HITEC

Messtechnik GmbH

Optical Measuring Systems
3D Coordinate Measuring

CONTENT

Optical Metrology |3D Coordinate Measuring

GOOD TO KNOW

As manufacturer and designer of leading optical measuring systems for over 30 years to the automotive industry, mechanical engineering, medical industry, aerospace industry, electrical industry, motor sports, auto supplier, teaching facilities, etc. we are able to offer you astonishingly competitive pricing and perfect, affordable, custom-made systems for any special industrial demands- including accessories.

QUALITY
MADE IN GERMANY
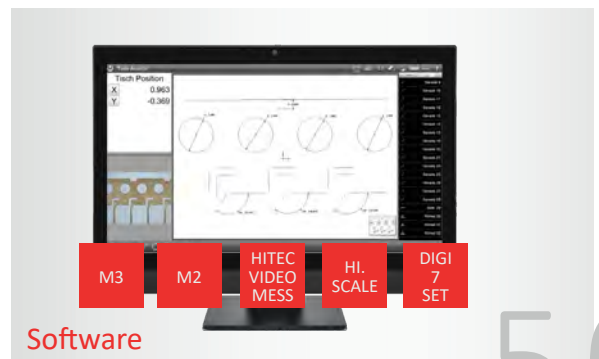
QZW1
Mesuring Microscope

HITEC Messtechnik GmbH
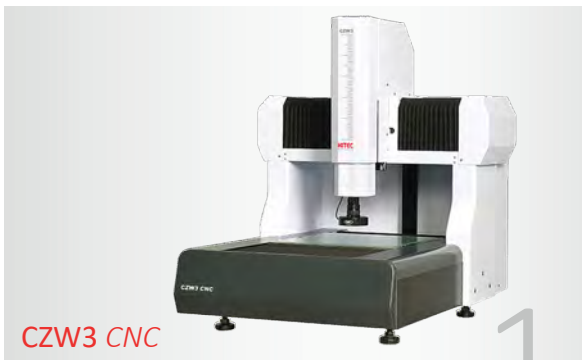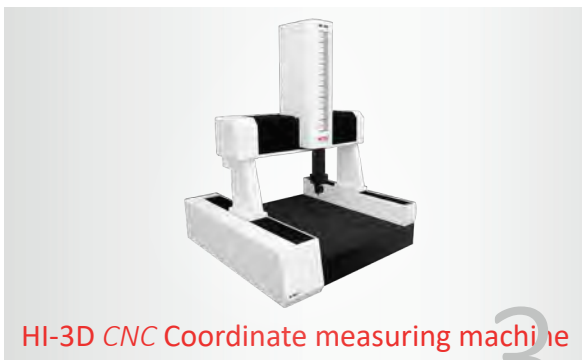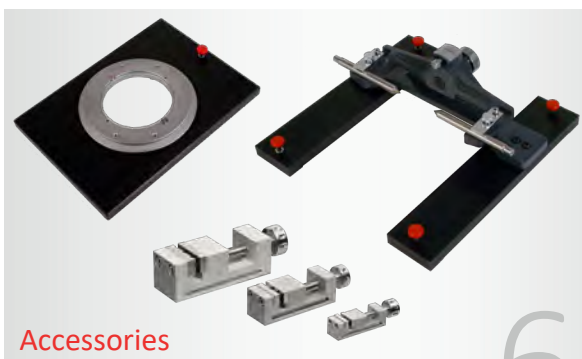
Base plate made of natural granite

Precision measuring stage

Quick adjustment with friction drive

Fixed lenses

USB camera 1,3 mega pixels

4 segments LED ring light/surface light

LED transmitted light

Laser pointer for position finding

QZW1 Measuring Microscope

QZW1 Measuring Microscope

The HITEC QZW1 product line delivers high precision repeatable measurements of complex components of all materials. Based on various options like zoom lens, different z-axes measurement capability and different measuring table sizes, the QZW offers all possibilities to satisfy your measurement requirements. For automatic measurement of multiple complex components HITEC QZW1 is also available with CNC.

Software:

M3

Applications

Plastic components	Mechanical Parts

Stamp parts	Medical components	Electronic parts

Technical Data

MEASURING RANGE X-Y AXES	100 x 100 mm	200 x 100 mm	250 x 170 mm	400 x 250 mm
LENGTH DEVIATION	1,9 µm + l/100 (l in mm)			4 µm + l/100 (l in mm)
MEASURING RANGE Z-AXIS	150 mm / optional 350 mm			
MEASURING SYSTEM Z-AXIS	optional			
CAMERA	USB 3.0 25 frames/s 1,3 megapixels			
OBJECT LENS	Fixed lenses / optional zoom lens 0,7x - 4,5x (manual/motorized)			
MAGNIFICATION	40x / 35x - 225x (zoom lens)			
FIELD OF VIEW	8 mm / 9 mm - 1,5 mm (zoom lens)			
SURFACE LIGHT	4 segments LED ring light/surface light			
TRANSMITTED LIGHT	LED transmitted light			
POSITIONING	laser pointer			
TABLE LOAD CAPACITY	max. 20 kg			
DELIVERY CONTENT	23" touchscreen PC, keyboard, mouse, calibration certificate, operation manual			

HITEC Messtechnik GmbH

QZW1 Accesories

Item no.	Description
601-1500	Zoom lens 6,5:1 incl. TV Adapter 1,0x
660-8950	Zoom lens with coaxial surface light
601-1506	Zoom lens 6,5:1 motorized
660-8970	Zoom motorized with coaxial surfece light
600-1000	Measuring system z-axis (150 measuring range)
600-1200	Prolongation of the z-axis about 200mm (measuring range 350mm)
600-1100	Measuring system z-axis (350 measuring range)
660-8600	Telecentric bottom light
601-1000	Auxilliary lens 0,5
601-1600	Auxilliary lens 0,75
601-1100	Auxilliary lens 1,5
601-1200	Auxilliary lens 2,0
601-1300	TV-Adapter 0,67x
601-1512	Surcharge dxf option for M3 (see page 12)
601-1520	Additional option for M3 measuring thread (see page 13)
600-0800	Stop bar 30x120mm
600-0900	Angle stop 90° 200x150mm
601-1700	Turnable glass plate Ø100mm (measuring table 100x100 / 200x100mm)
601-1800	Turnable glass plate Ø100mm (measuring table 250x170mm)
601-1901	Turnable glass plate Ø100mm (measuring table 400x250mm)
600-1501	Pair of prisms 5-55 diam. (table 100x100 and 200x100mm)
600-1502	Pair of prisms 5-55 diam. (table 250x170mm)
600-1503	Pair of prisms 5-55 diam. (table 400x250mm)
600-1601	Center support (pair) 40mm height (table 100x100 and 200x100mm)
600-1602	Center support (pair) 40mm height (table)
600-1603	Center support pair 40mm height (table400x250 mm)
600-1701	Center support, swivelling 50mm height/maximum width 130mm (table 100x100mm and 200x100mm)
600-1702	Center support, swivelling 50mm height/maximum width 130mm (table 250x170mm)
600-1703	Center support, swivelling 50mm height/maximum width 130mm (table 400x250mm)
600-9200	Calibration grid circles 50mm
600-9500	Calibration grid scale 50mm
600-2010	Cover for measuring table 100x100/200x100 mm (500/500/500mm)
600-2020	Cover for measuring table 250x170 mm (700/600/550mm)
600-2030	Cover for measuring table 400x250 mm (1000/1000/1000mm)

QZW1*CNC*

Measuring Microscope

HITEC Messtechnik GmbH

Base plate made of natural granite
precision measuring stage
3-axes-CNC-control
Fixed lenses
USB camera 1,3 mega pixels
4 segments LED ring light
Telecentric LED bottom light
Laser pointer for position finding

Optional:
Upgrade for the Z-axis with
TP20 tactile measurement
system for measuring
3D-geometries

QZW1 CNC Measuring Microscope

QZW1 CNC Measuring Microscope

The product line QZW1 CNC delivers high precision repeatable measurements of complex components of any material. The 3-axes-CNC-control is based on servo-motors and joystick and can be used for automated serial measurements. By various options like zoom lens and various sizes of measurement tables QZW1 CNC offers all possibilities for your part-specific requirements.

Software:

M3

Applications

Plastic components

Mechanical parts

Stamp parts

Medical components

Electronic parts

Technical Data

MEASURING RANGE X-Y AXES	200 x 100 mm	250 x 170 mm	400 x 250 mm
LENGTH DEVIATION	1,9 µm + L/100 (L in mm)		4 µm + L/100 (L in mm)
LENGTH DEVIATION E_1 - Z-AXES TACTILE	4 µm + L/75 (L in mm)		
MEASURING RANGE Z-AXIS	200 mm		
CAMERA	USB 3.0 25 frames/s 1,3 megapixels		
OBJECT LENS	Optional zoom lens 0,7x - 4,5x motorized		
MAGNIFICATION	35x - 225x		
FIELD OF VIEW	9 mm - 1,5 mm		
SURFACE LIGHT	4 segments LED-ring light (coaxial surface light optionally)		
TRANSMITTED LIGHT	LED (telecentric optionally)		
POSITIONING	laser pointer		
MAX. TABLE LOAD CAPACITY	max. 20 kg		
DELIVERY CONTENT	23" touchscreen PC, keyboard, mouse, calibration certificate, operation manual		

HITEC Messtechnik GmbH

QZW1 CNC Accessories

Item no.	Description
660-898	Navitar zoom motorized with coaxial surface light
660-8600	Telecentric bottom light 5V LED
601-1000	Auxilliary lens 0,5 x Navitar
601-1600	Auxilliary lens 0,75x Navitar
601-1100	Auxilliary lens 1,5x Navitar
601-1200	Auxilliary lens 2,0x Navitar
601-1300	TV Adapter 0,67x
601-1512	dxf option and profiling „Best Fit" (see page 12)
601-1520	Additional option for M3 measuring thread (see page 13)
600-0800	Stop bar 30x120mm
600-0900	Angle stop 90° 200x150mm
601-1700	Turnable glass plate Ø100 mm (measuring table 100x100 / 200x100 mm)
601-1800	Turnable glass plate Ø100 mm (measuring table 250x170 mm)
601-1901	Turnable glass plate Ø100 mm (measuring table 400x250 mm)
600-1501	Pair of prisms 5-55 mm diameter (table 100x100 / 200x100 mm)
600-1502	Pair of prisms 5-55mm diameter (table 250x170 mm)
600-1503	Pair of prisms 5-55 mm diameter (table 400x250 mm)
600-1601	Center support (pair) 40mm height (table 100x100 / 200x100 mm)
600-1602	Center support (pair) 40mm height (table 250x170 mm)
600-1603	Center support (pair) 40 mm height (table 400x250 mm)
600-1701	Center support swivelling 50mm height / maximum width 130mm (table 100x100 / 200x100 mm)
600-1702	Center support swivelling 50mm height / maximum width 130mm (table 250x170 mm)
600-1703	Center support swivelling 50mm height / maximum width 130mm (table 400x250 mm)
600-9200	Calibration grid circles 50mm
600-9500	Calibration grid scale 50mm
600-2010	Cover for measuring table 100x100/200x100 mm (500/500/500 mm)
600-2020	Cover for measuring table 250x170 mm (700/600/550 mm)
600-2030	Cover for measuring table 400x250 mm (1000/1000/1000 mm)
604-T100	**Optional**: Upgrade for the Z-axis with TP20 tactile measurement with magnetic mount, PH6 probe

Option DXF and profile comparison

Best Fit function

The relevant measuring points are recorded and fitted into the specified tolerance band as best as possible. Several profiles with different tolerance ranges can be integrated into one measurement sequence. For QCM microscopes as well as for microscopes with a measuring table, e.g. QZW1. Regardless whether using a manual or a CNC table.
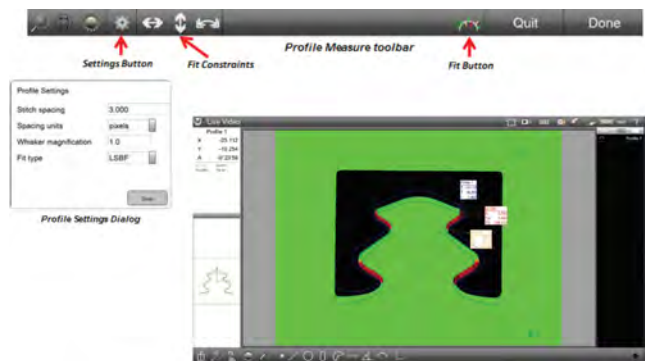

Adjustment operations

Position the Profile Tool and press the Fit button to perform a fitting operation. Perform as many adjustment operations as necessary to get the best possible result. Profile measurement results are displayed in the upper left. The detailed view of the individual profile point data can be displayed and used in the part view.

Profile comparison toolbar

Adjustment parameters can be set using the profile measure toolbar. Matching controls include independent fitting conditions for X / Y translation and rotation, fit point density, fit algorithm type, and fit point filtering.
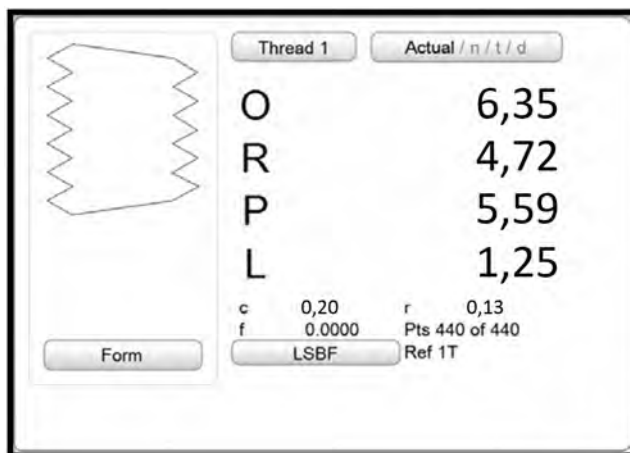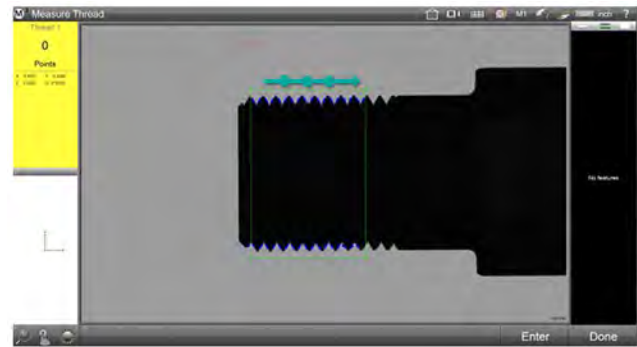

Profile adjustment results

Easily analyze the profile fitting results with intuitive tools: quickly identify and read the worst point, the best point or a specified number of points relative to the profile tolerance.

HITEC Messtechnik GmbH

Thread measuring module

The module enables the measurement of threads with just one click. The nominal diameter (O), the core diameter (R), the pitch diameter (P), the thread pitch (L) and, as secondary coefficients, the value for the thread tip (c) and the thread core (r) are output.

Thread element

The calculated element for the thread outputs six thread-specific values:

O = nominal diameter

R = core diameter

P = pitch diameter

L = pitch

c = distance to tip of thread
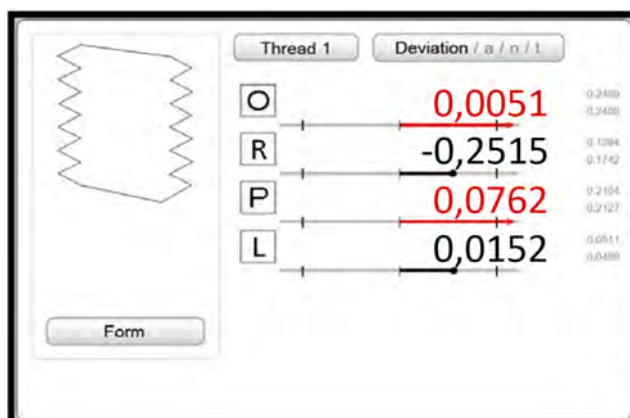
r = distance to thread core

Thread classification

Class 1 - A very loose tolerance thread class for applications with simple assembly and disassembly of components.

Class 2 - „Standard" tolerance thread class used for general assembly.

Class 3 - High-precision thread class for fine fits. Designations for each class and the type of thread for unified and metric threads are listed on the right.

	Unified Inch Standard	Metric
Class	External Thread	External Thread
Loose	1A	8g
Standard	2A	6g
High Accuracy	3A	4g

Thread tolerances

In the deviation view, a numerical as well as a graphical result is displayed for each coefficient to be tolerated. The numerical value represents the actual deviation from the target value for a given coefficient. NOTE: The nominal value for some coefficients does not always have to fall within the upper and lower tolerance limits. The graphic tolerance display shows the direction and value of the deviation as well as the permissible bandwidth. The tolerance test has failed as soon as at least one coefficient is outside the tolerance.

Optional:

Upgrade for the Z-axis with
TP20 tactile measurement system
for measuring 3D-geometries

CZW3CNC
Measuring Microscope

HITEC Messtechnik GmbH

Measuring range 430 x 420 x 200 mm

Solid bridge construction
3D-sensor optionally
Motorized zoom lens
4 segments LED-ring light
LED-transmitted light
Incl. sturdy base frame

Optional:
Upgrade for the Z-axis with
TP20 tactile measurement system
for measuring 3D-geometries

Measuring range 300 x 300 x 200 mm

Measuring range 600 x 600 x 200 mm

HITEC Messtechnik GmbH

CZW3CNC

WITH TACTILE MEASUREMENT SYSTEM FOR 3D GEOMETRIES

CZW3 CNC Measuring Microscope

CZW3 CNC Measuring Microscope

Our product line CZW3 CNC supports you with motors for highly accurate, repeatable measurements of complex components no matter which material. From up to 3-axis-system with automatic edge detection CZW3 delivers various configurations of software and hardware for your specific measurement requirements. Measuring microscope CZW3 CNC is available in three versions.

Software:

M3

Applications

Plastic components

Mechanical parts

Stamp parts

Medical components

Electronic parts
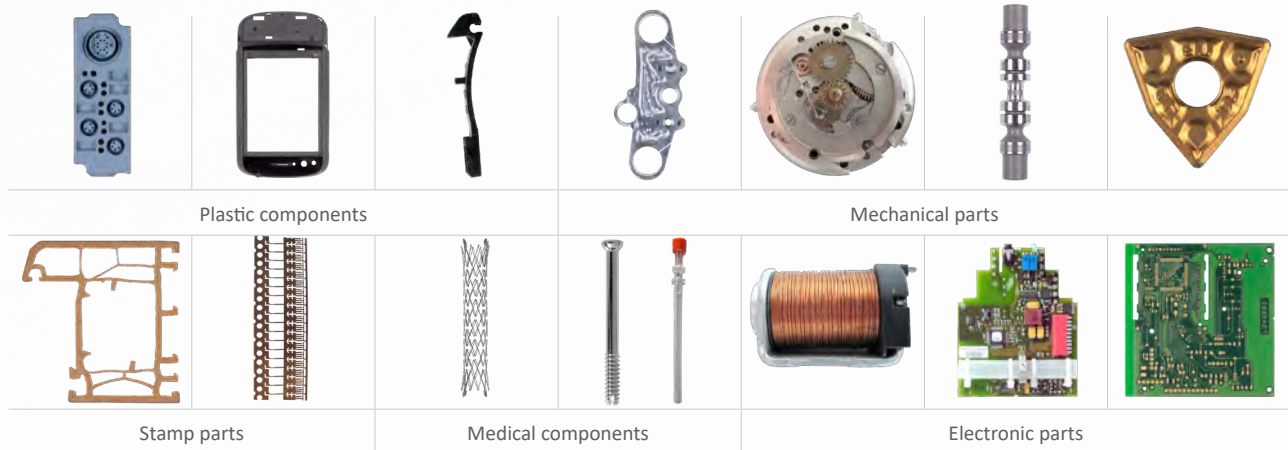
Technical Data

MEASURING RANGE X-Y-Z-AXIS	300 x 300 x 200 mm	430 x 420 x 200 mm	600 x 600 x 200 mm
LENGTH DEVIATION	3+L/200 (L in mm)	4+L/200 (L in mm)	4,0+L/200 (L in mm)
LENGTH DEVIATION E_1 - Z-AXES TACTILE	$4\,\mu m + L/75$ (L in mm)		
CAMERA SYSTEM	USB 3.0 1,3 megapixel 25 frames/s		
OBJECT LENS	motorized zoom lens 0,7x - 4,5x		
SURFACE LIGHT	4 segments LED ring light		
TRANSMITTED LIGHT	LED transmitted light		
INSTRUMENT DIMENSIONS (LXWXH)	770 x 1000 x 930 mm	1100 x 1000 x 1950 mm	1300 x 1700 x 1700 mm
WEIGHT	350 kg	580 kg	1380kg
MAX. TABLE LOAD CAPACITY	20 kg	20 kg	30 kg
DELIVERY CONTENT	23" touchscreen PC, keyboard, mouse, calibration certificate, operation manual, sturdy base frame		

HITEC Messtechnik GmbH

CZW3 CNC Accessories

Item no.	Description
660-898	Motorized zoom with coaxial surface light
601-1000	Auxilliary lens 0,5 x Navitar
601-1600	Auxilliary lens 0,75x Navitar
601-1100	Auxilliary lens 1,5x Navitar
601-1200	Auxilliary lens 2,0x Navitar
601-1300	TV Adapter 0,67x
601-1512	dxf option and profiling „Best Fit" (see page 12)
601-1520	Additional option for M3 measuring thread (see page 13)
600-9200	Calibration grid circles 50mm
600-9500	Calibration grid scale 50mm
604-T100	**Optional**: Upgrade for the Z-axis with TP20 tactile measurement with magnetic mount, PH6 probe

Optional:
Upgrade for the Z-axis with TP20 tactile measurement system for measuring 3D-geometries

Optical Metrology | 3D Coordinate Measuring

QCM
Measuring Microscope

Solid metal casing

Measuring table with height adjustment

Telecentric fixed lens

USB 3.0 camera 5,0 megapixel
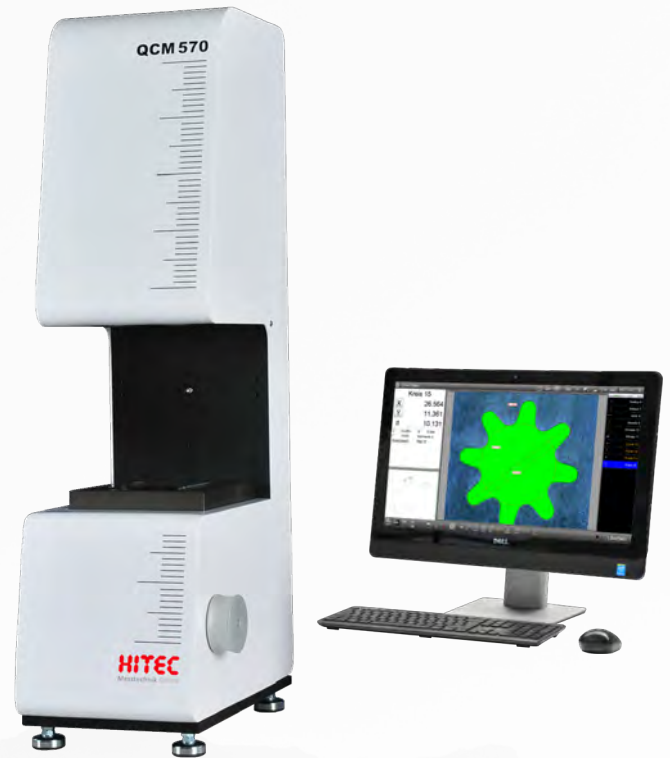
LED ring light

Telecentric LED bottom light

QCM Measuring Microscope

QCM Measuring Microscope

The product line QCM delivers highly accurate repeatable measurements of complex components no matter which material. By use of telecentric lenses QCM offers the option to adjust the selectable scale to your parts specific requirements. The automatic parts program detection helps the user to select and allocate the measured parts.

Software:

M3

Applications

Plastic components		Mechanical parts
Stamp parts	Medical components	Electronic parts

Technical Data

MODEL	QCM320	QCM570	QCM950
MEASURING RANGE / FIELD OF VIEW	32 X 24 mm	57 x 42 mm	95 x 72 mm
LENGTH MEASUREMENT TOLERANCE (E2)	4+L/50 (L in mm)	4,5+L/50 (L in mm)	7,5+L/50 (L in mm)
CAMERA SYSTEM	5 megapixel USB3		
SURFACE LIGHT	LED ring light		
TRANSMITTED LIGHT	LED telecentric		
HEIGHT ADJUSTMENT	30 mm		
INSTRUMENT DIMENSIONS (LXWXH)	330 x 230 x 580 mm	330 x 240 x 720 mm	340 x 250 x 820 mm

HITEC Messtechnik GmbH

QCM Accessories

Item no.	Description
630-50000000	Height-adjustable ring light
600-94000200	Calibration grid for "field of view" • 100 x 80 mm • Diameter 1,0 mm • Grid 1,5 mm
601-1502	Additional option for M3 measuring thread (see page 13)

HITEC
Messtechnik GmbH

Gesamtkatalog - Handmessmittel
Complete Catalog - Measuring Tools

www.hitec-messtechnik.de

Check out the
**Complete Catalog
for hand tools**
from HITEC Messtechnik!

Ask for your free copy
in English or German at
verkauf@hitec-messtechnik.de
now.

CZW1 L-Series
Microscopes

We also build optical measuring instruments according to your requirements.
We have been designing and building custom-made optical measuring instruments for our customers for over 27 years. For example for...

Automotive industry
Mechanical engineering
Medical industry
Aerospace Industry
Electrical industry
Motor sports
Auto suppliers
Etc.

Contact us.

Zoom lens manual/motorized
4 segments LED-ring light
LED-transmitted light
Many more options available
Your measuring instrument according to
your requirements

Optional:
Digital
angle measurement
system

CZW1L-800

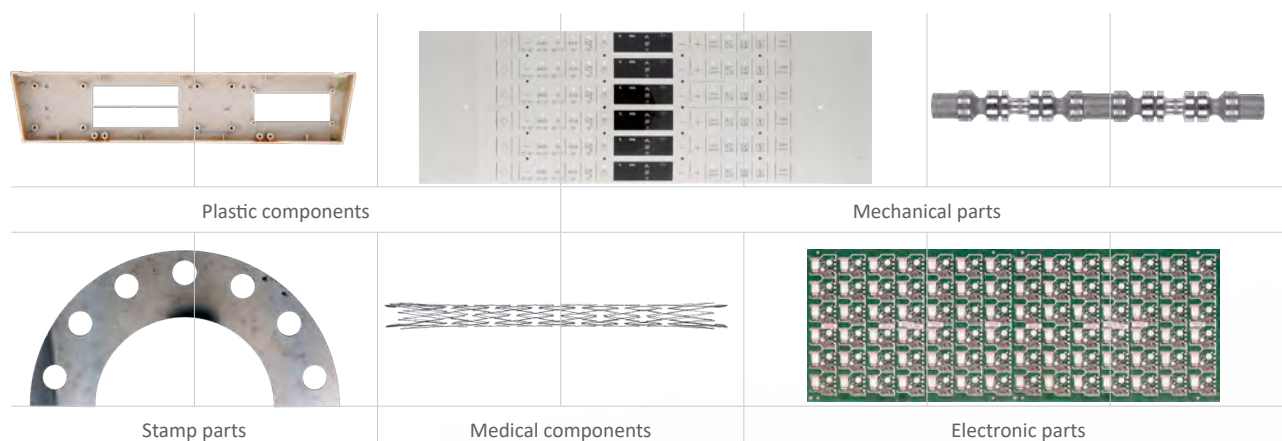# CZW1 L-Series Measuring Microscope

CZW1 L-Series Measuring Microscope

We also build optical measurement instruments according to your requirement. As manufacturer of optical measurement instruments for 27 years now we have fulfilled the requests of our customers in various branches e.g. automobile branch, engineering, medical industry, aviation industry, electrical industry, motor sports, automotive suppliers, and many others. The CZW1 L-Series is perfect for e.g. long parts. You have questions? Feel free to contact us.

Software - according to your requirements:

| M3 | M2 | HITEC VIDEO MESS | HI. SCALE |

Applications - acccording to your requirements

Plastic components	Mechanical parts
Stamp parts	Medical components	Electronic parts

Technical Data

MEASURING RANGE X-Y AXES	800 x 250 mm	1000 x 250 mm	1300 x 250 mm
LENGTH DEVIATION	10 µm + L/25 (L in mm)		
CAMERA	USB 3.0 25 frames/s 1,3 megapixels		
OBJECT LENS	Fixed lens / optional zoom lens 0,7x - 4,5x (manual/motorized)		
MAGNIFICATION	40x bzw. 35x - 225x (optional zoom lens)		
FIELD OF VIEW	8 mm bzw. 9 mm - 1,5 mm (optional zoom lens)		
SURFACE LIGHT	LED ring light		
TRANSMITTED LIGHT	LED		
POSITIONING	Laser pointer		
MAX. TABLE LOAD CAPACITY	max. 20 kg		
DELIVERY CONTENT	23" touchscreen PC, keyboard, mouse, calibration certificate, operation manual		

HITEC Messtechnik GmbH

CZW1 L-Series Accessories

Item no.	Description
601-1500	Zoom-object lens 6,5:1 inkl. TV Adapter 1,0x
660-895000	Zoom object lens with coaxial surface light
601-1506	Zoom-object lens 6,5:1 motorized
660-89700	Zoom motorized with coaxial surface light
660-898	Zoom motorized with coaxial surface light
601-1000	Auxilliary lens 0,5 x
601-1600	Auxilliary lens 0,75x
601-1100	Auxilliary lens 1,5x
601-1200	Auxilliary lens 2,0x
601-1300	TV Adapter 0,67x
600-0800	Stop bar 30x120mm
601-1512	dxf option and profiling „Best Fit" (see page 12)
601-1520	Additional option for M3 measuring thread (see page 13)
600-0900	Angle stop 90° 200x150mm
Upon request	Pair of prisms
Upon request	Center support (pair)
600-9200	Calibration grid circles 50mm
600-9500	Calibration grid scale 50mm

Optical Metrology | 3D Coordinate Measuring

HITEC Messtechnik GmbH

WMZ
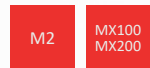## Measuring Microscope

HITEC Messtechnik GmbH

Base plate made of natural granite

Precision measuring stage

Quick adjustment with friction drive

Zoom lens 8x-40x

LED ring light

LED transmitted light

WMZ Measuring Microscope

WMZ Measuring Microscope

The product line WMZ delivers highly accurate repeatable measurements of complex components no matter which material. WMZ offers you different configurations according to your requirements starting with 2 manual axes systems up to 3 axis systems incl. program sequence.

Software:

M2	MX100 MX200

Applications

Plastic components	Mechanical parts

Stamp parts	Medical components	Electronic parts

Technical Data

MEASURING RANGE X-Y AXES	100 x 100 mm	200 x 100 mm	250 x 170 mm
LENGTH DEVIATION	1,9 μm + L/100 (L in mm)		
MEASURING RANGE Z-AXIS	150 mm / optional 350 mm		
MEASURING SYSTEM Z-AXIS	optional		
OBJECT LENS	Zoom lens 8x - 40x		
SURFACE LIGHT	LED ring light		
TRANSMITTED LIGHT	LED (telecentric optionally)		
MAX. TABLE LOAD CAPACITY	max. 20 kg		
DELIVERY CONTENT	calibration certificate, operation manual		

WMZ Accessories

Item no.	Description
600-7700	Binocular head for WMZ
600-1500	Eyepiece with angle measuring instrument for WMZ
600-1200	Extension of z-axis by 200 mm (350mm measuring range)
600-1100	Measuring system in z-axis (350mm measuring range)
600-1001	Auxilliary lens 0,5x Rathenow (MZM head)
600-1002	Auxilliary lens 2,0x Rathenow (MZM head)
600-1000	Measuring system in z-axis (150mm measuring range)
600-0800	Stop bar 30x120mm
600-0900	Angle stop 90° 200x150mm
600-1501	Pair of prisms 5-55mm diameter (table 100x100 / 200x100 mm)
601-1700	Turnable glass plate Ø100mm (measuring table 100x100mm/200x100mm)
601-1800	Turnable glass plate Ø100mm (measuring table 250x170mm)
600-2010	Cover for measuring table 100x100/200x100mm (500/500/500mm)
600-2020	Cover for measuring table 250x170mm (700/600/550mm)

HI-3DCNC

3D Coordinate
Measuring Machine

HITEC Messtechnik GmbH

Base plate made of natural granite
Renishaw probe MH20i
No compressed air needed
User friendly software

HI-3D*CNC* | 3D Coordinate Measuring Machine

HI-3D*CNC*

16 "all-in-one PC with Windows OS. Renishaw probe head MH20i indexable including probe module TP20SF. User-friendly software Metlogix M3 tactile. Linear guides X, Y and Z with DC servo motors. No compressed air required. Renishaw measuring system. Hard stone plate with M10 thread inserts. Stable base. Probe insert set M2 (standard HM probe Ø 1, 2, 3 and 4mm, extensions 10, 20 and 30mm, star probe 5 directions). Reference sphere Ø 20mm, height 100mm.

Software:

M3
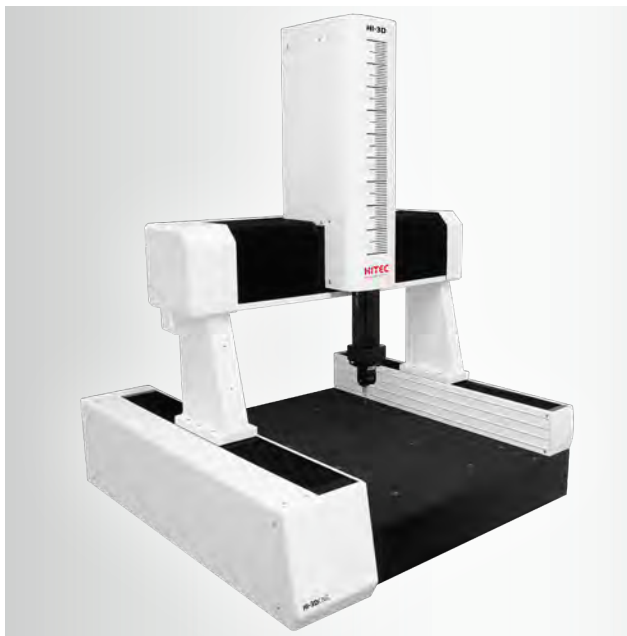
Sophisticated design

with high quality measuring system from RENISHAW

- Precise and high quality linear guides
- DC servo motors for highprecision
- Use close to production
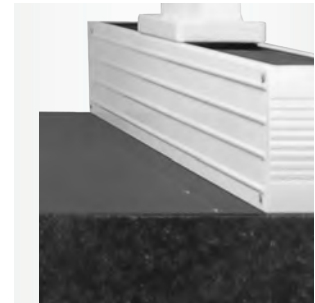
Technical Data

PROBE HEAD	Renishaw MH20i
PROBE DESIGN	indexable 15° steps
PROBE HOLDER AND MODULE	TP 20, magnetic
MEASURING RANGE X x Y x Z	400 x 450 x 350 mm
MEASURING UNCERTAINTY ACC. TO ISO 10360-2 E XYZ	2,9 μm + L/100 (L in mm)
EXT. DIMENSIONS MACHINE + BASE	920 x 970 x 2140 mm
DIMENSIONS GRANITE SURFACE B X T	590 x 840 mm
MACHINE WEIGHT	580 kg
MAX. WEIGHT LOAD	120 kg
DELIVERY CONTENT	calibration certificate, operation manual, sturdy base frame

HITEC Messtechnik GmbH

MetLogix M3-tactile software

Software

- User-friendly, intuitive software interface
- Quick and easy measurement of 3D geometries
- Easy creation of measurement programs through teach-in
- User-friendly via touch, keyboard and mouse
- Automatic element recognition
- Cost saving through minimal training effort

More Features

- By specifying the absolute minimum number of measuring points, the software automatically calculates the distribution of the desired total number of measuring points.
- Automatic calculation of the perfect probing directions depending on the number of probing points
- Ideal for checking position and shape tolerances such as bore roundness, etc.

Protocol output

- Create an individual measurement report with a dimensioned view of the parts
- Easily understandable presentation of the measured values including trend display
- Tolerance test acc. to DIN/ ISO
- Statistics function
- Data export in CSV-, TXT- and DXF-format

Probe head MH-20i from RENISHAW

Optimal workpiece accessibility

Manually indexable rotary / swivel head with the kinematic TP20 probe module holder and a swivel joint that can be indexed in two axes. This enables flexible probe changes and repeatable probe positioning.

MH20i manual turn / swivel head
The A-axis rotates by ± 180° in the X / Y plane. The B-axis, however, rotates by 90° in the Z-plane. The MH20i offers 168 repeatable positions in 15° steps.
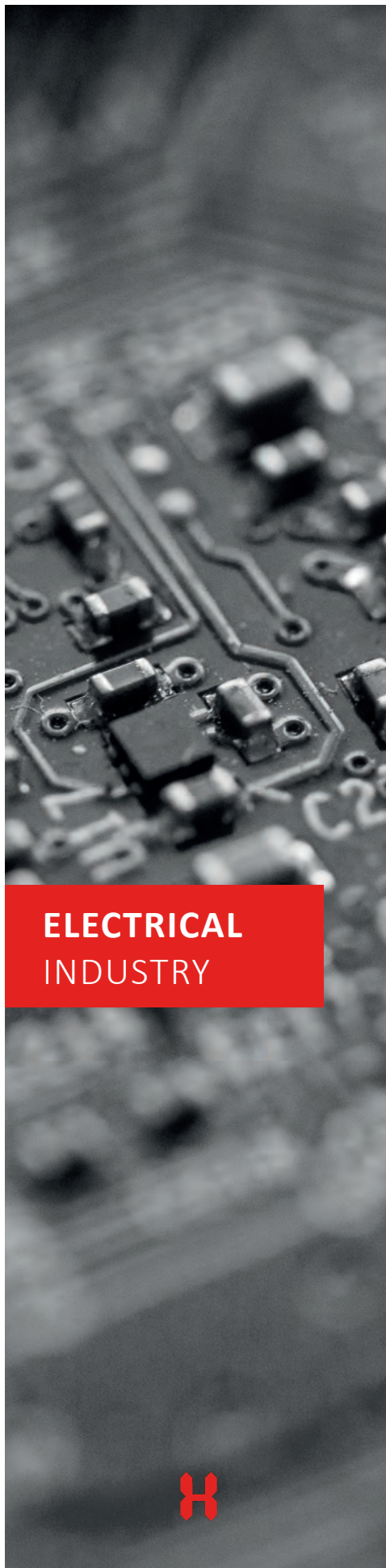
The probe head is compatible with all TP20 probe modules. Probe modules that have already been calibrated can be used without recalibration and changed with repeat accuracy.
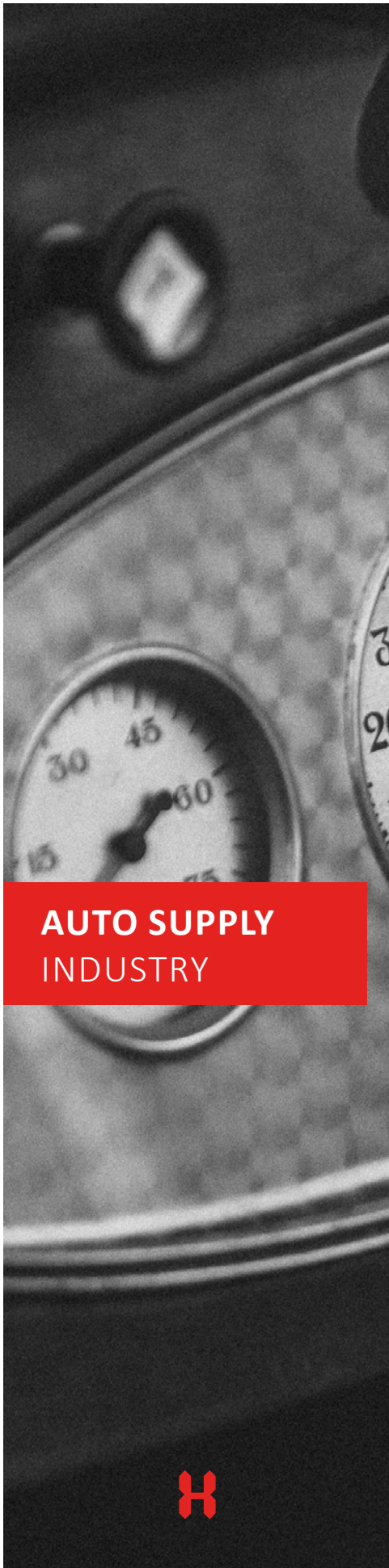
[renishaw.de]

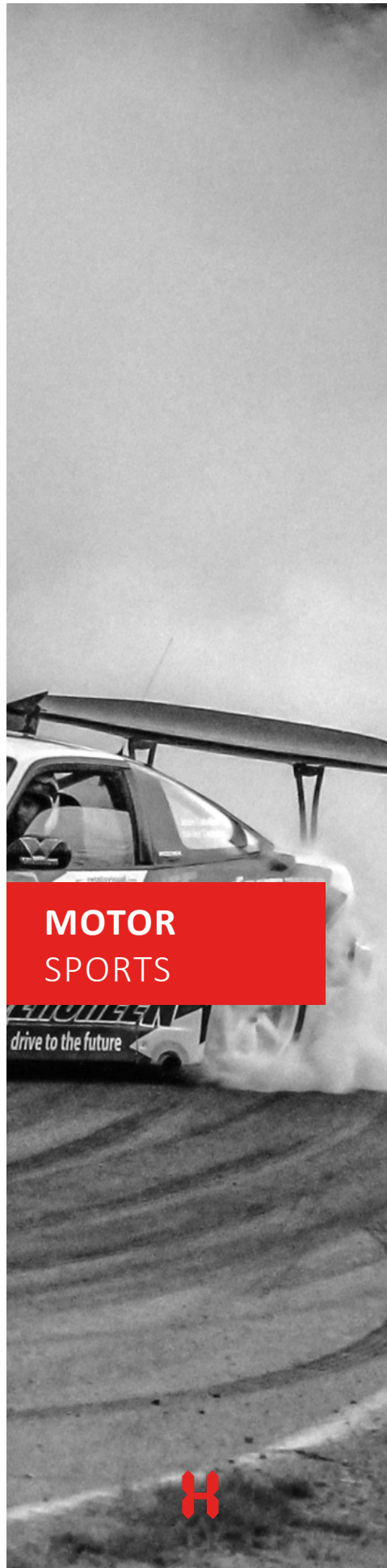**AUTOMOTIVE**
INDUSTRY

ELECTRICAL
INDUSTRY

AVIATION
INDUSTRY

HITEC Messtechnik GmbH

AUTO SUPPLY
INDUSTRY

MOTOR
SPORTS

MEDICAL
INDUSTRY

VZS1
Measuring Microscope

HITEC Messtechnik GmbH

VZS1 Measuring Microscope

VZS1 Measuring Microscope

This working station is especially used for quick inspection and measurement of mechanical, electronic components as well as for assembly technique. The pictures of the CCD-camera are presented digitalized on the monitor by software. By use of HITEC VideoMess or HI.Scale, measurements can be recorded as picture, documentation of pictures can be presented and much more.

Software:

HITEC VIDEO MESS   HI. SCALE

Technical Data

Optics and Magnification
Optics with 5-fold screening
Standard magnification: from 25- to 160-fold
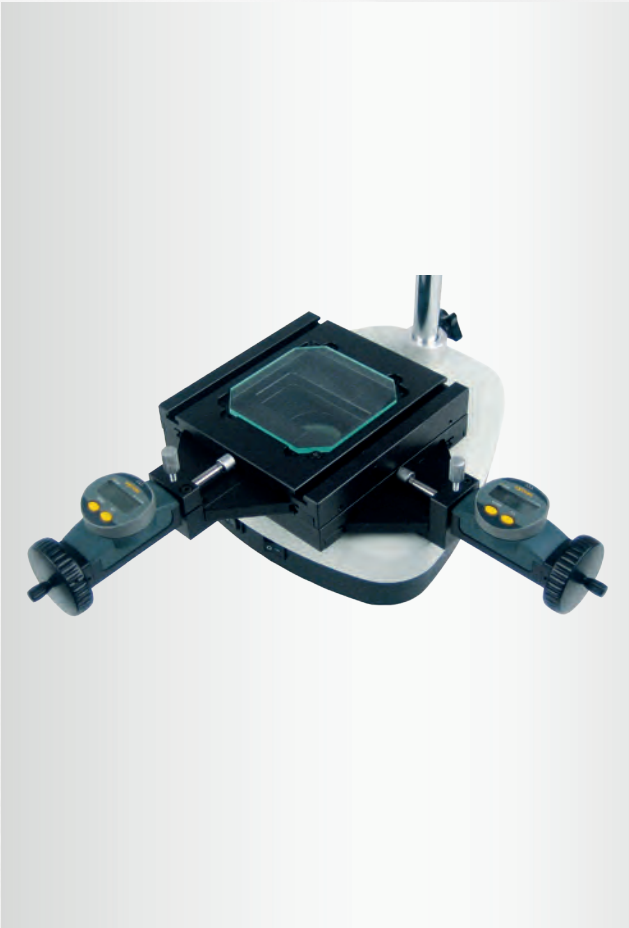Optional magnification: from 6- to 311-fold

Dimensions and Weight
L / W / H in mm 230 / 230 / 280
kg 3,5 (without measuring table)

Lighting
Standard surface light: Halogen-lighting
Standard transmitted light: Halogen-lighting
Optional surface light: LED ring light
Optional surface light: optical fibre ring light (cold-light source necessary)

Optional measuring table

Optional measuring table 50x50mm with
Sylvac micrometer head
L220xW150xH75mm
Glass plate ø 95mm

Item no.	Description
600-4900	Measuring table 50x50mm table surface 150x150mm

HITEC Messtechnik GmbH

VZS1 Accessories

201-7800

201-7900

Item no.	Description
201-7800	Micrometer head with digital display 0-50mm with friction thimble and case*
201-7900	Micrometer head with digital display 0-50mm / data output RS232 / display rotatable 270° / with non-turnable head*

* Please **always order two** of these micrometer heads.

Item no.	Description
600-2000	Cover for VZS1 (250/350/500mm)
601-1000	Auxilliary lens 0,5x
601-1600	Auxilliary lens 0,75x
601-1100	Auxilliary lens 1,5x
601-1200	Auxilliary lens 2,0x
660-7400	LED ring light 75mm adjustable via external box (1 segment)
660-7500	LED ring light 75mm adjustable
615-1900	Adapter for LED ring light
615-1800	Adapter for optical fibre ring light DRM41/31,5mm
660-2100	Gooseneck light conductor 2-arms L=550mm D=4mm
990-0000	PC with 22" flat screen
660-6400	Optical fibre ring light 40mm (only in combination with cold-light source)
615-1800	Adapter for optical fibre ring light 40mm
660-0300	Cold-light source 150W

SZM1
SZM2
SZM3
SZM4

Stereo Microscopes

HITEC Messtechnik GmbH

SZM1 Stereo Microscope

Technical Data

Magnification	7x – 45x (up to 180x possible)
Field of view	30 mm – 4 mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Eye pieces	EWF 10x / 20 mm with eyecups
Object lens	Zoom 0,7 – 4,5x
Lighting	Adjustable LED surface and transmitted light

SZM1 Accessories

Item no.	Description
615-2100	Eye pieces WF15x/15
615-2200	Eye pieces WF20x/10
615-2300	Eye pieces WF10x with graticule (1 piece) for SZM
615-2400	Auxilliary lens 0,5x only with longer column
615-2500	Auxilliary lens 2,0x
615-2600	Column LP 100mm longer - custom-made, please ask for quote
660-7400	LED ring light 75 mm adjustable via external box (1 segment)
660-7500	LED ring light 75 mm adjustable (4 segments)

LED ring light for SZM

- for even illumination of workpieces
- 1 segment, brightness stepless adjustable
- mountable up to Ø60mm
- with 12V/4W power adapter
- fits SZM 1/2/3/4

660-74

SZM2 Stereo Microscope

Software:

Technical Data

Magnification	7x – 45x (up to 180x possible)
Field of view	30 mm – 4 mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Eye pieces	EWF 10x / 20 mm with eyecups
Object lens	Zoom 0,7 – 4,5x
Lighting	Adjustable LED surface and transmitted light

SZM2 Accessories

Item no.	Description
615-2100	Eye pieces WF15x/15
615-2200	Eye pieces WF20x/10
615-2300	Eye pieces WF10x with graticule (1 piece) for SZM
615-2400	Auxilliary lens 0,5x
615-2500	Auxilliary lens 2,0x
615-2600	Column LP 100mm longer - custom-made product - please ask for a quote
660-7400	LED ring light 75mm adjustable via external box (1 segment)
660-7500	LED ring light 75mm adjustable (4 segments)
615-3800	USB camera adapter (c-mount)
980-1000	Software HITEC VIDEO MESS for USB camera
990-0000	PC with 22" flat screen
600-9500	Calibration grid scale 50mm
600-9800	Calibration grid scale 50mm with calibration certificate
651-3800	Digi7 set incl. camera and adapter
983-0000	HI.SCALE Software for video image display on the monitor (camera, software, calibration standard)

SZM3 Stereo Microscope

Technical Data

Magnification	7x – 45x (up to 180x possible)
Field of view	30 mm – 4 mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view um 360° rotatable with dioptric adjustment
Eye pieces	EWF 10x / 20 mm with eyecups
Object lens	Zoom 0,7 – 4,5x
Lighting	None
Total height	48 cm
Base plate	25 x 25 cm
Overhang	45 cm

SZM3 Accessories

Item no.	Description
615-2100	Eye pieces WF15x/15
615-2200	Eye pieces WF20x/10
615-2300	Eye pieces WF10x with graticule (1 piece) for SZM
615-2400	Auxilliary lens 0,5x
615-2500	Auxilliary lens 2,0x
615-2600	Column LP 100mm longer - custom-made, please ask for quote
660-7400	LED Ring light 75 mm adjustable via external box (1 segment)
660-7500	LED Ring light 75 mm adjustable (4 segments)

LED ring light for SZM

- for even illumination of workpieces
- 4 segments, different modes
- mountable up to Ø60mm
- with 12V power adapter
- fits SZM 1/2/3/4

660-75

HITEC Messtechnik GmbH

SZM4 Stereo Microscope

Software:

HITEC VIDEO MESS | HI. SCALE | DIGI 7 SET

Technical Data

Magnification	7x – 45x (up to 180x possible)
Field of view	30 mm – 4 mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view um 360° rotatable, with dioptric adjustment
Eye pieces	EWF 10x / 20 mm with eyecups
Object lens	Zoom 0,7 – 4,5x
Lighting	None
Total height	48 cm
Base plate	25 x 25 cm
Overhang	45 cm

SZM4 Accessories

Item no.	Description
615-2100	Eye pieces WF15x/15
615-2200	Eye pieces WF20x/10
615-2300	Eye pieces WF10x with graticule (1 piece) for SZM
615-2400	Auxilliary lens 0,5x
615-2500	Auxilliary lens 2,0x
660-7400	LED ring light 75mm adjustable via external box (1 segment)
660-7500	LED ring light 75mm adjustable (4 segments)
615-3800	USB camera adapter (c-mount)
982-0000	Upgrade HVM framegrabber on USB camera
980-1000	Software HITEC VIDEO MESS for USB Camera
990-0000	PC with 22" flat screen
600-9500	Calibration grid scale 50mm
600-9800	Calibration grid scale 50mm with calibration certificate
651-3800	Digi7 set incl. camera and adapter
983-0000	HI.SCALE Software for video image display on the monitor (camera, software, calibration standard)

LAB Stereo Microscopes

LAB1 Stereo Microscope

Technical Data

Magnification	20x and 40x
Field of view	10mm / 5mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Eye pieces	WF 10x/20 mm with eyecups
Object lens	Lens turret 2x and 4x
Lighting	Adjustable LED surface and transmitted light 12V/10W

LAB2 Stereo Microscope

Technical Data

Magnification	10x – 40x (up to 80x possible)
Field of view	20mm / 5 mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Ocular tube	WF 10x/20 mm with eyecups
Object lens	Zoom 1x – 4x
Beleuchtung	Adjustable LED surface and transmitted light 12V/10W

HITEC Messtechnik GmbH

ST45 Stereo Microscope

Technical Data

Magnification	20x and 40x (up to 80x possible)
Field of view	10mm / 5mm
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Eye pieces	WF 10x/20 mm with eyecups
Object lens	Lens turret 2x and 4x
Lighting	Adjustable LED surface and transmitted light 12V/10W

ST50 Stereo Microscope

Technical Data

Magnificaiton	20x
Field of view	10mm
Eye distance	zwischen 51 mm und 75 mm einstellbar
Eye distance	Adjustable between 51 mm and 75 mm
Ocular tube	Prism head 45° angled view 360° rotatable, with dioptric adjustment
Eye pieces	WF 10x/20 mm with eyecups
Object lens	2x
Lighting	Adjustable LED surface and transmitted light 12V/10W

Which software for which device?

M3
M2
MX100/MX200
HITEC VIDEO MESS
HI.SCALE
DIGI7SET

HITEC Messtechnik GmbH

DEVICE	OUR ALLROUND **PREMIUM** SOFTWARE M3	M2	MX100/ MX200	HITEC VIDEO MESS	HI.SCALE	DIGI7SET
QZW1	✓ „ONE*touch*"					
QZW1 CNC	✓ „ONE*touch*"					
CZW3 CNC	✓ „ONE*touch*"					
QCM SERIES	✓ „ONE*shot*" „ONE*touch*"					
CUSTOM MADE	✓ „ONE*touch*"	✓	✓	✓	✓	
WMZ		✓	✓			
VZS1				✓	✓	
SZM1						
SZM2				✓	✓	✓
SZM3						
SZM4				✓	✓	✓

Software M3

ONEtouch

Receive measuring results **instantly** by edge detection. The measuring point can be recorded by clicking on the corresponding element on the live picture of the monitor.

ONEshot

Instantly detecting the complete part geometry by taking live pictures and at the same time evaluating elements and shortcuts.

Software M3

With M3 measuring software HITEC Messtechnik opens up new possibilities regarding handling and measuring accuracy for measurement of geometric data by using our measuring microscopes QZW1, QZW1 CNC; CZW3 CNC, QCM and custom-made instruments.

Inspired by the smartphone philosophy, M3 includes multi-touch-applications, which can be learned within the shortest time. The software will win you over through its intuitive user interface and, depending on the instrument, by "ONEtouch" or "ONEshot" edge detection or measuring of parts.

Easiest dimensioning of measured properties in the graphic representation, as well as their recording on various templates are standard functions. Considerable tolerance tests of the elements according to DIN ISO are also embedded.

Further highlights are saving the graphics and the live picture with measuring results. We also provide the dxf module for the comparison of the measurement with the CAD drawing.

Software M3 is available for:

| QZW1 | QZW1 CNC | CZW3 CNC | QCM | CUSTOM MADE |

HITEC Messtechnik GmbH
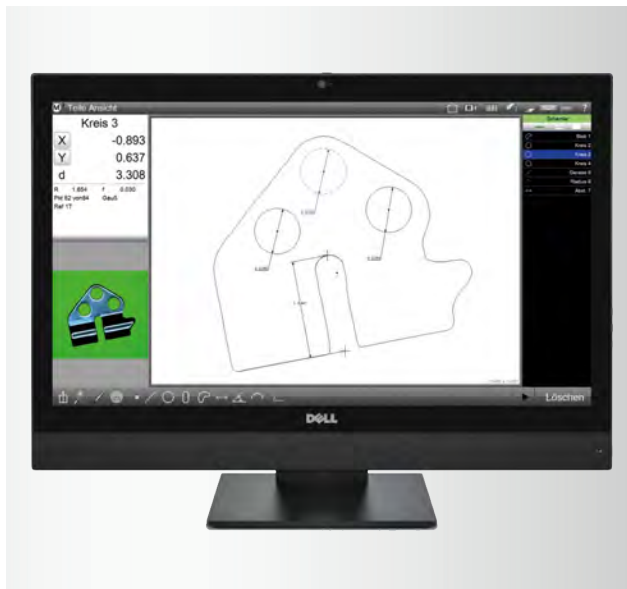
Graphic representation of
measured CAD-systems

•

Drag and Drop dimensioning in parts view
as well as in live-picture

Considerable recording options by various templates
(CSV, Europe, tolerance)

•

Easy tolerance input by group tolerance

•

Optical output if result good/bad
with tendency signal

View of single elements with graphic representation
of the measuring points

•

Output of various calculation methods
(Gauss, maximum inscribed circle-/minimum
circumscribed circle, MMK)

Easy recording of measuring points by clicking on the
element on the live picture

Option DXF and profile comparison

Best Fit function

The relevant measuring points are recorded and fitted into the specified tolerance band as best as possible. Several profiles with different tolerance ranges can be integrated into one measurement sequence. For QCM microscopes as well as for microscopes with a measuring table, e.g. QZW1. Regardless whether using a manual or a CNC table.

Adjustment operations

Position the Profile Tool and press the Fit button to perform a fitting operation. Perform as many adjustment operations as necessary to get the best possible result. Profile measurement results are displayed in the upper left. The detailed view of the individual profile point data can be displayed and used in the part view.

Profile comparison toolbar

Adjustment parameters can be set using the profile measure toolbar. Matching controls include independent fitting conditions for X / Y translation and rotation, fit point density, fit algorithm type, and fit point filtering.

Profile adjustment results

Easily analyze the profile fitting results with intuitive tools: quickly identify and read the worst point, the best point or a specified number of points relative to the profile tolerance.

HITEC Messtechnik GmbH

Thread measuring module

The module enables the measurement of threads with just one click. The nominal diameter (O), the core diameter (R), the pitch diameter (P), the thread pitch (L) and, as secondary coefficients, the value for the thread tip (c) and the thread core (r) are output.

Thread element

The calculated element for the thread outputs six thread-specific values:

O = nominal diameter

R = core diameter

P = pitch diameter

L = pitch

c = distance to tip of thread

r = distance to thread core

Thread classification

Class 1 - A very loose tolerance thread class for applications with simple assembly and disassembly of components.

Class 2 - „Standard" tolerance thread class used for general assembly.

Class 3 - High-precision thread class for fine fits. Designations for each class and the type of thread for unified and metric threads are listed on the right.

	Unified Inch Standard	Metric
Class	External Thread	External Thread
Loose	1A	8g
Standard	2A	6g
High Accuracy	3A	4g

Thread tolerances

In the deviation view, a numerical as well as a graphical result is displayed for each coefficient to be tolerated. The numerical value represents the actual deviation from the target value for a given coefficient. NOTE: The nominal value for some coefficients does not always have to fall within the upper and lower tolerance limits. The graphic tolerance display shows the direction and value of the deviation as well as the permissible bandwidth. The tolerance test has failed as soon as at least one coefficient is outside the tolerance.

Software M2

Powerful geometry measuring software for PC or tablet.
Ideal for measuring microscopes and profile projektors.

Software M2

- Measuring processor as PC with multi-touch functionality. Operating system Microsoft Win10 or more. 32 or 64 bit
- 2 - 4 axes (X, Y, Z, W)
- Measuring point recording via reticle or **optionally with optical edge finder**
- Measuring, defining and constructing of 2D-elements
- Various calculation methods (Best Fit, Best Form, minimum circumscribed circle, maximum inscribed circle etc.)
- Part programming by Teach-In
- Extensive measuring recordings
- Coefficient-data output by RS232
- Tolerance test according to DIN/ISO
- Also with camera connection and reticle creator, perfect for retrofit
- Image archiving in relation with camera option
- Error compensation linear and section by section
- Optional compensation angular error XY or matrix compensation XY
- USB hardware for recording of the measuring instruments. all current measuring signals and plugs
- Extensive data export incl. DXF

Software M2 is available for:

CUSTOM MADE

WMZ

HITEC Messtechnik GmbH

Innovative measuring computer with touch panel.
Stands out with intuitive design combined with high user friendliness.

Measuring processor MX100/MX200

Single element view in tabular form
with tolerance check

Graphical representation of the measured elements
with export function in CAD systems

MX100/MX200 is available for:

CUSTOM MADE   WMZ

Features and constructions
Support of standard geometries and
their types of construction. With the button „change element type" the subtypes of feature-creation quickly toggle.

- Intersections
- Bolt circle
- Max. distance
- Min. distance
- Parallel/perpendicular

- Angle
- Fitting circle/fitting line
- Center point
- End point
- Tangents

Software HITEC VIDEO MESS

Software HITEC VIDEO MESS

HITEC VIDEO MESS is the smart software for documentation, dimensioning and saving of pictures

- Different cross-hair pointer variations can be shown
- Adjustment of frame rate, shutter speed, brightness, contrast, white balance
- Software for dimensioning of circles, radii, distances, angles and many more applications
- Insertion of arrows and texts
- Pictures can be saved as jpg and bmp
- Many different overlays, such as tolerance circles, grids, etc., can be shown
- With Excel-connectivity
- Delivery contents: Software CD

Software HITEC VIDEO MESS is available for:

| CUSTOM MADE | VZS1 | SZM2 | SZM4 |

HITEC Messtechnik GmbH

Software HI.SCALE

HI.SCALE is the smart software for documentation, dimensioning and saving of pictures

• Cross-hair pointer can be shown
• Adjustment of frame rate, shutter speed, brightness, contrast, white balance
• Software for dimensioning of circles, radii, distances and angles
• Insertion of arrows and texts
• Pictures can be saved as jpg and bmp
• Delivery contents: USB-camera 1,3 megapixel, USB- connection cable, software CD, calibration grid

Also available for instruments of other manufacturers.

Software HI.SCALE is available for:

| CUSTOM MADE | VZS1 | SZM2 | SZM4 |

DIGI7SET

DIGI7SET

Camera illustration exemplary. Subject to change.

Resolution	16,1 Megapixel
Max. Resolution	4.608 x 3.456 Pixel
Sensor (size)	1/2,3-inch-USB-sensor
Optical zoom	5-fach
Display diagonal	6,7 cm (2,7 Zoll) Bildschirmdiagonale, TFT-LCD-Monitor mit fünfstufiger Helligkeitsregelung
Picture format	JPEG
USB interface	Highspeed USB, supports Direct Print (PictBridge)

Storage medium included.

DIGI7SET is available for:

SZM2

SZM4

HITEC Messtechnik GmbH

So you'll never have a warp in your way of looking at things.

HITEC

Messtechnik GmbH

Work tables

600-2042

600-2051

600-2043

600-2041

Plate solid-beech
Resilient, pressure-resistant, long-lasting, robust, hard-wearing
With raw material from sustainable forestry
4-feet frame with two pair of feet made of tubular steel profiles (60x20x2 mm)
Surface load max. 500 kg
Delivery in parts - easy assembly
5 years warranty
Made in Germany

Description	Item no.
Work table for measuring range 400x250mm W2000xD800xH760-1080mm	**600-2051**
Work table for measuring range 100x100, 200x100 und 250x170mm W500xD800xH760-1080mm	**600-2041**
Base cabinet with 2 drawers **fire red**, central lock W390xD560mm	**600-2042**
Base cabinet with 2 drawers **tele grey**, central lock W390xD560mm	**600-2043**
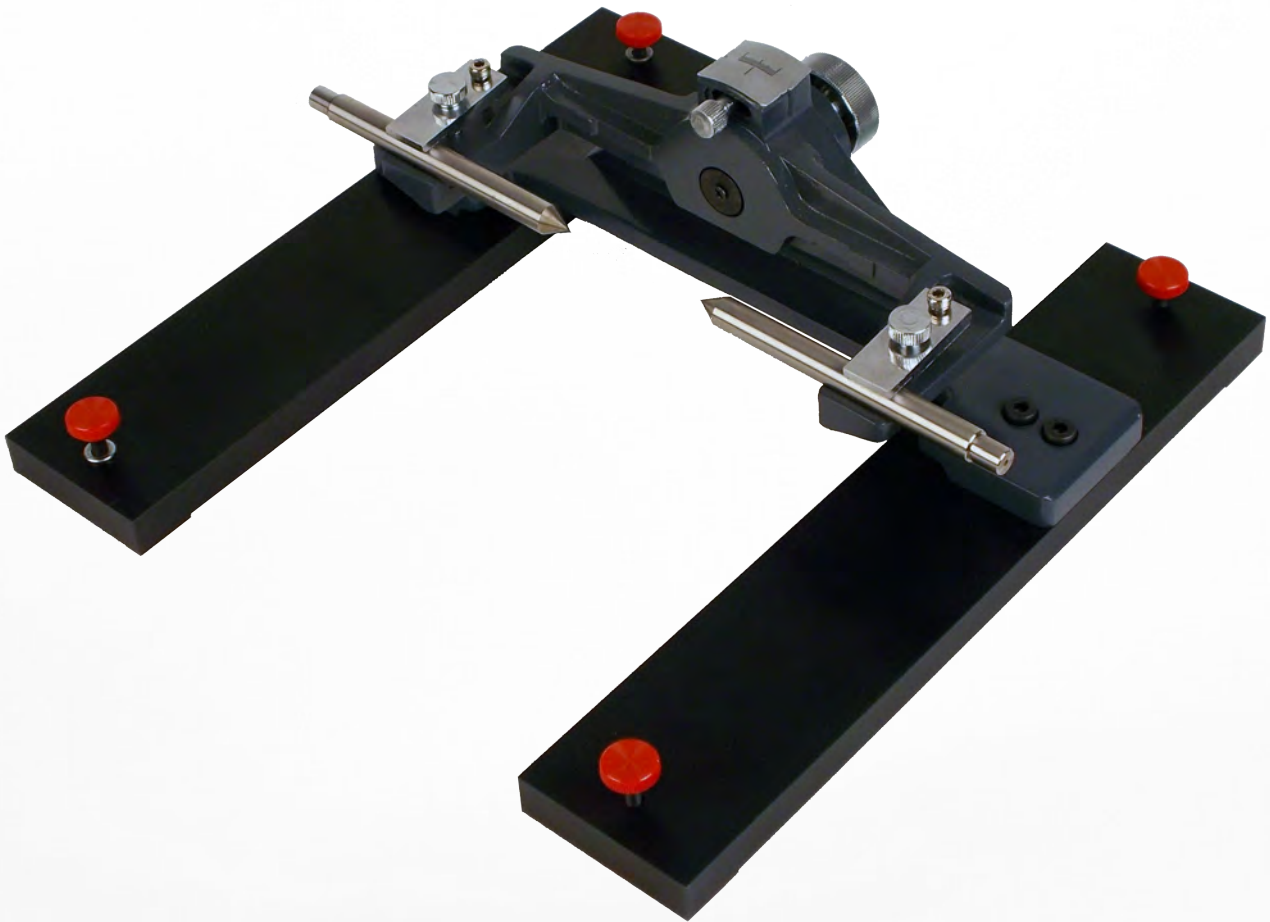
Center Support Swivelling

Center support swivelling 50mm height / maximum width 130mm

Description	Item no.
For table 100x100 / 200x100 mm	**600-1701**
For table 250x170 mm	**600-1702**
For table 400x250 mm	**600-1703**

Center Supports

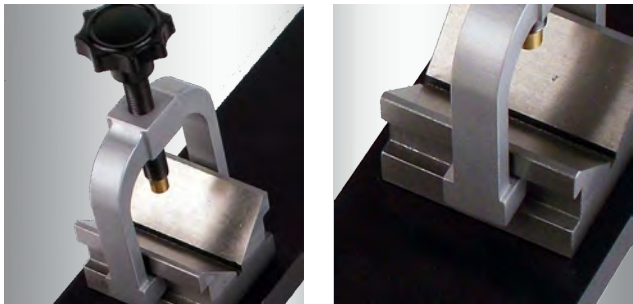| Description	Item no.
Center support (pair) 40mm height (table 100x100 / 200x100 mm)	**600-1601**
Center support (pair) 40mm height (table 250x170 mm)	**600-1602**
Center support (pair) 40 mm height (table 400x250 mm)	**600-1603**
Center support (pair)- *special version* - for 400x table	**600-1604**
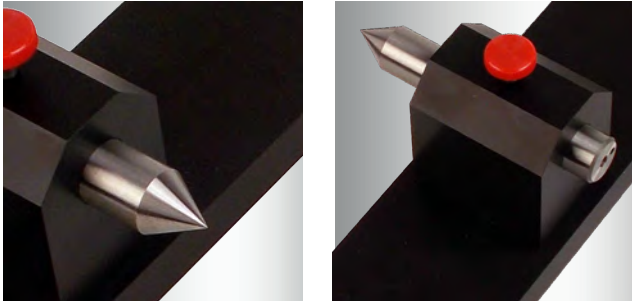
Angle Stop 90°

Description	Item no.
Angle stop 90° 200x150mm	**600-0900**

HITEC **Messtechnik** GmbH
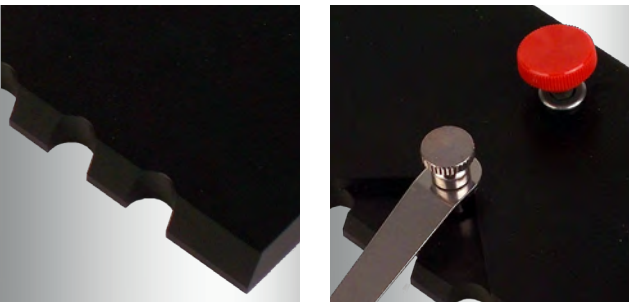
Prism Pair

| Description	Item no.
Prism pair 5-55 mm diameter (table 100x100 / 200x100 mm)	**600-1501**
Prism pair 5-55mm diameter (table 250x170 mm)	**600-1502**
Prism pair 5-55 mm diameter (table 400x250 mm)	**600-1503**

Massive Base with Rotatable Glass Plate

Description	Item no.
Ø100 mm (measuring table 100x100mm and 200x100mm)	**601-1700**
Ø100 mm (measuring table 250x170mm)	**601-1800**
Ø100 mm (measuring table 400x250mm)	**601-1901**
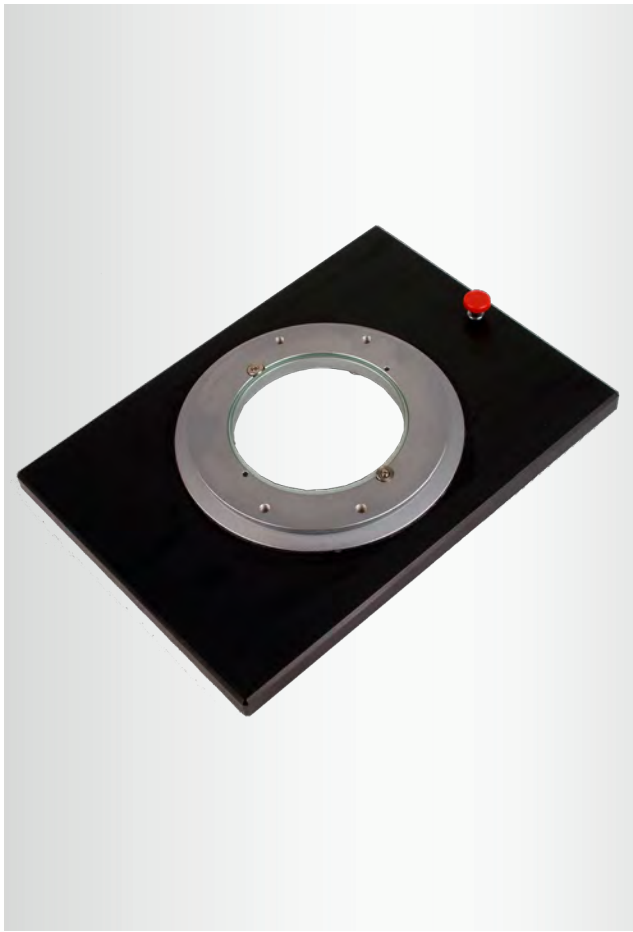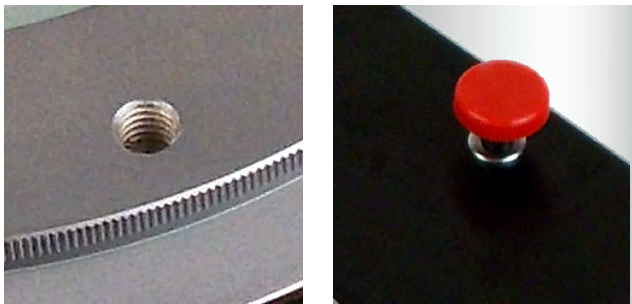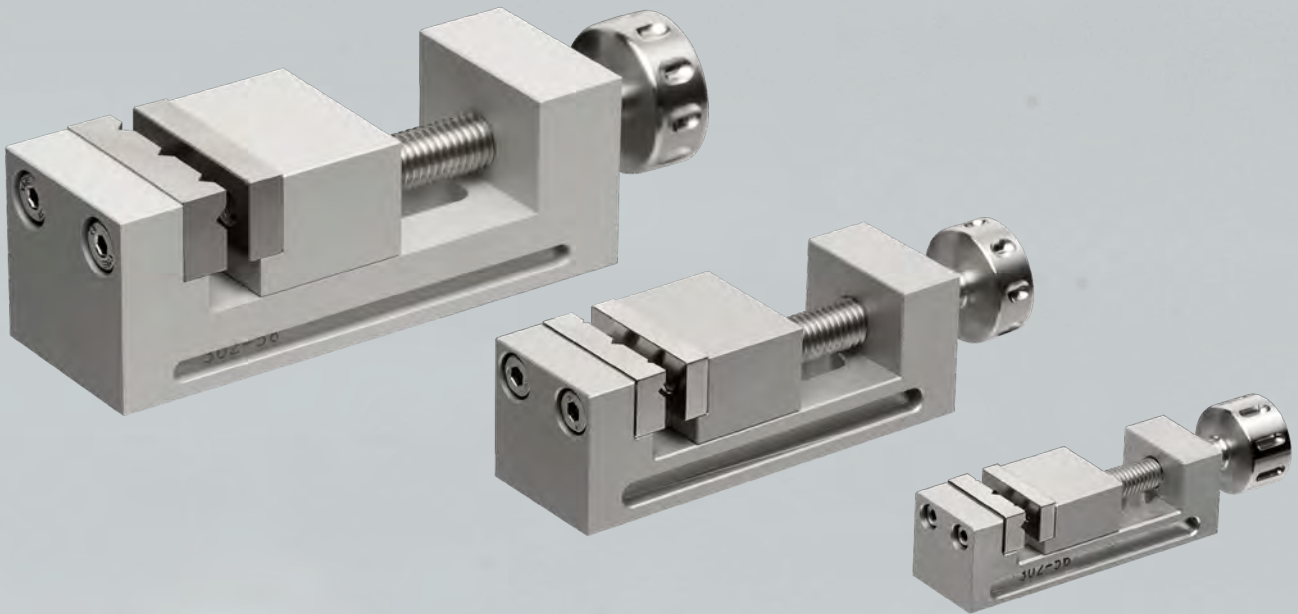
Mini Precision Vices

Used to clamp small parts on measuring microscopes, measuring machines and profile projectors as well as for several other applications

Including threaded spindle
Horizontal and vertical ground prism
Parallelism 0,01 mm
Angle accuracy 0,01 mm
Packed in plastic box

LxBxH	Jaw width	Range	Clamping depth	Material	Item no.
50x15x15mm	15mm	16mm	9mm	Alu anodized	**302-5600**
75x25x25mm	25mm	24mm	15mm	Alu anodized	**302-5700**
100x35x35mm	35mm	32mm	21mm	Alu anodized	**302-5800**
50x15x15mm	15mm	16mm	9mm	INOX hardened	**304-5600**
75x25x25mm	25mm	24mm	15mm	INOX hardened	**304-5700**
100x35x35mm	35mm	32mm	21mm	INOX hardened	**304-5800**

Mini Precision Vices Set

One precision vice with 15, 25 and 35 mm jaw width
with threaded spindle
Horizontal and vertical ground prism
Parallelism 0,01 mm
Angle accuracy 0,01 mm
Packed in plastic box

Material	Item no.
Alu anodized	**302-4010**
INOX hardened	**304-4010**

Mini Precision Vices Set with Accessories

A set of 3 precision vices, jaw width 15, 25 and 35 mm
each including
- one pair of plastic jaws (prism and plain)
- one pair of step jaws
- one prism jaw with stop pin

Tripod for mini precision vice, rotatable and swivelling
in all directions
3 mounting plates
1 double-prism pair
Packed in plastic box

Material	Item no.
Alu eloxiert	**302-5010**
INOX gehärtet	**304-5010**

Stand for Mini Precision Vice

Made of steel
Rotatable and pivotable on all sides
With permanent magnet
Mounting thread M6

Item no.
302-5678

Mounting Jaws | Jaws

Mounting Jaws for Mini Precision Vice

Used to mount vices on a tripod

Made of anodized aluminium
Thread M6
Incl. mounting screws

Vice	Item no.
15mm	**302-561**
25mm	**302-571**
35mm	**302-581**

Jaws for Mini Precision Vice

Used to clamp various work pieces

Prism jaw with stop pin

Vice	Item no.
15mm	**302-5605**
25mm	**302-5705**
35mm	**302-5805**

Jaws for Mini Precision Vice

Used to clamp various work pieces

Plastic jaws (prism and plain)

Vice	Item no.
15mm	**302-5603**
25mm	**302-5703**
35mm	**302-5803**

HITEC Messtechnik GmbH

Jaws for Mini Precision Vice

Used to clamp various work pieces

Step jaws (pair)

Vice	Item no.
15mm	**302-5604**
25mm	**302-5704**
35mm	**302-5804**

One Double Prism with Clamp

Dimensions: 25x20x20 mm
Clamping Range: Ø 2-18 mm
Hardened and grinded

Material	Item no.
INOX hardened	**302-5910**

/hitecmesstechnik

HITEC **Messtechnik** GmbH

A one-stop service.

Consulting
Initial operation service
Training
Calibration Service
Maintenance Service
Modernization Service
Repair and Replacement Service
Support

HITEC **Messtechnik** GmbH

Consulting

Consulting custom-made.

Do you need our support for the selection of the appropriate measuring instrument?
You can count on our expertise. We offer custom-made advice for free, if requested also including a presentation at your place.

We provide advice and supply reputable companies in Germany, Europe and all over the world for almost 30 years.

You need a custom-made measuring instrument? No problem.

As manufacturer of measuring instruments we are able to realize custom-made solutions.

As additional service HITEC Messtechnik offers a pre-acceptance at your plant together with you, as well as measuring instrument capability checks according to relevant defined methods.

Contact us.
Tel. +49 (0)79 40 93 19 38 – 0
mail@hitec-messtechnik.de

Training

Do your operators need an extensive training?

As full-range supplier HITEC Messtechnik offers its customers the complete world of optical metrology.

There is almost no limit for instruments of HITEC Messtechnik to solve measuring problems.

The operator should be familiar with all options and functions for an optimal use of the instruments.

Therefore we offer considerable workshops in our company in Niedernhall or at your place.

Our training specialists are always glad to assist you.

Calibration Service

Our measuring systems are manufactured and checked according to strict guidelines. Nevertheless after a longer period of use a certain wear may occur.

We recommend to regularly maintain and calibrate the measuring system in order to ensure the required measurement accuracy.

As full-service provider HITEC Messtechnik offers prompt calibrations.

We calibrate your instruments at your place or in Niedernhall according to national and international standards.

Maintenance Service

Due to our regularly scheduled checks based on our maintenance schedule, the measuring systems stay precisely, reliable and durable.

There is no need to plan your regularly checks by yourself – our service team will get in touch with you just in time before your next maintenance comes up.

To avoid or minimize loss of production and to maintain the efficiency we calibrate your systems at your place.

Our hotline offers you also support at any time.

Please do not hesitate to contact us for further information.

Modernization Service

To maintain the value of your measuring systems and to be up to date regarding technical developments, we recommend our modernization service.

A Software update on a regular basis is just one possibility.

We submit regular software updates and upgrades for you.

Another possibility is to upgrade your hardware.

To grant and to optimize a long term efficiency, it is recommendable to upgrade your hardware either at your place or with us in Niedernhall.

We look forward hearing from you if there is any need or questions regarding soft-and hardware updates.

Repair and Replacement Service

As we produce our systems in our plant in Niedernhall, we of course have an immense knowledge regarding our optical measuring systems and are therefore also your Partner for any repair needed.

Once repaired, your systems corresponds to all specifications and accuracy as a brand new machine.

A long service life, excellent quality and the best price/performance ratio – HITEC original spare parts are the first choice for your systems.

Very often it is necessary to calibrate your systems through our specialist after repair.

We grant of course a warranty of 12 month for spare parts and service.

Our technicians use only high technology equipment and are trained on a regularly basis to guarantee you the best service possible.

Support

HITEC measuring systems including software convince through extraordinary efficiency and reliability.

The HITEC Team supports you with advice and assistance throughout the complete product life.

We also offer you a Technical Support Hotline for our computer based measuring systems.

If you wish so, our specialists check and correct your settings via Teamviewer Quick Support.

HITEC Messtechnik GmbH

Give us a call

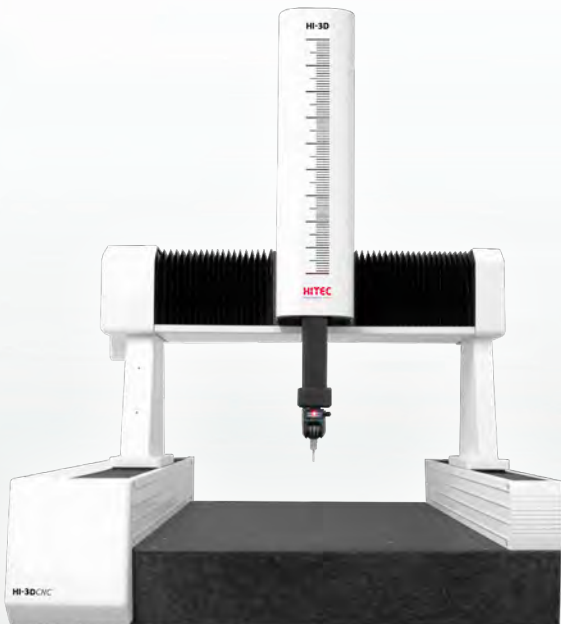+ 49 (0)79 40 93 19 38 0

HITEC

Messtechnik GmbH

HITEC

Messtechnik GmbH

Zimmerbachstraße 45
74676 Niedernhall-Waldzimmern
Germany

Tel. +49 7940 983660
Fax +49 7940 9836699
info@hitec-messtechnik.de
www.hitec-messtechnik.com
/hitecmesstechnik

OM1