-0.8	≥ 99%	380/50	2.5	600	2522*1214*1182
LM2(KP+Hi)	0.8-1.2	≥ 99%	380/50	2.9	1000	2625*1700*1270
LM4(KP+Hi)	1.5-3	≥ 99%	380/50	4.6	1220	2625*2300*1270
LMS2(KP+Hi)	1.5-3	≥ 99%	380/50	6.2	1360	2971*1700*2410
LMS4(KP+Hi)	1.5-3	≥ 99%	380/50	6.2	1690	2971*2300*2410

Note: The above parameters will vary according to the impurity content of raw materials.

LQ | FOUR VIEW BELT-TYPE
COLOR SORTER

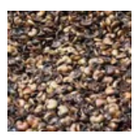
SUPER ANGLE FOUR-VIEW LENS

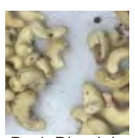
LQ(KP+Hi) Deep Learning Technology Available

AMD® LQ series products are designed for materials (like cashews) with special shape characteristics. Normal dual vision can not remove dark blemishes, waist and husk cover outside the viewing angle of the camera, and the rejection rate is less than 95%, which can not meet the requirements of the market. The AMD® four-view lens color sorter achieves a rejection rate of over 98% for cashew husk and black blemishes through 360° observation.

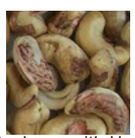
SORTING APPLICATIONS


Cashews Accept


Shell Removal

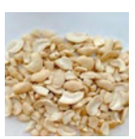

Dark Blemish


Light Blemish


Cashews with Husk


Black Spot


WS White


LP White


Light Yellow


Dark Yellow


Oily Cashews


Superficial Damage

CORE TECHNOLOGIES

- Enhanced Sorting Capability:
  Our latest optical path in the mirror ensures efficient cashew nut sorting, specifically targeting small black spots and tiny husks.

- Innovative Mechanical Design:
  The double-layer structure not only conserves space but also significantly diminishes the risk of breakage.

- Embracing a dust-proof sealing method and a novel sorting chamber design, the entire machine facilitates effortless cleaning, enhancing overall maintenance.

- The main machine's redesigned structure minimizes drops, ensuring a gentle landing for materials. Pairing this with food-grade silica gel effectively addresses concerns related to broken cashew nuts.

- Optional Deep Learning Technology
  Compatible with optional deep learning solutions, model addition can be completed with just one click. Real-time monitoring of all camera operation status, and combined with the number of bad materials to analyze the sorting effect.

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Weight (Kg)	Dimension (mm)
LQ2(KP+Hi)	0.8-1.5	≥ 99%	380/50	2.9	980	3389*1410*1898
LQ4(KP+Hi)	2-5	≥ 99%	380/50	3.7	1250	3295*2170*2070
LQS4 / LQS4(KP+Hi)	2-5	≥ 99%	380/50	7.5	2300	3641*2170*2930

Note: The above parameters will vary according to the impurity content of raw materials.

LQC

MULTIPURPOSE BELT-TYPE DETECTION SYSTEM

The AMD® LQC series is the first sorting equipment for light and fine foreign objects in the chili industry. Its single-view integrated ultra clear detection technology can accurately detect dozens of impurities. AMD® LQC Series provide multi-functional, excellent, specific and efficient sorting for chili, cumin, tea, coffee beans, tobacco and other foods.

SORTING APPLICATIONS


Dehydrated Vegetable


Chili Pepper


Prickly Ash Seeds


Cumin


Fennel Seed


Tea


Chinese Herbal Medicine


Red Wolfberry


Marine Products


Tobacco


Coffee Beans


Raisins

●●●

CORE TECHNOLOGIES

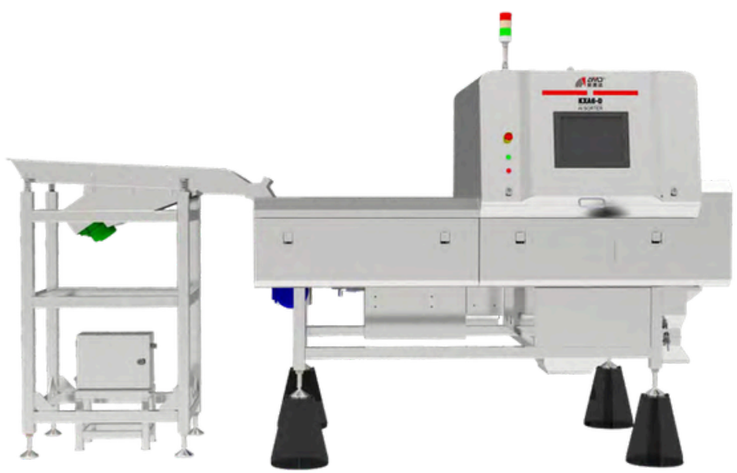
- AMD Open Source Large Model
- AMD S-level Visual System
- Ultra Clear Deep Learning Technology
- Servo Electric Power Transmission System
- Multi Stage Variable Frequency Mixing System
- High Pressure Wind Knife Dust Removal System
- Innovative Light Source System
- Innovative Mechanical Structure Design

PARAMETERS

Model	Throughput (T/H)	Accuracy (%)	Voltage (V/Hz)	Power (KW)	Dimension (mm)
LQC1	0.2-0.4	≥ 99%	380/50	2	4141*1272*2063
LQC2	0.5-0.8	≥ 99%	380/50	2.5	4271*1198*1652
LQC4	0.5-1.2	≥ 99%	380/50	3.3	4234*1825*1652
LQC6	0.5-1.5	≥ 99%	380/50	4.1	4241*2475*1657

Note: The above parameters will vary according to the impurity content of raw materials.

KXA6-D | X-RAY NUTS DETECTOR



AMD® KXA6-D is a basic X-ray deep learning multispectral sorting machine equipped with single view visible light algorithm recognition.It is mainly used for sorting hollow and atrophy defects of walnuts, hickories, almonds, etc. It can also detect high-density impurities such as metals and stones, and low-density impurities like colored plastics and cigarettes. Using safe food grade materials to ensure safe product contact and adopting unique radiation protection design to reduce radiation to natural levels, which is below the international limit.

SORTING APPLICATIONS

Almonds

Pecans

Hickories

●●●

CORE TECHNOLOGIES

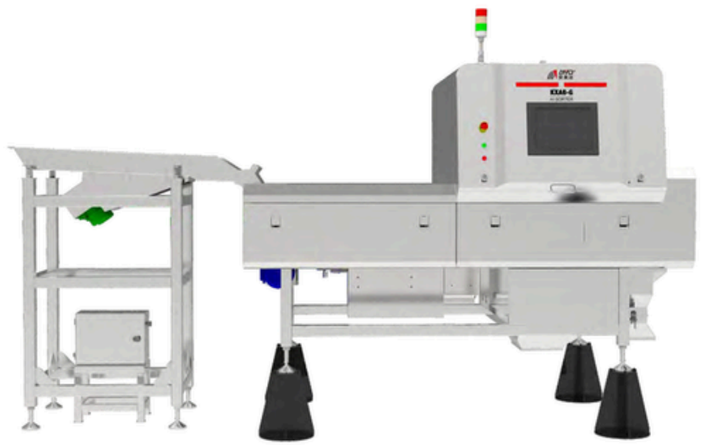
- Equipped with the latest high-definition camera, X-ray+deep learning technology.
- Using food grade materials to ensure food safety.
- Adopting special radiation protection design and fully enclosed structure, the radiation dose is maintained at the natural level (0.2-0.5uSv/h), lower than international standards.
- The new generation imaging and computing platform includes a quality traceability system, impurity image playback. More valuable data push, and stronger computing power.
- The intelligent internal circulation air cooling system maintains the ambient temperature at all times, allowing the machine to operate more stably and smoothly.
- Suitable for impurity removal and internal defect detection of almonds, walnuts, and pecans, etc.

PARAMETERS

Model	Throughput (T/H)	Accuracy	Voltage	Power (kW)	Weight (kg)	Dimension (mm)
KXA6-D	Almonds:1.2-1.8 / Hickories:1.3-1.5 Pecans:2.5-3 / Cashews:2	＞98%	220V 50/60Hz	3.5	900	3803*1600*2316

Note: The above parameters will vary according to the impurity content of raw materials.

KXA6-G | X-RAY DEEP LEARNING MACADAMIA NUTS DETECTOR



The AMD® KXA6-G is a X-ray deep learning detector for macadamia nuts, integrating multispectral design, specific algorithm for macadamias and X-ray deep learning. Equipped with composite single view visible light technology, it can effectively remove the typical internal defects of macadamia nut-in-shell, such as empty, shriveled, discolored, cracked shell, rotten, insect-damaged nuts caused by stink bugs.

SORTING APPLICATIONS

Macadamia Accept | Discolored | Dry Rot | Oiled | Wormy | Moldy | Red Moldy

CORE TECHNOLOGIES

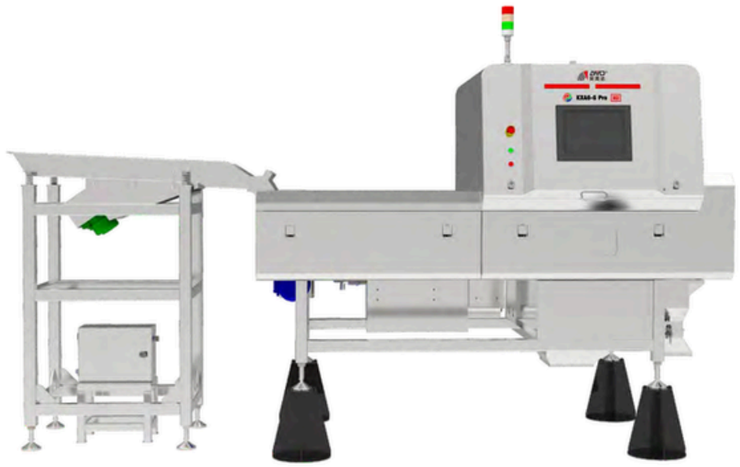
- Versatile Intelligence Platform:
  Specific algorithm for macadamias, X-ray deep learning.
- Multispectra Design:
  Equipped with visible light technology, the KXA6-G can effectively removes nuts with shell color defects, such as black or cracked nuts.
- New Generation Imaging And Computing Platform:
  Incorporates a quality traceability system, evil miscellaneous image playback, more value data push and more computing power.
- Intelligent Internal Circulation Air-cooled Cooling System:
  Always maintains the ambient temperature inside the chassis, making the machine more stable and smooth.
- Adopt Special Anti-radiation Design And Fully Enclosed Structure:
  The radiation dose is kept at the natural level (0.2-0.5μSv/h), below the International Standard.

PARAMETERS

Model	Throughput	Accuracy	Voltage	Power	Weight	Dimension
KXA6-G	3 T/h	＞95%-98%	220V 50/60Hz	3.5 kW	900 kg	3803*1600*2316 mm

Note: The above parameters will vary according to the impurity content of raw materials. The throughput information is presented based on medium macadamias (22-24mm) with 15% impurities.

KXA6-G PRO | X-RAY HD DEEP LEARNING NUTS DETECTOR



The KXA6-G PRO is the high-definition upgrade of the KAX6-G, featuring enhanced light sources, sensors, and optical paths. This advancement ensures superior sorting performance and lower carryover ratio. The KXA6-G PRO is ideal for the internal inspection of various nuts, including macadamia nuts, walnuts, pecans, almonds, and hazelnuts.It can effectively identify internal defects such as wormholes, frozen kernel, frozen spots, blank and empty, shriveled, oily, moldy, etc. And it also can remove foreign materials such as glass, coal slag, stones, metals, rubber, etc.

SORTING APPLICATIONS


Macadamias


Hazelnuts


Hickories


Almonds


Pecans


Walnuts

●●●

CORE TECHNOLOGIES

- New four-dimensional UHD recognition technology+X-ray recognition technology+deep learning technology, forging an outstanding level in the industry.
- Large self-collected database for nuts internal and external quality issues, exclusive customized service brings the best quality.
- Successfully overcome industry challenges in identifying internal impurities such as small atrophy, defects, and mold, achieving superior sorting effects.
- Combining external impurities identifying and color sorting functions, it can effectively identify and remove both internal (wormholes, blank and empty, shriveled, etc) and external (glass, coal slag, stones, etc) impurities.

PARAMETERS

Material	Macadamias (22-24mm)	Walnuts	Hickories	Pecans	Almonds	Hazelnuts
Throughput(t/h)	2.5	25	1.5	2.5	1	1
Accuracy	97%	99%	96%	99%	99%	97%
Raw Material Impurities	18%	15%	20%	13%	10-15%	10-15%

Model	Voltage	Power	Weight	Dimension
KXA6-G PRO	220V 50/60Hz	3.5 kW	900 kg	3803*1600*2316 mm

Note: The above parameters will vary according to the impurity content of raw materials.

X640/1280 | SEAFOOD DETECTION MACHINE

The X640 & X1280 G PRO series seafood quality control guardian's X-ray sorting performance has been improved. Using leading deep learning technology, ultra definition multi-dimensional identification quality control, it can precisely detect internal and external foreign objects like empty shells, cracks, glass, metals, stones, ceramic, etc. Its control accuracy has been comprehensively improved, quality and safety are more guaranteed. The new triple-proof design is suitable for various water contained material sorting scenarios. With industry-leading high output, high precision, and stronger production line adaptability, it can achieve perfect quality.

SORTING APPLICATIONS


Pond Snails Accept


Empty

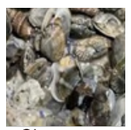

Shells


Metals


Stones


Clams Accept


Broken Shells


Clams Reject

●●●

CORE TECHNOLOGIES

- Adopting a brand new moisture-proof, waterproof, and anti-corrosion design, it is suitable for sorting impurities in seawater & freshwater shrimp, clams, and fish.
- Harmless radiation protection design, fully enclosed structure, with a radiation level lower than international standard.
- A super large model data platform that supports quality traceability and classification model playback, making it easy to get high-value data.
- Industry leading hardware configuration, with core components customized by high-end brands.

PARAMETERS

Model	Throughput (T/H)	Accuracy	Voltage (V/Hz)	Power (kW)	Weight (kg)	Dimension (mm)
X640-G Pro	Clams:2-12	>98%	220/50	3.5	700	3270*1455*2315
X1280-G Pro	Clams:5-15	>98%	220/50	5.7	1400	3945*1805*2690

Note: The above parameters will vary according to the impurity content of raw materials.