

# PHIXEL DWR

## Die & Wire bond Reel inspection

### Application

- Inspection of lead-frame substrate to detect post die bond and wire bond defect

### Key Feature

- High speed fully auto wire loop/profile inspection
- Min 5MP camera for 3D inspection
- Laser cut option for reject handling
- Post inspection after reject laser handling
- Inspection Time: 7µm resolution with 4cm/second
- SEMI standard with SECS/GEM interface
- Sophisticated defect mode classification
- Lead frame width 17mm to 32mm
- AOI cellular network architecture for recipe and emap management
- Option: real-time data feeding to MES and eSPC
- Option: auto email alert (defect / batch summary)



3D Post-Wirebond Reel-to-Reel Inspection

### Imaging System

Camera	5M pixels area camera monochrome
Number of camera	3
Resolution / Field of View	3.7 µm/pixel, FOV: 9mm
Min object detection	15 µm
Lighting	Blue bar light / dome light + back panel light

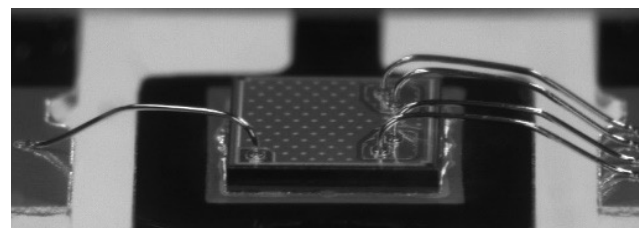


Image from camera

### Inspection Categories

<b>Program Mode:</b>	Fast programming for common reject criteria		
<b>Reject treatment:</b>	Electronic map and laser		
<b>Inspection View:</b>	Top and side view		
<b>Inspection items:</b>	<b>Die defects:</b> <ul style="list-style-type: none"><li>- Foreign material</li><li>- Die placement</li><li>- Glue on chip</li></ul>	<b>Wire defects:</b> <ul style="list-style-type: none"><li>- Ball shift</li><li>- Sweep wire</li><li>- Loop height</li><li>- Sagging wire</li><li>- Stray wire</li><li>- Broken wire</li><li>- Missing wire</li><li>- Stitch off</li><li>- Stitch offset</li></ul>	<b>Lead-frame defects:</b> <ul style="list-style-type: none"><li>- Lead deformation</li><li>- Lead shift</li><li>- Lead lift up</li><li>- Missing chip</li></ul>