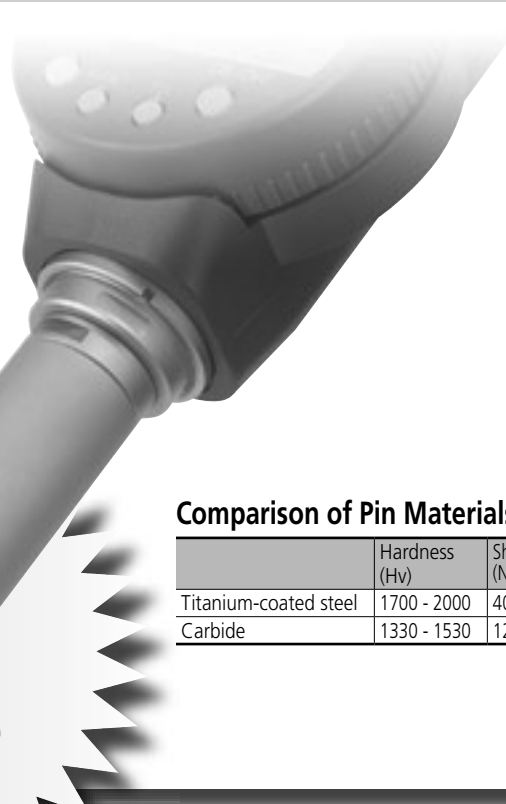


Applying a titanium coating to the contact faces of the measuring pins has improved durability and abrasion resistance. With this titanium coating the pin material has been changed from carbide to hardened steel to provide extra toughness to prevent the contact face from being chipped during measurement.



### Comparison of Pin Materials

	Hardness (Hv)	Shear strength (N/mm <sup>2</sup> )
Titanium-coated steel	1700 - 2000	4000
Carbide	1330 - 1530	1220 - 1800

### Measuring a Blind Hole

The measuring pins held in the jaws permit measuring the diameter of a blind hole close to the bottom.

\* The Holtest type II does not use measuring pins.

#### Holtest/Digimatic Holtest/Borematic

Measuring Range	inch (mm)		
	a	b	c
.08"-.24" (2 - 6)	—	—	.08" (2)
.24"-.47" (6 - 12)	.08" (2)	—	.10" (2.5)
.47"-.79" (12 - 20)	.01" (0.3)	.22" (5.6)	.14" (3.5)
.79"-1.18" (20 - 30)	.01" (0.3)	.33" (8.3)	.20" (5.2)
1.18"-1.97" (30 - 50)	.01" (0.3)	.51" (13)	.39" (10)
1.97"-3.94" (50 - 100)	.01" (0.3)	.67" (17)	.55" (14)
1.97"-4.92" (50 - 125*)			
3.94"-11.81" (100 - 300)	.49" (12.4)	.83" (21)	.54" (13.8)

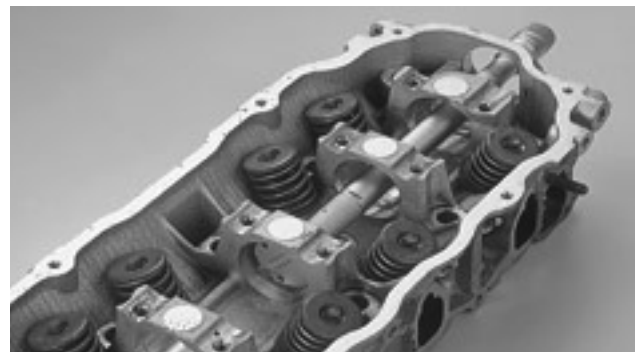
\* Dimensions apply to Borematic.

#### Holtest Type II

Measuring Range	inch (mm)	
	a	c
.47"-.79" (12 - 20)	.10" (2.6)	.14" (3.5)
.79"-1.18" (20 - 30)	.13" (3.4)	.20" (5.2)
1.18"-1.97" (30 - 50)	.13" (3.4)	.39" (10)
1.97"-3.94" (50 - 100)	.13" (3.4)	.55" (14)
3.94"-11.81" (100 - 300)	.77" (19.6)	.54" (13.8)

### Measuring Deep Holes

An extension rod (optional accessory) can be fitted to allow measurement of deep holes.



### Measuring small diameters

Measuring range	Stroke	Messuring method	inch (mm)	
			Contact-point material	Remarks
.08"-.12" (2 - 3)	.02" (0.5)	Two-point method	Hardened steel (HRC60.5 or more)	No titanium coating
.12"-.24" (3 - 6)	.04" (1)	Two-point method	Hardened steel (HRC60.5 or more)	
.24"-.47" (6 - 12)	.08" (2)	Three-point method	Carbide	

For details, contact your local Mitutoyo office.

### Inspection Certificate included as standard accessory.

The Inspection Certificate supplied with each instrument, which assures product quality and safety, cannot be used for obtaining a Calibration Certificate since the purchase date is not stated. A Calibration Certificate certifies the accuracy of your measuring instrument on the date tested, the standard(s) used for calibrating it, and traceability. Mitutoyo will issue this calibration certificate, at a cost, on request.

### Improved Operability

The ratchet unit has been increased in diameter for easier operation.

## Holtest

### Individual micrometers

Order No.	Measuring Range (mm)	Graduation (mm)	Accuracy (mm)
<b>368-101-10</b>	6-8	0.001	±0.002
<b>368-102-10</b>	8-10		
<b>368-103-10</b>	10-12		
<b>368-164</b>	12-16	0.005	±0.003
<b>368-165</b>	16-20		
<b>368-166</b>	20-25		
<b>368-167</b>	25-30		
<b>368-168</b>	30-40		
<b>368-169</b>	40-50		
<b>367-170</b>	50-63		
<b>368-171</b>	62-75		
<b>368-172</b>	75-88		
<b>368-173</b>	87-100		
<b>368-174</b>	100-125	±0.005	±0.005
<b>368-175</b>	125-150		
<b>368-176</b>	150-175		
<b>368-177</b>	175-200		
<b>368-178</b>	200-225		
<b>368-179</b>	225-250		
<b>368-180</b>	250-275		
<b>368-181</b>	275-300		

\* Ring gages and extension rods are not supplied.

\* The model with a measuring range of 6 to 12mm is equipped with carbide-tipped contact points with no titanium coating.

Order No.	Measuring Range (inch)	Graduation (inch)	Accuracy (inch)
<b>368-201-10</b>	.275 - .35	.0001	±.0001
<b>368-202-10</b>	.35 - .425		
<b>368-203-10</b>	.425 - .5		
<b>368-264</b>	.5 - .65	.0002	±.00015
<b>368-265</b>	.65 - .8		
<b>368-266</b>	.8 - 1		
<b>368-267</b>	1 - 1.2		
<b>368-268</b>	1.2 - 1.6		
<b>368-269</b>	1.6 - 2		
<b>367-270</b>	2 - 2.5		
<b>368-271</b>	2.5 - 3		
<b>368-272</b>	3 - 3.5		
<b>368-273</b>	3.5 - 4		
<b>368-274</b>	4 - 5	±.00025	±.00025
<b>368-275</b>	5 - 6		
<b>368-276</b>	6 - 7		
<b>368-277</b>	7 - 8		
<b>368-278</b>	8 - 9		
<b>368-279</b>	9 - 10		
<b>368-280</b>	10 - 11		
<b>368-281</b>	11 - 12		

### Standard Sets

Order No.	Measuring Range (mm)	Graduation (mm)	Order No.	Measuring Range (inch)	Graduation (inch)
<b>368-901-10</b>	6-12	.001	<b>568-988-10</b>	.5 - 1	.001
<b>368-912</b>	12-20	.005	<b>568-989-10</b>	1 - 2	.002
<b>368-913</b>	20-50				
<b>368-914</b>	50-100				
<b>368-915</b>	100-200				
<b>568-990-10</b>	2 - 3		<b>568-991-10</b>	3 - 4	
<b>568-992-10</b>	2 - 4		<b>568-992-10</b>	2 - 4	

\* Each set includes the main measuring unit, ring gages, an extension rod and other standard accessories.

\* **368-901-10, 368-921-10** sets are equipped with carbide-tipped contact points with no titanium coating.

## Holtest Type II

### Individual micrometers

Order No.	Measuring Range (mm)	Graduation (mm)	Accuracy (mm)
<b>368-764</b>	12-16	0.005	±0.002
<b>368-765</b>	16-20		
<b>368-766</b>	20-25		
<b>368-767</b>	25-30		
<b>368-768</b>	30-40	0.005	±0.003
<b>368-769</b>	40-50		
<b>368-770</b>	50-63		
<b>368-771</b>	62-75		
<b>368-772</b>	75-88		
<b>368-773</b>	87-100		
<b>368-774</b>	100-125		
<b>368-775</b>	125-150	±0.005	±0.005
<b>368-776</b>	150-175		
<b>368-777</b>	175-200		
<b>368-778</b>	200-225		
<b>368-779</b>	225-250		
<b>368-780</b>	250-275		
<b>368-781</b>	275-300		

\* Ring gage and extension rod are not supplied.

Order No.	Measuring Range (inch)	Graduation (inch)	Accuracy (inch)
<b>368-864</b>	.5 - .65	.0002	±.00015
<b>368-865</b>	.65 - .8		
<b>368-866</b>	.8 - 1		
<b>368-867</b>	1 - 1.2		
<b>368-868</b>	1.2 - 1.6		
<b>368-869</b>	1.6 - 2		
<b>368-870</b>	2 - 2.5		
<b>368-871</b>	2.5 - 3		
<b>368-872</b>	3 - 3.5		
<b>368-873</b>	3.5 - 4		
<b>368-874</b>	4 - 5	±.00025	±.00025
<b>368-875</b>	5 - 6		
<b>368-876</b>	6 - 7		
<b>368-877</b>	7 - 8		
<b>368-878</b>	8 - 9		
<b>368-879</b>	9 - 10		
<b>368-880</b>	10 - 11		
<b>368-881</b>	11 - 12		

### Standard Sets

Order No.	Measuring Range (mm)	Graduation (mm)	Order No.	Measuring Range (inch)	Graduation (inch)
<b>368-991</b>	12-20	.0005	<b>368-995</b>	.5 - .8	.0002
<b>368-992</b>	20-50				
<b>368-993</b>	50-100				
<b>368-994</b>	100-200				
<b>368-996</b>	.8 - 2		<b>368-997</b>	2 - 4	
<b>368-998</b>	4 - 8		<b>368-998</b>	4 - 8	

\* Each set includes the main measuring unit, ring gages, an extension rod and other standard accessories.