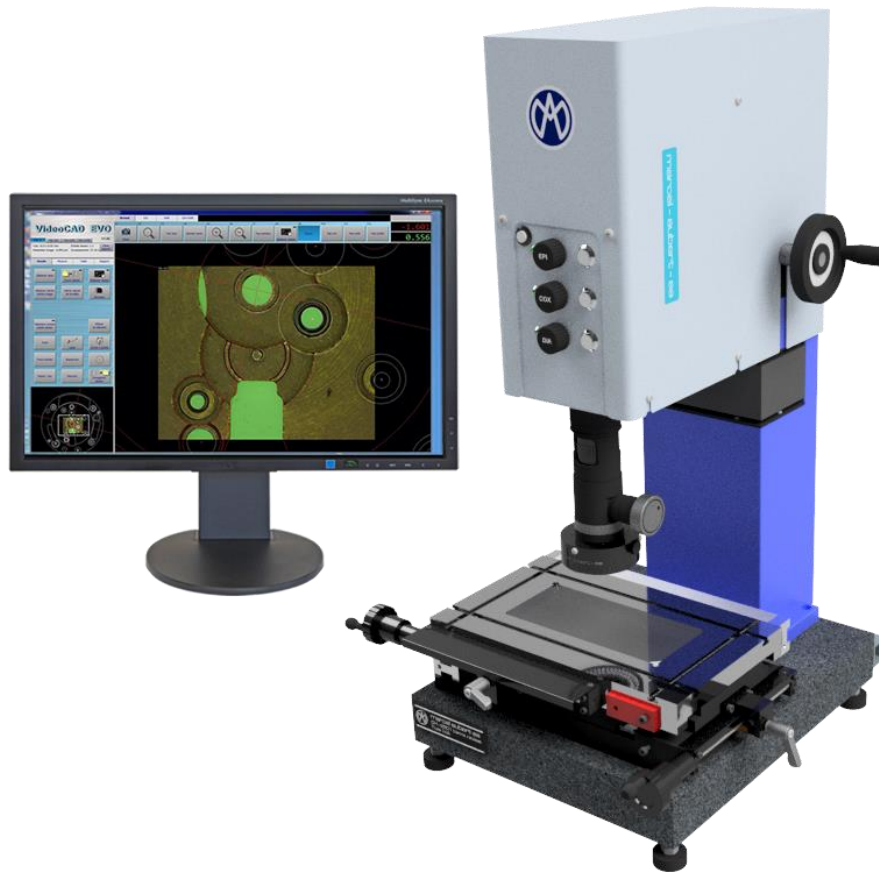


Optimum 150 / 200 / 200M

Video measuring system




MA 185 & MA 186



Versatile workshop measuring machine for fast and reliable optical measurement on different fields of view. This enclosed version incorporates the lighting controls, and in the case of a motorized machine, the motorization controls, thus offering a small footprint. The ergonomics of the device is thus optimal and the device is more compact. The choice of optics and illuminators meets the most demanding applications.

- Granit base.
- Manual or motorized X-Y table.
- Manual or motorized Z column.
- Zoom-optics with indexes.
- 1.3 Mpx USB 3.0 color camera.
- LED circular illuminator.
- Computer with 24" monitor.
- Glass chromium deposit calibration ruler.
- Wide choice of measuring and comparison software.

Technical specifications

	 Optimum 150	 Optimum 200	 Optimum 200M
X-Y table range [mm]	150x70 manual	200x100 manual	200x100 motorized
Table precision [mm]	0.003 / 100		
Z column range [mm]	150 manual or 140 motorized	150 manual or 140 motorized	140 motorized
Column precision [mm]	0.030 / 100		
X-Y axis rulers	Heidenhain (Display resolution : 0.001mm)		
Z axis rulers	Optional		
Weight (kg)	74	99	116
Dimensions column lowered (W x D x H) [mm]	440 x 450 x 680	450 x 530 x 730	600 x 770 x 750

Optical choice 1









Optics	12X zoom / 8 indexes
Magnifications *	25X to 280X
Camera	Color 1.3 Mpx USB 3.0
Fields of view [mm]	17.5 x 14.0 to 1.4 x 1.1
Focal length [mm]	86
Pixel resolution [μm] **	13.6 to 1.1

Optical choice 2

Optics	12X zoom / 8 indexes
Magnifications *	45X to 540X
Camera	Color 1.3 Mpx USB 3.0
Fields of view [mm]	8.8 x 7.0 to 0.7 x 0.6
Focal length [mm]	86
Pixel resolution [μm] **	6.9 to 0.6

* = Indicated magnifications are calculated on 24" monitor and may be reduced by up to 12% according to the software configuration.

** = Camera pixel size / (sensor size / field of view)

Software								
Functions	VideoCAD EVO	M3	VideoRET	VideoMES	METRIC	VideoSYMBOL	VideoGEN	VideoPIC
								
Displaying a reticle / cross	✓	✓	✓	✓	✓	✓	✓	✓
Saving an image	✓	✓	✓	✓	✓	✓	✓	✓
Saving measurements	✓	✓	-	-	✓	-	-	-
Measuring / displaying angles	✓	✓	✓	✓	✓	✓	-	-
Distance measurement	✓	✓	✓	✓	✓	-	-	-
Depth measurement	✓	✓	-	-	-	-	-	-
Importing and comparing DXF drawing	✓	✓	✓	-	-	✓	-	-
Diameter and radius measurement	✓	✓	✓	-	✓	-	-	-
Measurement protocol	✓	✓	-	-	✓	-	-	-
Display of X and Y axis	✓	✓	-	-	-	-	-	-
Display of Z axis	✓	✓	-	-	✓	-	-	-
Automatic measurement by image processing	✓	✓	-	-	-	-	-	-
Displaying and moving up to 2 pairs of lines	-	-	-	-	✓	-	-	-
Displaying and moving up to 3 pairs of lines	-	-	-	-	-	-	✓	-

Choice of software by machine								
Optimum 150	✓	✓	✓	✓	✓	✓	✓	✓
Optimum 200	✓	✓	✓	✓	✓	✓	✓	✓
Optimum 200M	✓	✓	-	-	-	-	-	-

Choice of axis display								
Axis Display	-	-	✓	✓	✓	✓	✓	✓
M1	-	-	✓	✓	✓	✓	✓	✓
QC100	-	-	✓	✓	✓	✓	✓	✓
QC200	-	-	✓	✓	✓	✓	✓	✓

Options

	Concentricity measuring tool for T-slot MA 145-003-02 (150) MA 146-003-02 (200 / 200M)		Cast iron rotary table with graduation MA 145-15-70G (150)
	Concentricity control for T-slot MA 145r (150) MA 146r (200 / 200M)		Aluminum rotary table with graduation MA 145-16-70G (150)
	Manual divider for T-slot MA 145d (150) MA 146d (200 / 200M)		Aluminum rotary table MA 145-16-70 (150)
	±15° rotating between centers clamping bracket for T-slot MA 145a (150) MA 147a (200 / 200M)		Vice (capacity 15mm) MA 143b-004 (150 / 200 / 200M)
	Prism with clamping flange for T-slot MA 145e (150) MA 146e (200 / 200M)		Adjustable vice (capacity 15mm) MA 143b-005 (150 / 200 / 200M)
	Crocodile-pliers for T-slot MA 145b (150) MA 146b (200 / 200M)		Crocodile-pliers on round support MA 143-010-01 (150 / 200 / 200M)
	Clamp with parallel jaws for T-slot MA 145b-001 (150) MA 146b-001 (200 / 200M)		Clamp with parallel jaws on round support MA 143-010-02 (150 / 200 / 200M)
	Collet holder for T-slot MA 145bZ (150) MA 146bZ (200 / 200M)		Collet holder on round support MA 143-010-03 (150 / 200 / 200M)
	V-block with spring clip for T-slot MA 145c (150) MA 146c (200 / 200M)		V-block with spring clip on round support MA 143-010-04 (150 / 200 / 200M)
	Ø40mm diaphragm for transmitted illuminator 45-030-01 (150)		Digital ruler Z-axis MA 461-170 (150)
	Digital calculator QC200 MCA-120-193 (150 / 200)		Measuring software M2