PELLET & GRANULE INSPECTION SYSTEM

PGI-IV

Original detection system

Dects foreign matter or discoloration among Pellet and Granule

Features

- Remarkable detection capability. (detection accuracy : 16.6μm).
- Compact design using the combination of an inspection box and control panel.
- Equipped with a clean unit as standard, making this system applicable for installation in a simplified clean room or factory.
- Simple operability by merely setting the parameters on a touch-panel and then pressing a single button to perform the automatic inspection.
- Enables automatic on-line inspection when connected to the automatic sampling line.
- Provides a mechanism that collects foreign matter in a container through suction by an ejector and is useful for analysis and other purposes.
Function
This system has been designed to detect only foreign matter among transparent pellets without mistakenly detecting air bubbles, pores, convexity, and the like as foreign matter. In order to enable such difficult detection among transparent pellets, we have developed an original turntable system and combined it with our image processing unit.

Inspection items
1. Black or brown substances among pellets or in powder. (classified into 5 size groups)
2. Yellow-colored pellets.

Objects inspected
Pellet: Transparent pellet, milky-white pellet, white pellet, and various types of cut products of PE (LD or HD), PP, PC, PS, AS, PET, ABS, POM, PA, PMMA, RB, or fluorine-based compound.
Powder: White powder, faint-colored powder, and various types of powder and granule of PVC.

Specifications

<table>
<thead>
<tr>
<th>Image Processing Unit</th>
<th>HU-3120</th>
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<tbody>
<tr>
<td>Camera</td>
<td>Color and Monochrome Camera</td>
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<tr>
<td>Lighting</td>
<td>LED Strobe</td>
</tr>
<tr>
<td>Monitor</td>
<td>15-inch Color Monitor</td>
</tr>
<tr>
<td>Unit Size</td>
<td>H1700×W1000×D750 mm</td>
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<tr>
<td>Power Source</td>
<td>AC100V～200V</td>
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<tr>
<td>Power Consumption</td>
<td>0.5KVA</td>
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<tr>
<td>Air Supply</td>
<td>0.4Mpa 500nl/min</td>
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</tbody>
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Performance of Data logger PC
- Inspection Data Saving
- Foreign matter Image Saving 100～2500
- Trend Graph
- Sorting

Inspection Performance
1. Color camera system
   - Performance 8.3 μm/cell, Resolvable 16.6 μm
   - Handling Performance Clear Pellet: 1.3 Kg/Hr
   - Milky & White Pellet: 5 Kg/Hr
2. Monochrome camera system
   - Performance 8.3 μm/cell, Resolvable 16.6 μm
   - Handling Performance Clear Pellet: 2 Kg/Hr
   - Milky & White Pellet: 7 Kg/Hr

An example of inspection system

URL: http://www.hu-brain.co.jp