MT-Series™

In-line System for 100% Vision Inspection and Rejection

Systems for Any Environment

The MT-Series of systems use a high-speed, non-contact imaging method to continuously quantify a wide range of object characteristics such as top and bottom color, topping coverage, height, diameter, slope, symmetry, length and width. Results are displayed in real-time on an attached monitor and ethernet connected PC.

System options include conveyor belt width, height, and material, number of cameras, type of reject module, additional touchscreens, integration of third party devices (scale, product handling), output signals to alarm and oven, and data output to plant-wide data systems.

Operators may view the results in two main formats – individual results with images, and averaged data in various graphical formats, with subdivision by lane.

Key Benefits:

- Physical measurement of every product in 2D, 3D, top and bottom color
- Easy installation and calibration with a compact footprint, pre-configured measurements
- Montrose inspection software with customizable real-time charting and dashboard display
- Full data storage and custom report generation
- Smart interaction with packaging equipment
- Specialized material handling options: individual product rejection, de-kiss separation, counter/grouper, and diversion to multiple grading streams
- Quantifies a wide variety of physical attributes which include:
    - Diameter, Length, Width, Surface area
    - Volume, weight
    - Height, Slopes
    - Bake Color (excluding topping, split)
    - Topping (Color, Coverage, Count)
    - Measure color in L*a*b* and BCU
- Ability to measure up to 50 objects per second

MONTROSE
TECHNOLOGIES INC.

Vision in baking since 1998.

Why consider the MT-Series?

- Rapid payback through
  - Lower or eliminated labor costs
  - Reduced waste
  - Maximized yield
  - Improved quality
- For automatic grading, counting, grouping and rejection
- Increased plant safety and hygiene at inspection points
- Easy to install and operate
- Complete monitroing and reporting on every product made including details on faulty products
- Inspection at multiple locations: pre/post proofer, pre/post oven, pre/post freezer, pre/post enrobing and pre-packaging
- Versatile measurement capability for a wide range of food items: including:

  Baked Goods

  Snack Foods

  Bars

  Frozen Foods

  Meats

  Packaged Goods

- Products of any shape and size can be measured
- Easily keeps detailed records of everything you make
  - Detailed description of defects
  - Logging of production activity by the minute
  - Detailed production reporting in real time and historically
  - User defined reporting optionsby the minute, hour, shift, day, week, month or year
- In-house and field support, full warranty, full inventory of spare parts

Specifications

Measurement Accuracies

Height:	+/- 0.5 mm
Length/Width/Diameter	+/- 0.5 mm

Product Characteristics

Maximum Throughput	application specific
Maximum Length	up to 1524 mm (60″)
Maximum Height	up to 1524 mm (60″)

Physical (sensor head)

Field of View	as small as 305 mm (12″)

Environmental

Ambient Max Temperature	50 °C (122 °F)
Ambient Min Temperature	2 °C (36 °F)
Humidity (non-cond)	5 to 95%
Power	120-240 VAC
	50/60 Hz, 1 PH
	380-480 VAC
	50/60 HZ, 3 PH
Compressed Air	30 CFM (max)
	@ 30 psi (min)
	Dry and oil-free