

# The Newest Innovative X Ray Inspection System



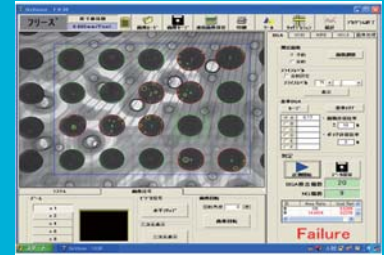
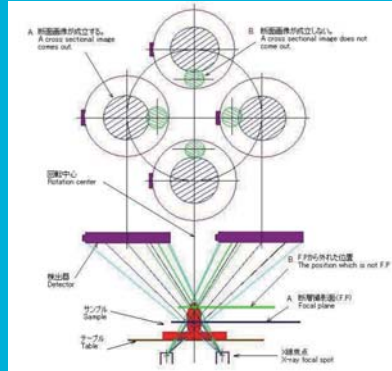
M.S.Engineering Co.,Ltd.

<http://www.mseng.co.jp>

[msc@mseng.co.jp](mailto:msc@mseng.co.jp)

## MSX8000 Tomography Inspection System

Model MSX8000 is tomography inspection system by lamino-graphy. It is the best inspection system to the such as double side mounting board and also high density. Generally, It was very expensive although the system was required. MSX8000 succeeded in supply at a reasonable price by a new lamino-graph mechanism. Furthermore, MSX8000 can be use for 3D and 2D dual operation. It is operate with fluoroscopy such as general x-ray inspection system.

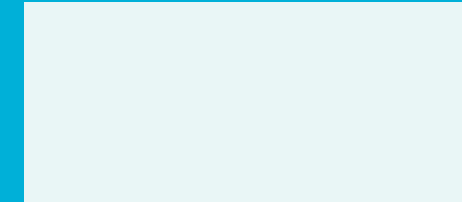


### The Software:

MSX8000 is using the same vision software of model GxVision as MSX1200L. Therefore, the capability of almost all measurement, and analysis is shared. Of course, an automatic check function is also the same.

### Main Specifications

- Table Size: 360W x 450D mm max
- XY Stroke: X90 x Y90mm
- X Ray V: 80KV max
- X Ray A: 300micro-A
- X Ray P: 24W
- X Ray T: Closed type
- Focus Size: 100micron-m
- Detector: CCD I inch
- Monitor: LCD 17 inch
- 3D Area: 6.4 x 4.8mm
- 3D Scan T: 3 sec
- 3D Scan H: up-to 15mm
- Image Magnification: x30 max.  
x240 max by GxVision.
- 2D Angle: Vertical
- Image Magnification: x30 max.  
x240 max. by GxVision.
- Vision Soft: GxVision
- PC: Windows 7 Professional SP1.  
Celeron440 (2GH)
- Power : AC200~240V / 800VA
- Size: 1240W x 1300D x 1600Hmm
- Weight: 700Kg
- X Ray Radiation: Less than 1  $\mu$  Sv/H
- Sold by:



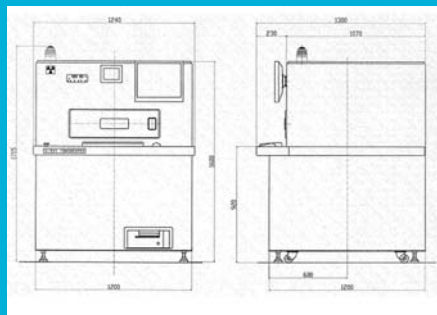
### Features:

- Epock-making Low Cost :  
It depends on the newly developed lamino-graph mechanism.
- 3D and 2D Dual Operation:  
Tow functions can use it, being able to change. It is also usual X ray Inspection System.
- Auto-Judgement:  
Most functions of usual X ray inspection system have analysis, measuring, etc.
- Easy maintenance:  
The closed type min. focus X ray tube. exchange is easy and cost is low.

### Composition:

MSX8000 is a compact stand alone system, In a lamino-graphy, X rays are given and irradiated with few angles, and it is rotated one time. And only a picture to the point is obtained. If the position whose focus suits is changed, only the picture of required height will be displayed. The focus position is able to setting to the free of the height of the board. By the function, even if the upper and lower side of a board have components, it become possible to required only image needed. For example, only a required image is obtained even if the upper and lower side of a board have BGA like sandwiches.

3 seconds. Now, cost became 1/5 or less and measuring speed became early extremely. In MSX8000, the target filed data is created with the data obtained by rotaing 360 degrees in 3 sec. Then, it succeeded in reproducing the highest image obtained by lamino graph theory.



### Proposal of MSX8000

When a both-sides surface mount board is inspected by X ray fluoroscopy, Only the visual information on the field demanded is required. The most famous method for that is CT scanning, and it is used for medical treatments mainly. However, probably it will be unsuitable for the inspection of a SMT board, because, it is very expensive system and the time of measurement is too long. The lamino-graphy system solved those weak ponts. We finished development of a min. focus X ray tube for exclusive use in order complete equipment at reasonable cost. And measuring time succeeded in finishing one measurement in

The specification are subject to changewithout notice