MarVision MM 420 CNC

CNC workshop measuring microscope

FEATURES

- 3-axes CNC control
- Axis movement and speed regulation controlled via the joystick
- Integrated color camera
- Motorized zoom lens (0.7x –4.5x) with autofocus
- LED ring light: 1 ring and 4 segments, individually switchable and dimmable
- LED transmitted light: dimmable
- Laser pointer for position finding
- Solid granite base
- Sturdy steel XY table, precision-mounted
- Optical incremental measuring system for outstanding accuracy and reliability

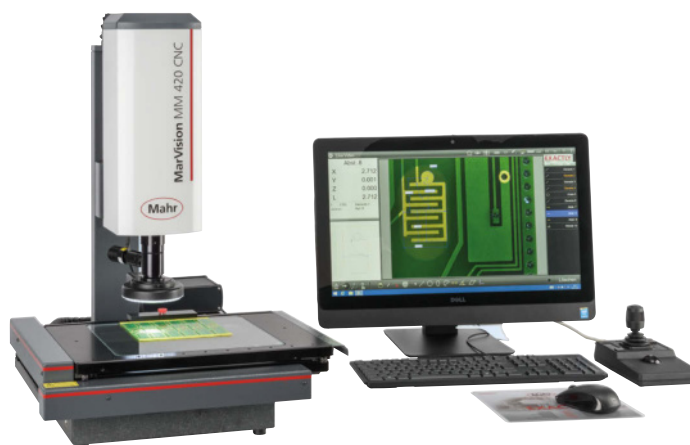### Operating and display unit M3 software with touchscreen PC

- 23" touchscreen with keyboard and mouse
- The operating system is Windows 10 Pro, so further software can be installed
- Operation via the Multi-Touch screen or with a mouse/keyboard
- M3 Software version 3
- Large video image
- Reference/actual evaluation with tolerances
- Record output with company logo
- Graphic display with dimensioning
- Automatic edge detection, even on low-contrast parts
- Stitching
- Statistics
- Palletizing of serial parts
- Optional hardware components
- Telecentric transmitted light
- Coaxial incident light
- Use of ancillary lenses 0.5x / 2x (additional magnification levels)
- Tactile measuring system Renishaw TP20
- Macro zoom Navitar 4 K motor zoom 8x–116x with 5MB camera
- 0.67x TV adapter for larger line of view

Software options
- Importing DXF data
- DXF and profiling package
- Thread measurement module
- Cable insulation module
- Upgrade of M3 versions V1 and V2
- QDAS converter program

- **Package contains:**
  M3 software with touchscreen PC, standard stop bar 220 as, instruction manual, Mahr calibration certificate

Application:

- Measurement or determination of geometric elements (point, straight line, circle, distance, intersection point, etc.) by automatic edge detection, e.g. on punched and bent components, plastic components, and circuit boards

TECHNICAL DATA

Order no.		4247701	4247702	4247703
Type			MM 420 CNC	
Measuring range X/Y	mm	200 / 100	250 / 170	400 / 250
Size of table	mm	370 x 210	420 x 280	600 x 480 x 200
Maximum table load	kg		20	
Measuring system			built-in incremental scale	
Measuring system - resolution	mm		0,001	
Measuring system - E1 X/Y in µm	µm	1.9 + (L/100)	1.9 + (L/100)	3.9 + (L100)
Measuring system - E2 XY in µm	µm		2.9 + (L/100)	4.9 + (L/100)
Magnification			35 –225x	
Max. height of test piece	mm		200	
Max. height of test piece / 0.5-fold	mm		110	
Max. height of test piece with coax.	mm		200	
Max. height of test piece with coax. / 0.5-fold	mm		110	
Illumination			LED back and front illumination, adjustable	
Energy supply			230 V / 50 Hz	