



## Inspection of the bonding wire geometry

### OUTLINE / PREVIOUS

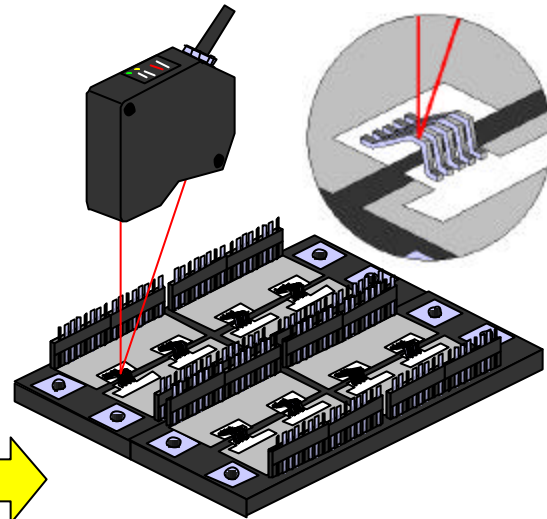
**Customer: Auto parts manufacturer**  
**Process: Wire bonding**

The geometry of bonding wire in the control units for automobile is inspected.

### PROBLEM

Highly accurate sensor is required that achieves measurement as well as discrimination of bonding wire geometry.

### SOLUTION



### MODEL / HOW TO

**HL-C211F5 HL-C2C**

Long-range, small beam spot type  
**HL-C211F5** is used.

### BENEFIT 1 Highly accurate

**HL-C211F5** is a displacement sensor with performance of sampling 100kHz, linearity  $\pm 0.03\%$ , resolution (\*)  $0.1\mu\text{m}$ , the distance to the bonding wire can be accurately measured.  
 \* **HL-C211F5E** is not subject to control, whose resolution is  $0.25\mu\text{m}$  (used in combination with controller **HL-C2CE**).

### BENEFIT 2 Long measurement center distance & wide measuring range

**HL-C211F5** is a sensor head whose measurement center distance is as long as 110mm, so that the sensor head will not interrupt when setting / resetting sensing objects. In addition, measurement is achieved without adjustment even the type of object is changed because the measuring range is as wide as  $\pm 15\text{mm}$ .

### BENEFIT 3 Functionally-rich I/O

**HL-C2C** can be connected to a variety of devices such as analog output, RS-232C and USB cable, so that the stored data in these devices can be displayed and analyzed as well as the control of the sensor can be achieved.