Peanut Color Sorter

Photoelectric color sorter is a kind of nondestructive separation equipment for quality inspection and classification of bulk materials. It is widely used in pigment chemical industry, food, grain and other fields.

Characteristics of peanut color sorter:

1. Peanut color sorter adopts linear CCD true color selection technology, color HD identification, high-speed sorting and identification is more fine.
2. Integrated with shape recognition technology, peanut color sorter more accurately for peanut and all kinds of miscellaneous grain separation quality grade.
3. The spectrum distribution of visible light is full color, and the spectral region can be adjusted at will.
4. By selecting different specifications of slide rail without changing the light source, peanut color sorter can be suitable for the separation of all kinds of miscellaneous grain, industrial products and other particles and flake raw materials.
5. Peanut color sorter has high brightness and long life. LED light source can meet all kinds of raw materials and colors. Different raw materials, different colors do not need to change the light source.
6. The super-clear imaging technology of peanut color sorter can define the color selection of thousands of raw materials and 100000 kinds of colors, and truly realize the universal scope of color selection.
7. Each group can independently and synchronously carry out multi-task, various mode color selection, can be synchronized to meet the positive selection, reverse selection, a variety of colors sorted together.
8. Full-featured software operating platform, 53.88 million pixel HD accurate identification of peanuts, one-click intelligent operation, easy to understand, simple and convenient operation.

9. Intelligent color CCD peanut color separator, peanut shell, peeled peanut, mildew fruit and other impurities separation, the separation rate of 99%, effectively eliminate peanut defective products, the selected peanuts are of good quality.

Principle application and sorting process of peanut color sorter:

According to the difference of optical characteristics of miscellaneous grains, peanut screening machine used photoelectric technology to automatically sort out a series of heterogeneous particles, such as sunflower seeds, wheat, buckwheat, oats, millet, peanut fruit, sunflower seeds, rapeseed and so on, so as to improve the product quality and remove impurities.

The peanut is fed from the hopper on the top to the peanut-fruit screening machine, and the peanut fruit is slid along the channel by the oscillation of the vibrator device, and the peanut is passed through the sensor and the background plate, and the drop is accelerated to the observation area in the sorting chamber. Under the action of the light source, the system generates an output signal to drive the control valve to work according to the intensity of the light and the hue change, and the foreign matter particles are blown into the waste cavity of the material receiving barrel, and the good peanut fruits continue to fall into the finished cavity of the material receiving barrel, so that the purpose of the selection is achieved.
Introduction to the relevant parameters of peanut color sorter:

<table>
<thead>
<tr>
<th>Model</th>
<th>9JHG</th>
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<tbody>
<tr>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Output(t/h)</td>
<td>0.7-1.2</td>
</tr>
<tr>
<td>Power(kw)</td>
<td>0.6-0.8</td>
</tr>
<tr>
<td>Gas-consumption(L/min)</td>
<td>&lt; 500</td>
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<tr>
<td>Selection and purification rate(%)</td>
<td>≥ 99</td>
</tr>
<tr>
<td>supply voltage</td>
<td>220V</td>
</tr>
<tr>
<td>Pressure(Mpa)</td>
<td>0.4-0.6</td>
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<tr>
<td>Selection and purification rate (%)</td>
<td>≥ 99</td>
</tr>
<tr>
<td>Electric source(v/Hz)</td>
<td>220/50</td>
</tr>
</tbody>
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System composition and introduction of peanut color sorter:

1. High pixel CCD image acquisition and sensing system

Automatic peanut color sorter selects high pixel full color CD linear array camera to obtain peanut red, green and blue color information, combined with complementary stepless dimming, depth resolution of small impurities, to ensure the micro color difference resolution ability of the equipment.

2. The artificial intelligence design

Touch the operation platform of the display screen, the operation method is simple and easy to learn, and the color selection is simpler and more intelligent, and the artificial error is reduced.

3. Intelligent ash-removing system

The fan system of the intelligent ash removal system peanut color separator can form high speed air flow, clean the dust and light floating objects in front of the lens quickly, and the unique magnetic suction ash removal brush can set the ash removal interval time at will, maintain high separation accuracy in harsh environment, reduce manual ash removal, and ensure the high efficiency screening of the equipment.

4. Light source system

The peanut color sorter of the light source system has high-purity spectrum, ensures
high-resolution image quality, can meet the distinguishing of more than one thousand colors, and can distinguish the tiny difference of the color.

5. Float valve design.
The high-speed spray valve developed for the selected object characteristics is designed, and the unique magnetic suspension technology is selected to fully match the equipment, and the service life is 5 times longer and the air consumption is reduced by 20%.

6. High speed data processing software
The peanut color sorter supports the real-time display of the real image, adopts a high-speed parallel data processing chip, integrates the advanced core software system, accurately recognizes the color and the shape, integrates the intelligent algorithm of various modes, ensures the double screening of the “color selection+shape selection”, The effective screen is different from the normal color and the shape is different.
The color sorter is very powerful in sorting the large-sized corn, hot pepper, pepper, raisin, various beans, various kinds of rice, shrimp skin, seeds, Chinese medicinal materials, ores, regenerated plastic sheets, glass, metal materials, and the like, and the sorting function of special materials.
If you are interested in our peanut color sorter or Peanut Frying Machine, please don’t hesitate to contact us at any time.