Advantages

• Compact design for easy integration on new or existing production Lines.
• Industrial construction for long-term reliability.
• Fully functioned Windows based IMAGE software with touch-screen user-interface for easy access and fast setups.
• High-power LED illumination provides optimized illumination with longevity.
• Integrated reject tracking with interfaces to any of BBULLs range of industry proven reject systems, or third party device.
• Highly-versatile with interfaces for up to 12 cameras, x-ray detection, ultrasonic height arrays, and other inspection technologies.
• Extendable functionality using additional inspection bridges.
• Remote Communications and support options (CAN / TCP / IP interface).

Built upon BBULL long-time expertise in industrial inspection, the BBULL IMAGE 180 high precision multi-camera system provides a robust solution for online inspection of two-sided packages. A number of different application modules and options allow use in the plastics, food, oil and chemical industry on full or empty containers.

The system can be supplied as a turn-key stand-alone system including a new compact label inspection bridge, or as retrofit utilizing components from your existing Gemini inspection equipment. The BBULL IMAGE 180 industrial control unit provides sophisticated inspection algorithms to locate measure and inspect for all common label quality and application issues.
Features

Standard Label Inspections
- Missing labels
- Faulty or damaged labels
- Incorrect labels (Details to 1mm²)
- Horizontal and vertical displacement (+/- 1mm)
- Tilted labels (+/- 0.5mm)
- Bar-code, Data-Matrix, and Lot Code Verification

Optional Inspections
- Thread, Flash and Short Shot Inspection (Side view)
- Faulty Cut and Ovality Inspection (Top View)
- Custom Inspection Applications

Specifications

| Max Speed:       | 60,000c/h; 1000bpm |
| Max Line Speed:  | 1.7m/s; 5.6ft/s   |
| Container Types: | square or rectangular packages |
| Electrical Requirements: | 208-250vac; 50/60hz; 1A |
| Air Requirements: | 6bar; 90psi       |
| Cameras:         | 2 x 1624x1234pixel standard |
|                  | 12 x 656x492/1624x1234pixel option |
| Lighting:        | LED Strobe        |
| Control Unit:    | high-quality industrial PC |
|                  | Windows embedded |
| Auxiliary Inputs:| TBD               |

Functionality

Front and Back label inspection is accomplished using two 2-megapixel cameras and optimized illumination. The high resolution images allow precise inspection of label position, defects and bar/data-matrix verification without the need for additional cameras. Processing and controls are performed on a high-quality industrial pc-controller using BBULLs industry proven IMAGE software and applicationspecific algorithms.

With support for up to 10 additional cameras it is possible to expand functionality to inspect a variety of other package defects. The system also supports integration of a wide range of other inspection technologies including laser barcode readers, weighers, x-ray, and ultrasonic imaging systems. Acquisition, inspection results and the conveyor belt are monitored using BBULLs integrated embedded controller, providing precise and reliable tracking and rejection.