MICROTECH

COMPUTERIZED BORE GAUGE

USER MANUAL

Calibration ISO 17025:2017

ISO 9001:2015

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SPECIFICATION

Item No	Range	Resolution	Depth	Modules		Accuracy (Horizontal)	Indication	Data output
				lenght	qty			
	mm	mm	mm	mm	pcs	µm		Wireless
131260760	105-260	0,0001	6000	2000	3	±28	computerized MICS system with 1,54" touchscreen	•
131260780			8000	2000	4	±31		•
131260790			10000	2000	5	±35		•
131450760	250-450		6000	1500	3	±26		•
131450780			8000	1750	4	±30		• •
131450790			10000	2000	5	±35		

TECHNICAL DATA

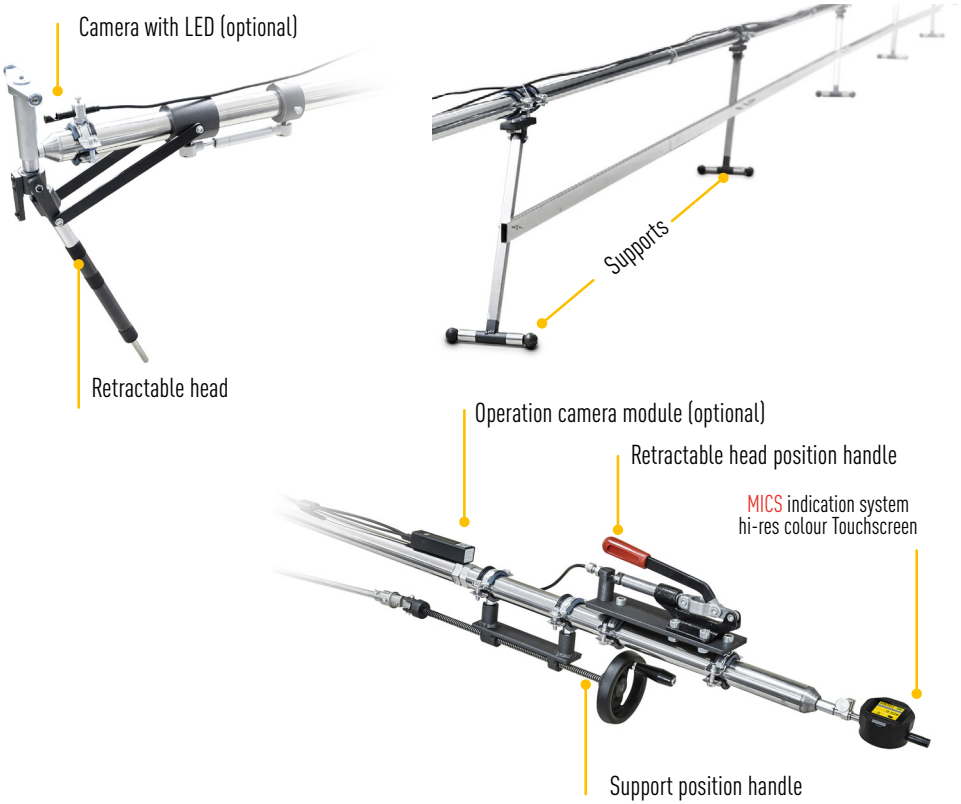
Parameters	
LED display	color 1,54 inch
Resolution	240x240
Indication system	MICS 3.0
Power supply	Rechargeable Li-Pol battery
Battery capacity	600 mAh (depends of device)
Charging port	micro-USB
Case material	Aluminium
Buttons	Switch (Multifuntional), Reset
Wireless data transfer	Long range

CHARGING

BUILT-IN BATTERY - rechargeable Li-Pol battery

For charging connect USB cable
Charging process indicating
on Battery status
(switch on device)

MAIN INFO



Extra long bore gauge equipped with some modules that gives possibilities to make big depth measurings:

- Supports are are using for control position and moving bore gauge inside tube or other detail.
- Support position handle regulate height of supports position according detail size.
- Retractable head position handle regulate head position for moving bore gauge to hard-to-rich places
- Optional Camera with LED gives poosbility correctly positioning bore gauge inside tube
- Computerized indicator with Wireless data transfer indicates measuring results

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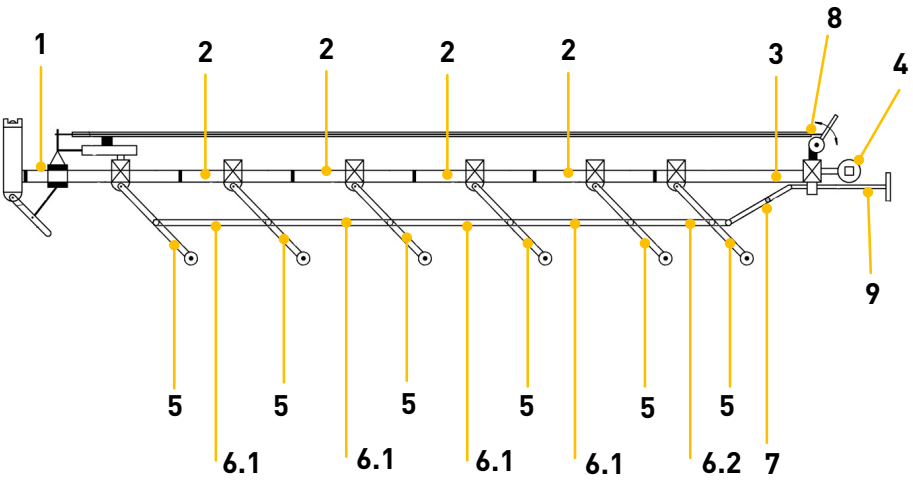
COMPLECTATION



1 Retractable Measuring head with extension rod 1950mm	1pcs
2 Extension rod 1950 mm	4pcs
3 Extension rod 1300 mm with operating handles	1pcs
4 Computerized indicator	1pcs
5 Supports with rolls	6pcs
6.1 Flat rods 1850 mm	4pcs
6.2 Flat rod 890 mm	1pcs
7 Round rod with cardan	1pcs
8 Retractale measuring head position handle	1pcs
9 Supports position handle	1pcs

Extra accesories in complectation:

10 Wrenches S14 mm	2pcs
11 Hexagon wrench S3 mm	1pcs
12 Hexagon wrench S6 mm	1pcs
13 Screws M4x8	30pcs
14 Sprecial wrench	2pcs

ASSEMBLING BORE GAUGE

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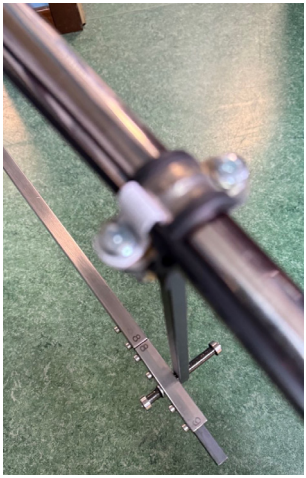
1. Screw together the extension rods **1+2+3**,
which already have clamps and mounted supports with roll **5**. *Assemble the rods in order (each rod end has engraved numbers).*

2. Total number of rods **2** *– 4 pcs*
+ rod with measuring head **1***- 1pcs.*
+ rod with operation handles **3***- 1pcs.*
When connecting the rods, insert a shaft into each one. *The shaft also has engraved numbers (see photo).*

SHAFTS

3. Start assembling from the first rod **1**,
which has the measuring head.
In the sixth rod, insert the shaft with the spring facing the handle side.
Each rod **1+2+3** *has a central bushing inside, so the shaft should be inserted gently while rotating.*
After that, tighten the rods using a special wrench **14** *through the grooves located at the ends of the rods.*

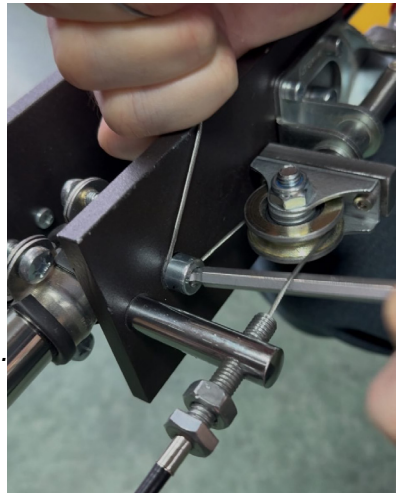
4. Attach the square tubes (5 pcs) **6.1+6.2** *to the mounted rollers* **5**. *This will serve as the pulling mechanism for raising and lowering the bore gauge. Each square tube has engraved numbers.*



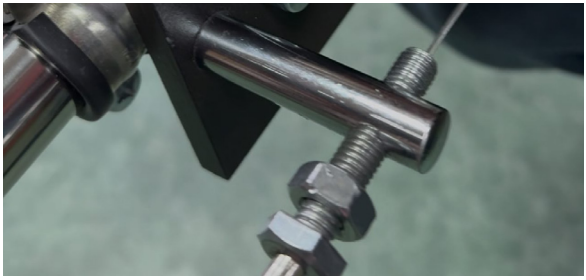
5. Position all roller mechanisms to the right side of the bridge.

6. Fasten the square tubes **6.1+6.2** *with two screws at each end.*
After completing the assembly, align the bridge with the mechanism, the roller axes, and the cable feed mechanism on the sixth extension roda **1+2+3** *in a straight line.*
To do this, loosen the clamps on the round rods if necessary – the spacing may shift.
The distance between clamp centers should be 1930 mm.

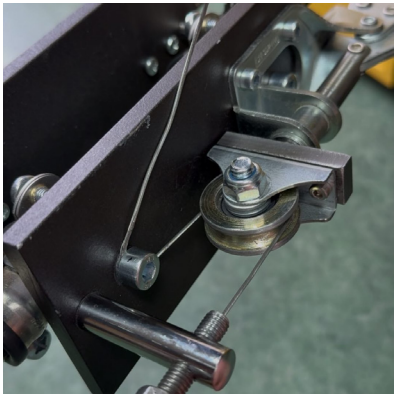
7. Install the cable. The cable with the sleeve is attached to the first rod. Thread the cable with the sleeve through the white loops secured to the clamps. The sixth rod has a stopper for the sleeve (this acts as the cable tensioner). Insert the cable into the tensioner and fix it into the bolt on the cable movement handle.



8. Tension the cable by turning the tension bolt out of the stopper.



9. After tensioning the cable, check the mechanism by pulling the handle away from the bridge.



10. When doing this, the bridge's movable insert on the first rod should retract.

11. When the handle is returned to its original position, the bridge insert should return to its working state.

Check the bore gauge lifting mechanism.
By rotating the trapezoidal screw using the handle, the rollers will raise or lower the bore gauge.
Do not rotate the trapezoidal screw when the bore gauge is fully lowered.
The gauge will begin to rise when the angle between the roller axis and the rod exceeds 30°.
Below 30°, lift the bore gauge manually and rotate the screw.

MEASURING PROCESS

1) Ensure the bore gauge is assembled correctly.

2) Switch on the Computerized Indicator **4**.

If necessary, charge it according to the instructions.

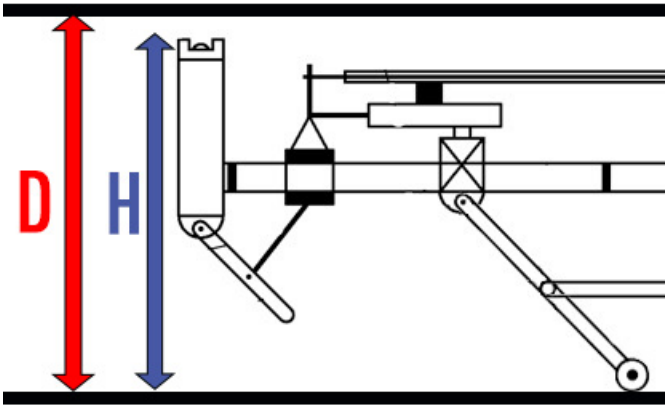
3) Press the measuring pin on the Retractable Measuring head **1** and check that the Computerized Indicator **4** responds.

4) Install correct-size anvils on Retractable Measuring Head **1**.

5) Preset value on the Computerized Indicator **4** using a ring gauge or another precision measuring instrument.

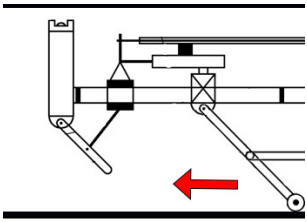
6) Before inserting the bore gauge into the hole, open the rollers **5** according Table.

D	H
mm	mm
110	86
120	98
130	109
140	120
150	131
160	143
170	154
180	165
190	175
200	186
210	196
220	206
230	217
240	227
250	237

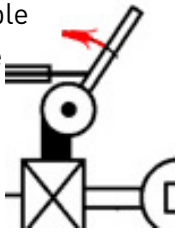


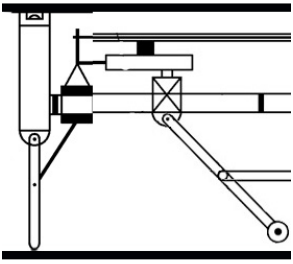
7) Insert the gauge into the hole in this state.

The bridge's movable insert must remain folded during insertion



8) Then, return the cable handle to its working position — the movable insert will open and measure the required zone.





DIMENSIONAL DRAWINGS

RETRACTABLE HEAD

Free Software for Windows, Android, iOS

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innovative measuring instruments

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