# WALL THICKNESS MEASUREMENT MULTI-POINT AND SINGLE-POINT





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# WALL THICKNESS MEASUREMENT FOR EVERY NEED

In container glass production, wall thickness measurement is one of the most important aspects. Heye offers a flexible package for every need. The new MTE electronic module can handle single-point as well as multi-point sensors. A major advantage: Heye is using the superior chromatic confocal method which is much more precise, robust and reliable than other solutions.

### HEYE WALL THICKNESS MEASUREMENT SYSTEM MTE 12

### Save time and money: One device to inspect all critical container areas simultaneously

The MTE 12 supports the new multi-point sensor MTS 10/05 as well as the well proven single-point sensors. It can handle up to 4 sensors and 12 measuring points simultaneously. This allows the fast and precise inspection of all critical container areas at the same time.

The MTE 12 is available as a stand alone unit, adaptable to numerous inspection machines, or as an integrated component in the Heye SmartLine and other machines with Heye control.



#### Advantages

- Available as stand alone or integrated version
- Up to 4 sensors can be used simultaneously
- Up to 350 bpm
- Up to 6000 measurements per second
- High intensity long life LED illumination, maintenance free
- Modular system, upgradable at any time
- Ovality (out of round) measurement



## **HEYE MULTI-POINT THICKNESS SENSOR (MTS 10/05)**

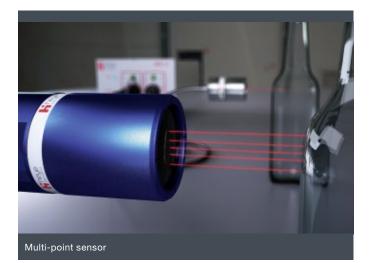
The new MULTI-POINT THICKNESS SENSOR MTS 10/05 is a breakthrough in wall thickness measurement.

#### **Function Principle**

The Heye MTS 10/05 is equipped with 5 measuring points spaced 2.5 mm apart. All 5 points simultaneously measure the wall thickness using the chromatic confocal method. This allows a wide range of possible settings for measurement distance and measurement angle to the surface. With this multi-point thickness sensor, you are able to inspect the wall thickness along a line of 10 mm length. An inspection area 10 times larger than a single-point sensor improves the quality and reliability of inspection. This makes it very easy to find the right points of inspection to cover all possible thin areas of a container.

#### Advantages

- Non-contact inspection
- Large inspection area per head (10 mm line)
- Easy setup
- Usable on uneven surfaces / non round
- Very flexible measurement angle
- Large working distance



### **HEYE SINGLE-POINT THICKNESS SENSORS**

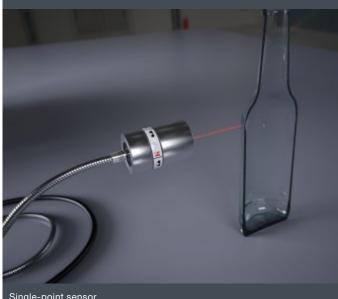
The well proven single-point wall thickness sensors are available in different versions.

You can choose between sensors with long or short working distance and normal or very compact sizes, depending on the dimensions and shape of your containers and the free space in your inspection machine.

Please refer to the last page for more information.

#### **Advantages**

- Non-contact inspection
- Compact design
- Easy installation



Single-point sensor

### FULL FLEXIBILITY AND SCALABILITY IN ONE SYSTEM



## **OVERVIEW**

### MULTI-POINT AND SINGLE-POINT SENSORS

Measuring head	10 mm	10 mm flat	12 mm	MTS 10/5
Measuring distance	64.5–75.5 mm	64.5 – 75.5 mm	47.25–60.74 mm	43.6–53.6 mm
Normal distance	70 mm	70 mm	54 mm	48.6 mm
Measuring range	10 mm	10 mm	12 mm	10 mm
Measuring spots	1	1	1	5
Length of measuring line	-	-	-	10 mm
Distance between measuring spots	-	-	-	2,5 mm
Measurable wall thickness	0.3–5 mm	0.3–5 mm	0.45–5 mm	0.37–5 mm
Measuring spot diameter	24 µm	24 µm	30 µm	30 µm
Measuring angle	90° ± 20°	horizontal 90° ± 20° vertical ± 11°	90° ± 15°	90°±15°
Length	146 mm	146 mm	61 mm	190 mm
Diameter	65 mm	65 mm x 35 mm	36 mm	50 mm
Weight	721 g	468 g	281 g	520 g

### **ELECTRONICS MTE 12**

	Specification		
	Sensors	max. 4	
	Measuring spot channels	max. 12 e.g. <b>a</b> 2 multi-point + 2 single-point <b>a</b> 1 multi-point + 3 single-point	
	Measuring rate	6 channels up to 6,000 Hz 12 channels up to 4,000 Hz	
	Electical system		
	Mains supply voltage	110–230 V AC	
	Mains frequency	50–60 Hz	
	Rated power	150 W	

Environmental conditions		
Temperature range (operation)	5°C up to +50°C	
Relative humidity	10% up to 90%, non-condensing	
Dimensions		

Dimensions (stand alone version)		
Depth (incl. handle)	525 mm	
Width (incl. handle)	465 mm	
Height	150–230 mm	
Total weight	approx. 11 kg to 12 kg	

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