

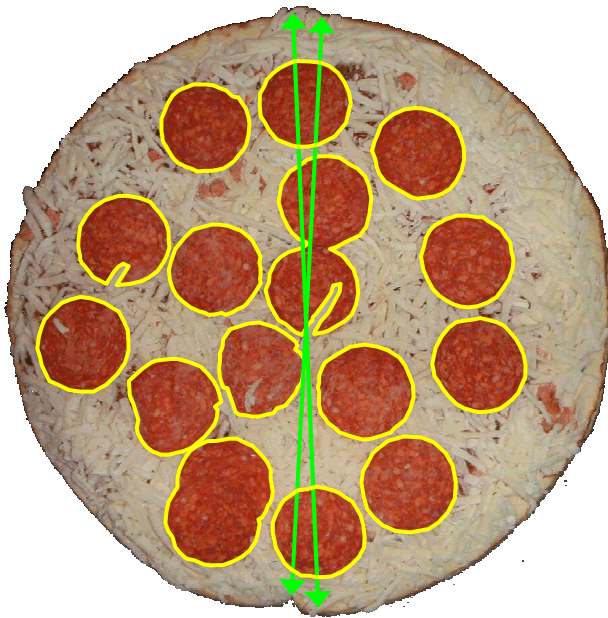
# MONTROSE TECHNOLOGIES INC.

## TOPPED PIZZA INSPECTION

A Montrose Inspection System can provide valuable information about topped pizza that can be used for real-time process optimization, off-line product analysis or even in-line 100% inspection with automatic rejection of defective products. The following summary highlights some of the typical analysis techniques that can be performed. Please note that there are over 100 different analysis results available, only a few of which are shown below.

### Key Measurements

### 2D/Color Measurements



**Surface Area:** The total surface area of the crust – a ½” increase in diameter on an 8” crust equates to a 12% increase in area that may require proportionate topping to cover.

**Min. and Maximum Diameter:** Up to 180 individual diameters are measured in order to detect over- and under-sized crusts.

**Roundness:** The difference between the largest and smallest of up to 180 measured diameters.

**Edge Color:** Specific color characteristics of the outside edge only.

**Topping Area (Dark) %:** The percentage of the top surface covered by dark areas, in this case pepperoni slices.

**Topping Area (Light) %:** The percentage of the top surface that is light in color (i.e. cheese).

**Number of Pepperoni ‘Blobs’:** Using blob analysis, it is possible to count the number of pepperoni slices on the top surface.

### 3D/Thickness Measurements

**Peak Height:** This measures the highest point on the pizza surface. The peak height will be too high if the topping is too high; or if the pizza has edge bent up.

**Filling Area (Center Spot Height) Height:** The average height of the pizza in a user-defined center spot of the crust.

**Slope Symmetry:** Maximum height difference between 12 user-defined spots on the top surface of the pizza.

**Volume:** Pizza volume can be calculated through integration of all collected height data.

**Flatness:** The height variation of all points is calculated in a defined area.

**Average Edge Height:** The average height of the outside edge only.

