



## Detecting the height of solder waves

### OUTLINE / PREVIOUS

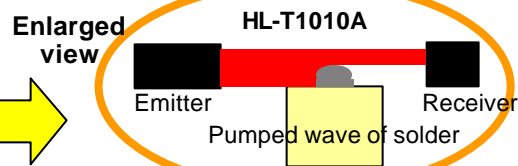
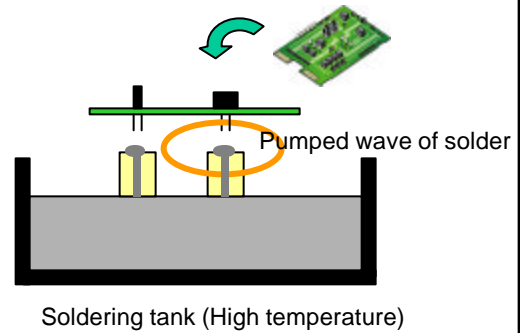
**Customer: Auto parts manufacturer**  
**Machinery: Wave soldering machine**

In the process that mounted components are soldered to a discrete board, the height of pumped solder waves is controlled to be constant.

### PROBLEM

Competitor's reflective type laser displacement sensor is used; however, its detection is unstable.

### SOLUTION



### MODEL / HOW TO

#### HL-T1010A HL-AC1

Laser collimated beam sensor of sensing width 10mm type is used. Detection is performed by targeting the laser beam at pumped wave of solder. Set by two-point teaching.

### BENEFIT 1 High resolution of 4 $\mu$ m

**HL-T1010A** detects and controls the top surface of solder wave with high accuracy thanks to its high resolution of 4 $\mu$ m. This reduces soldering failures.

### BENEFIT 2 Cost reduction

The **HL-T1** series is more reasonable than competitors' laser displacement sensors.

### BENEFIT 3 Detection resolution can be easily confirmed

**HL-AC1** is capable of confirming the marginal increment for the threshold value by setting to the resolution display mode and of performing accurate adjustment easily.