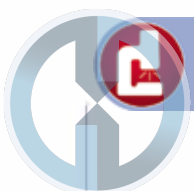




# OPTICAL MEASUREMENTS



**HOD**<sup>®</sup>



## STANDARD GAGE – VISUAL 250

### ▪ Main features

The VISUAL Vision Machine 250 is the answer to a growing demand of industry for workpieces that could not be measured using common tactile precision tools. The VISUAL 250 is compact but with no compromise on its metrological performances. This manual machine meets most of the market needs for 2D-measurement.

Featuring a solid mechanical construction, the machine can equally be used in the workshop as in the inspection laboratory.

Equipped with VISUAL GAGE – the software that requires less than a half-day training – the VISUAL 250 is a perfect multi-tasking and multi-users inspection means.

TOP LINE



### ▪ Exceptional Quality/Price ratio

The machine has been specially marketed to offer an alternative option in the field of vision at highly optimized costs, whilst guaranteeing optimum accuracy besides a high-quality level.

### ▪ Z-axis

This coordinate axis is moved from the front of the machine, directly.

### ▪ X/Y coordinate tables

Both X and Y coordinate tables have a built-in, hand-operated release system, speeding up any displacement needed to reach the measuring area.

### ▪ Manual zoom

The delivery scope includes an indexable manual zoom with optical magnifications from 0,7x up to 4,5x (6,5:1).

### ▪ Light illumination

The Visual 250 is fitted with two illuminations through LEDs – i.e. a ringlight for episcopic illumination (top) along with a diascope illumination (bottom) for part profile projection. Both are controlled over the software.

### ▪ Laser pointer

A laser pointer is included to make tracing the measurement zone on the part being inspected easier.



▪ **Clamp system**

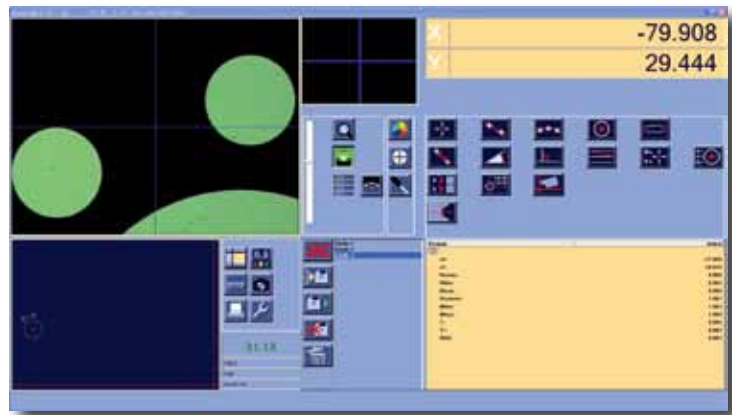
Your Visual 250 can be used in conjunction with VISUALFIX. This modular system includes a number of clamping elements available in either of both kits as below:

VISUALFIX kit, including 35 elements (**06860410**)

STANDARD VISUALFIX kit, including 51 elements (**06860411**)

▪ **Software**

VISUAL GAGE allows quick and accurate measurement of nearly all geometrical part features. This software can equally be run by a trained operator or a metrologist. It provides the user-friendliness and flexibility needed to create the measurement reports. Training takes just half a day. A clearly arranged User's interface makes this vision machine most easy to use.



Technical data	
<b>Order number</b>	<b>06834700</b>
Releasable X- and Y-axis	✓
Measuring range (X/Y)	250 x 150 mm
Z-Displacement	200 mm
Maximum workpiece weight	10 kg
<b>Accuracy</b>	
MPE <sub>xy</sub> (Ex, Eu)	3,9 µm + L/150* (L in mm)
MPE <sub>xy</sub> (Exy)	4,9 µm + L/150* (L in mm)
*m≤5 kg, uniformly distributed	
<b>Camera and Optics</b>	
CCD colour camera, 752 x 582 pixels	✓
Indexable zoom (0,7x up to 4,5x)	✓
Diascopic illumination, green LED	✓
Ringlight with a white LED	✓
Laser pointer	✓
<b>Additional data</b>	
Calibration	at 10 mm
Weight (w/o monitor and computer)	180 kg
Power supply	115 to 230 Vac ±10%, 50 to 60 Hz
Overall dimensions of the machine alone (LxHxD)	716 x 1015 x 753 mm
Reference temperature	20°C ±1°C
Operating temperature range	10°C to 40°C
Relative humidity	< 80%, non-condensing
VISUAL GAGE application software	✓
Provided with monitor and computer	✓

## VISUAL SCOPE MACHINE 300V



- Solid mechanical structure for better stability over time.
- Profile (bottom) and surface (top) light sources with different intensities for optimal contrast.
- X/Y release system to speed up manual displacement.
- Digital read-out included with common measuring features such as:
  - Point, line, circles
  - Distances, angles
  - Alignment/ skew

### Technical Specifications

Releasable X- and Y-axis	✓
Measuring range (X/Y)	150 x 50 mm or 200 x 100 mm
Displacement in Z-axis	90 mm
Maximum workpiece weight	3 kg
<b>Accuracy</b>	
MPE <sub>x</sub> and MPE <sub>y</sub> (E1 X,Y)	3 μm + L /75 (L in mm)
<b>Projection screen</b>	
Screen diameter	300 mm
Rotating range	0 ÷ 360°
Resolution	1'
Rotating accuracy	6'
<b>Illumination</b>	
Diascopic illumination, halogen lamp (12V, 100W)	✓
Episcopic illumination, halogen lamp (24V, 150W)	✓
<b>Lens magnification</b>	
10x (standard)	Field of View = 30 mm Working distance = 75 mm
20x (standard)	Field of View = 15 mm Working distance = 69 mm
50x (standard)	Field of View = 6 mm Working distance = 44 mm
<b>Additional specifications</b>	
Machine weight	135 kg
Overall dimensions (L x H x D)	772 x 1336 x 1026 mm
Power supply	110 to 230 VAC +/- 10%, 50 to 60 Hz
Reference temperature	20°C +/- 1°C
Operating temperature range	20°C +/- 5°C
Visual Scope 300 V read-out	✓

Order number	Table size (mm)	Special price
06834001	150 x 50	150 mm
06834002	200 x 100	150 mm