Banknote Quality Inspection System

- The advanced banknote quality inspection system available
- Precision third-generation inspection technology, including ABCS-2®
- Easily customized and integrated into printing plant operations
- Delivers the economic solution for single note inspection

Specifications

<table>
<thead>
<tr>
<th>Technical specifications</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Acceptable note range</td>
<td>110-175mm x 57-90mm</td>
</tr>
<tr>
<td>Average throughput</td>
<td>60,000 notes/hour</td>
</tr>
<tr>
<td>Feed speed</td>
<td>1,200 bank notes/minute</td>
</tr>
<tr>
<td>Feeder capacity</td>
<td>2 hoppers x 1,000 notes</td>
</tr>
<tr>
<td>Transport direction</td>
<td>Longitudinal</td>
</tr>
<tr>
<td>Transport speed</td>
<td>5.00m/s</td>
</tr>
<tr>
<td>Type of banding tape</td>
<td>25mm wide paper band</td>
</tr>
<tr>
<td>Acoustic noise</td>
<td>76 dBA average value</td>
</tr>
<tr>
<td>Max. stacker</td>
<td>4 stacker/bander and audit stacker</td>
</tr>
<tr>
<td>Labeling unit</td>
<td>Optional</td>
</tr>
</tbody>
</table>

Physical size and installation requirements

<table>
<thead>
<tr>
<th>Machine size</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>5,500 mm</td>
</tr>
<tr>
<td>Height</td>
<td>1,800 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>1,250 mm</td>
</tr>
<tr>
<td>Power supply</td>
<td>3 phase, 400V AC</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>10-30 degrees Celsius</td>
</tr>
<tr>
<td>Ambient humidity</td>
<td>30-80% relative humidity</td>
</tr>
</tbody>
</table>

*Note: All specifications subject to change without prior notice. All information in this document is as of July 1, 2017.
BI-1200

Toshiba and OeBS teamed up in 2003 to define a new standard of excellence for a Single Note Quality Inspection Machine. We have achieved just that with the new BI-1200 system.

Toshiba Corporation

Toshiba is leading company in banknote processing machines for central and national banks and printing plants. As the market leader since 1964, we have delivered over 500 units, to numerous countries. All our systems share a compact, ergonomic design, high level, highly reliable detectors and stable banknote transportation, and do so at economic prices that underline their performance.

OeBS

Austrian Printing Company.

Formerly the banknote printing arm of the Österreichische Nationalbank (OeNB), OeBS became a limited company in 1998. Today, OeBS is a specialist in the production of banknotes for the international market, combining innovative security features with the most modern design.

Single Banknote Inspection Machine

A banknote is nothing more than printed paper. Its value depends entirely on its printing. That is why consistency and high quality printing are essential, and why banknotes must achieve identical levels of visual appearance and technical properties. Assuring the high value of printed banknotes demands a high level of uniform quality control.

Toshiba’s BI-1200 Single Banknote Inspection System automatically checks banknotes for quality. In the past, this demanding task relied heavily on human visual perception. Today, Toshiba offers an automated inspection machine that conducts stringent quality management and handles every single note with the same degree of precision.

Banknotes loaded into the BI-1200’s feeder are picked up one by one and carried on a flat belt conveyor system, without damage. As the notes pass the ABCS-2® inspection device, they are inspected for quality. Notes identified as correctly printed are bundled in batches of 100 and are ready to go into circulation. Unacceptable notes are also bundled in batches of 100, but held together with a different colored paper band. They are ready for the shredder.

Toshiba’s BI-1200 is highly secure automated solution that can check for visual quality and the various technical properties that are now part of each banknote.

Features of BI-1200

1) The industry’s first medium/high speed Banknote Inspection Machine, the BI-1200 is compact in size, and can be introduced much more simply and flexibly than larger equipment.
2) Stable banknote transportation assures clear image data and highly accurate counting.
3) The state-of-the-art ABCS-2® inspection technology inspects printing quality against a high-definition full-color image.
4) Audit stacker (with bander) allows sampling for quality control.
5) On-line data transfer for each denomination generates reliable diagnosis and analysis.
6) Easy to set up for new denominations.
7) High quality stacking and banding.
8) Wide range of options includes Tracer System and Labeling Unit.

ABCS-2°

Developed by OeBS, drawing on its cutting-edge capabilities in banknote design, security features and detection, ABCS-2® is the world’s newest and most precise banknote inspection system.

1) Full color image analysis (Red, Green, Blue and IR)
2) High resolution (0.1mm)
3) The following items are inspected:
   • Printed patterns
   • Cutting tolerances
   • Full application
   • Magnetic properties
   • Watermarks
   • Security threads
   • Infrared properties (optional)
   • Ultraviolet properties (optional)
4) Serial numbers are readable and the optional Tracer System facilitates control of notes by bundles (optional)
5) Modular system architecture
6) Easily adapted to new notes (model building with only 100 banknotes)
7) Produces printable reports in accordance with the customer’s requirements.

Audit Stacker and Bander

The audit stacker allows the operator to confirm the condition of banknotes after inspection by ABCS-2®.

Feeding Hopper and Reject Stacker

The feeding hopper has two sections, left and right, each able to hold up to 1,000 banknotes, for a total of 2,000 banknotes. The reject stacker has also two boxes, for mechanical reject and detector reject.

Large 17-inch Display Panel

The display indicates system status and gives the operator necessary information. The operator sets up the sorting scheme-denomination, batch size, assigned stackers, etc. via an intuitive graphic user interface.