

# saki

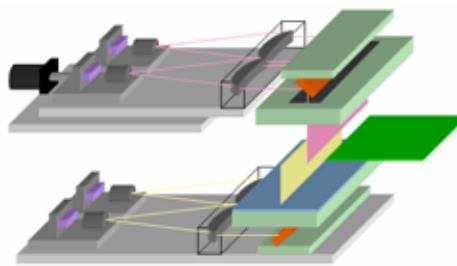
## BF - Tristar

Simultaneous inspection of both sides of PCB System

### Simultaneous high speed inspection of both sides of PCB Automated Optical Inspection Machine

**SMT production process for the new generation**

**~ both sides inspection at a time for efficient SMT production control ~**



#### **The Highest Speed Throughput**

Applying Saki's unique Line Scan Technology, inspection of both sides of PCB is achieved this time, that was not even considered under the common idea of conventional AOI machine. Inspecting both sides of PCB made it possible to collect repair processes at once to build up efficient production flow. Creation of inspection recipe, image taking and inspection can be done at the highest speed by applying the new technology called Master-Slave PC System. It is a system which multiple cameras and PC takes images of divided area assigned to each camera and PC. User friendliness of the machine maintains amenity of full memory inspection which is common to other BF series, and achieves the highest speed throughput. BF-Tristar is able to inspect both sides of M size PCB in less than 25sec counted from the time when PCB is taken in to the machine.

#### **High Accuracy**

The high resolution of 10  $\mu$  m with color line CCD sensor camera is applicable for the inspection of high density mounted 0402 chip. Employing Brilliant MLT Lighting to improve inspection accuracy of letter recognition, polarity, and solder fillet thus achieved clearer image taking.

#### **Auto Focusing Function**

Employing Auto Focusing Function, focus of the bottom side of PCB is fixed thus the top side will be adjusted automatically. By setting the thickness of PCB made it possible to have adjustment of the focus of top side of PCB automatically to maintain stable environment of image taking.

#### **Easy and Friendly Operation and Program Control**

NC data expansion and program tuning can be done at once for both sides of PCB, thus 1 program data control for 1 model of PCB is possible. Change of PCB model at production can be completed at once.

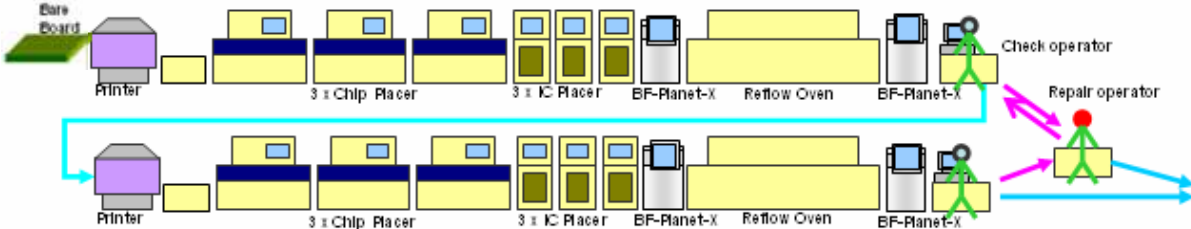


# BF - Tristar

Simultaneous inspection of both sides of PCB System

## Conventional system

Giving feed back of defect data to front-end in order to pursue the improvement in quality of production process without any defects.



**New system** Maintaining process quality by pre-flow inspection to pursue efficiency of SMT production.

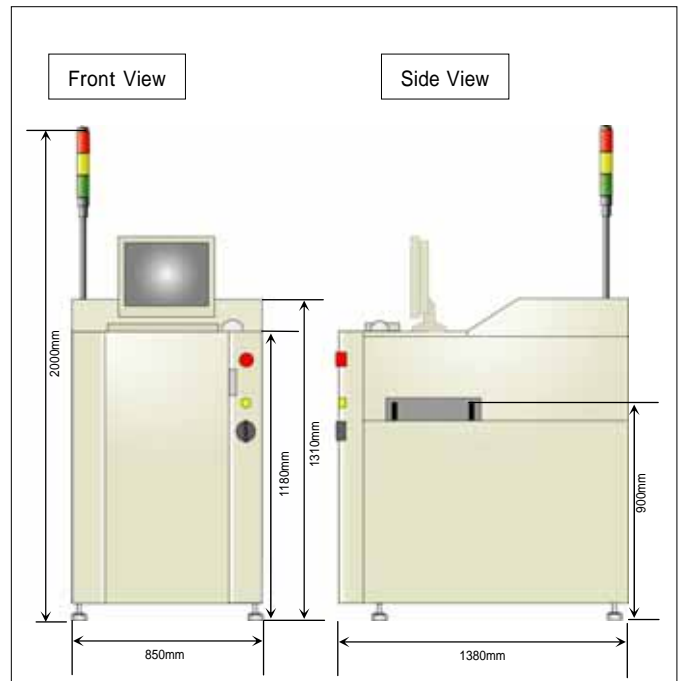


**Process of Inspection** Also applicable as the final test after in-circuit test and function test before shipment.

## System Specifications

Model	BF-Tristar
Conveyable Board Size	90 x 60 ~ 330 x 250 mm
Board Thickness Range	0.6 ~ 5.0mm
Clearance from PCB	Top : 30mm Bottom : 30mm
Flow Flap	Rail adjoining 3mm each side
PCB Weight	~ 6Kg
Inspection Output	missing, shift, reverse, polarity, bridge, no solder, short solder, lifted lead, OCR
Scanning speed	25s (both sides)
Image Resolution	10 μ m
Adjustment of Conveyor	Automatic width adjustment
Electrical Requirement	AC100 ~ 240V, 2400W, 50/60Hz
Compressed Air Requirement	0.5Mpa, 5L/min
Foot Print Dimensions	W800*D1380*H1310mm (body) H2000mm (signal tower included)
Weight	450Kg

## Dimensions



**SAKI Corporation**  
Shinagawa Intercity A-31F  
2-15-1, Kounan, Minato-ku  
Tokyo, 108-6031, Japan  
Phone: +81-3-5796-0393  
Fax: +81-3-5796-0399  
E-mail: sakicorp@sakicorp.com  
URL: <http://www.sakicorp.com>

**JAPAN Branch Office**  
Kobe-Itochobuilding4F-E  
121, Itocho, Chuo-ku, Kobecity  
Hyogo, 650-0032, Japan  
Phone: +81-78-392-5509  
Fax: +81-78-392-5517

**SAKI (SHANGHAI) CO., LTD.**  
Room 306, No 1600 West  
Nanjing Road Jing' an  
District, Shanghai 200040,  
China  
Phone: +86-21-6249-2758  
Fax: +86-21-6249-2760

**SAKI (SHANGHAI) CO., LTD  
(Shenzhen office)**  
Room 3112, No 5002 East  
ShenNan Road, Shenzhen  
518001

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