

MaxEye.Color

OPTICAL FLAW SURFACE INSPECTION SYSTEM WITH COLOR CAMERA

Futec's latest inspection system technology:
Higher accuracy defect classification
Breakthrough technology capable of recognizing and differentiating defects by color



01 High-speed color camera line-up

Fastest speed in industry

Minute flaw detection at the highest line speeds driven by 80MHz frequency color cameras

03 High Visibility Color Display

Increased accuracy with a new color display and color defect images.
With color classification, differentiation between defects contained in the material and those attached to the material can clearly be recognized.



Contained foreign matter



Adherent foreign matter

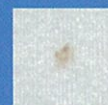
02 Defect Classification by Color

In addition to its proven classification methods, defects are now categorized by color. This allows for more precise identification and helps maximize efficiency in quality control.

Examples include recognizing Red (blood) or Brown (oil spot)



Defect in red



Oil Spot

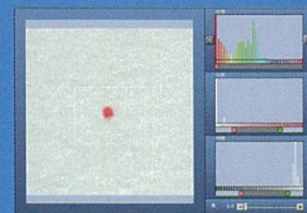
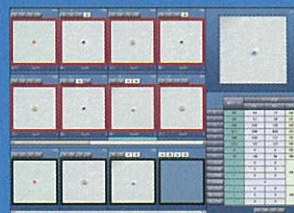


Defect in blue

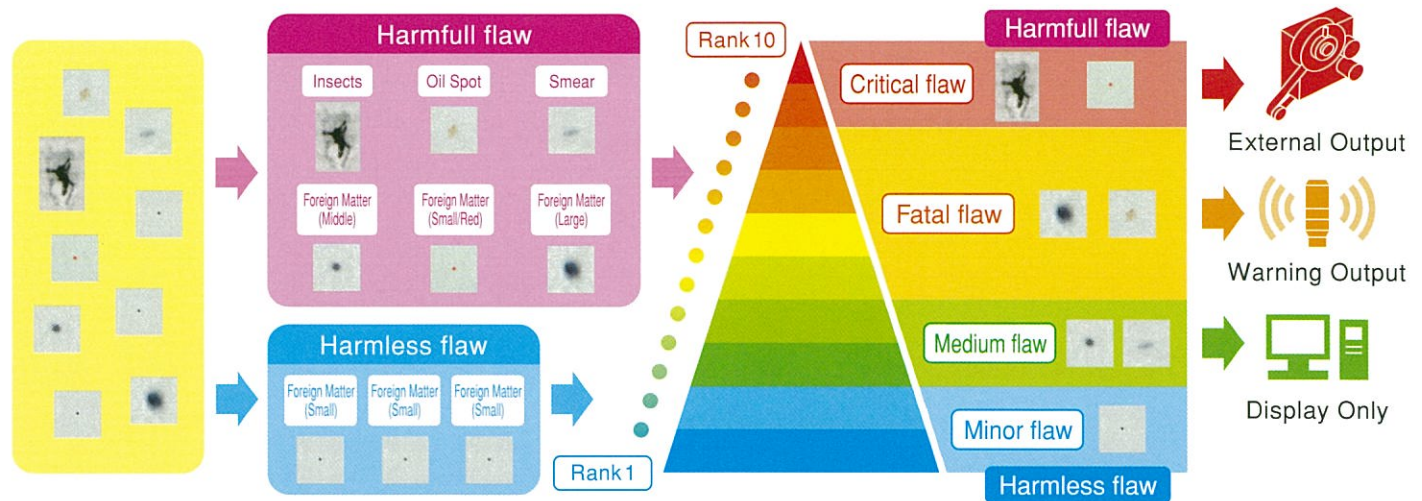
04 Setting Assist Function

First time ever in industry

A solution for the complexity of color defect detection has been found. The first time a defect image is classified, the color defect detection settings are automatically generated for future classification. Simplifying the ease of use and optimizing quality assurance.



Defect classification/Priority judgement



Camera Technology

Model	Pixels	Data Rate (MHz)	Pixel size (μm)	Characteristics
NCTCx (High Speed Color Camera)	2000	80	9×9	Minute flaw detection at the specified high line speeds
	4000	80	9×9	

SPEC

Camera	High Speed Color Camera:2000pix, 4000pix/80MHz * Mixture with following monochrome camera is available in a system. 2000pix, 4000pix, 6000pix, 8000pix/160MHz 2000pix, 4000pix/80MHz, 4000pix/40MHz		Defect image * In case of 256×256	Storage Maximum 60,000pcs/lot * Storing lot number varies with defect occurrence.
Light Sources	LED line illumination, Halogen lamp, Metal halide lamp		Transfer capability	100 images / sec.
Image processing section	Detection Circuit	4 Circuits (Bright and dark thresholds for each circuit.)	Buffer	256 images / Cam
	Defect Judgement	120 Defect classifications by characteristics Cyclical and density defect detection	Advanced functions	Wave monitor, Multi-lingual user interface, Setting assist function, Repeat judgement function, Quality check function, Self diagnostic function, external outputs (i.e. HTML, CSV)

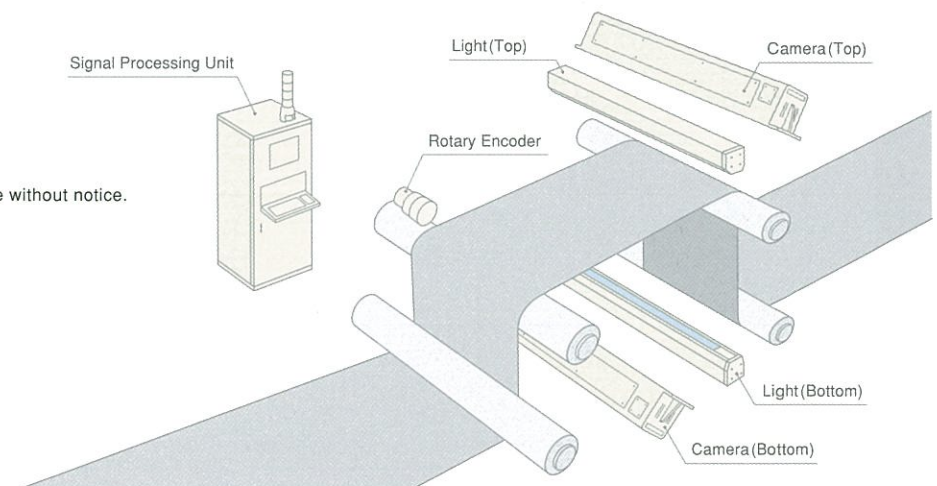
* Dust count/Material formation monitor function is unmounted.

Application examples

- Non-woven fabric ● Paper
- Film ● Metal ● Polyimide material
- Prepreg etc.

* Information (Model no., Spec, etc.) is subject to change without notice.
* The above information is as of January 1, 2012.

System configuration



FUTEC

URL: <http://www.futec.co.jp> Ver.1202

■ Head Office and Factory	1217 Hayashi-cho, Takamatsu, Kagawa 761-0301, JAPAN	TEL: +81-87-868-9991 (Overseas div.)	FAX: +81-87-865-7250
■ FUTEC Europe S.r.l.	Via Gerolamo da Cardano, 18 21013 Gallarate (VA) ITALY	TEL: +39-0331-792456	FAX: +39-0331-247407
■ FUTEC China Inc.	Room 2106, Singular mansion No. 322 Xianxia Rd, Shanghai 200336 CHINA	TEL: +86-21-5257-4298	FAX: +86-21-5257-4299
■ FUTEC America Inc.	105 Commerce Drive, Suite E, Fayetteville, GA 30214 USA	TEL: +1-770-461-0548	FAX: +1-770-461-0558
■ FUTEC Southeast Asia Sdn Bhd.	A-33-09, Menara UOA Bangsar, No. 5, Jalan Bangsar Utama 1, 59000 KL MALAYSIA	TEL: +60-3-2284-5530	FAX: +60-3-2284-5535