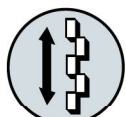
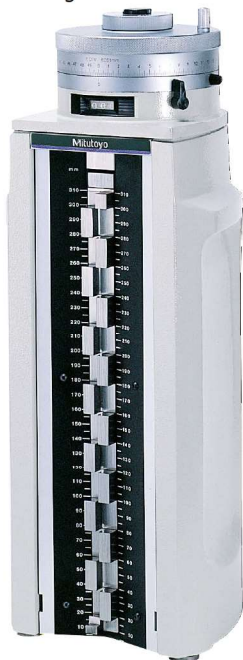


Reference Gages

Length Standards Brought to You by Mitutoyo

Height Master SERIES 515

- Height Master is a best-selling product with a name that has become the industry standard for height reference instruments.



Staggered 20 mm blocks (movable)



Vertical orientation



Riser block

515-322

SPECIFICATIONS

Metric	
Order No.	515-322
Range (H)	5 < H ≤ 310 mm
Graduation (analog scale)	0.001 mm
Block step	20 mm (staggered)
Micrometer adjustment	20 mm
Micrometer feed	0.5 mm/rev
Block pitch accuracy	±1.5 μm
Parallelism of blocks	1.0 μm
Feed error	±1.0 μm
Retrace error	1.0 μm
Mass	23 kg

Note 1: The block accuracy and the parallelism of blocks are relative to the main unit installation surface.

Note 2: Supplied with a wooden storage case as standard.

Inch		
Order No.	515-310	515-311
Range (H)	0.2 in < H ≤ 12.2 in	0.2 in < H ≤ 12.2 in
Graduation (analog scale)	0.00001 in	
Block step	0.5 in (straight)	1 in (staggered)
Micrometer adjustment	1 in	
Micrometer feed	0.025 in/rev	
Block pitch accuracy	±50 μin	
Parallelism of blocks	40 μin	
Feed error	±40 μin	
Retrace error	40 μin	
Mass	23 kg	

Note 1: The block accuracy and the parallelism of blocks are relative to the main unit installation surface.

Note 2: Supplied with a wooden storage case as standard.

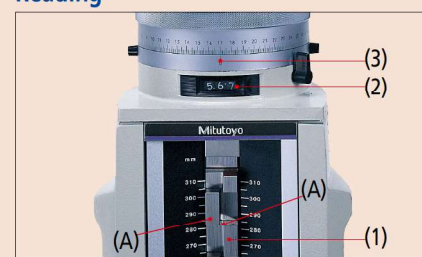


An inspection certificate is supplied as standard. Refer to page U-11 for details.

Typical application



Reading



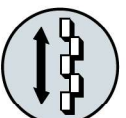
(A) Height A

(1) Scale	280. mm
(2) Counter	5.67 mm
(3) Thimble	0.000 mm
	285.670 mm



An inspection certificate is supplied as standard. Refer to page U-11 for details.

Digital Height Master SERIES 515



Staggered 20 mm blocks (movable)



Vertical orientation



Riser block

515-374

MeasurLink ENABLED

Data Management Software by Mitutoyo

- Best-selling height reference standard.
- Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems. (Refer to Page A-3 for details)



SPECIFICATIONS

Metric			
Order No.	515-374	515-376	515-378
Range (H)	10 < H ≤ 310 mm	10 < H ≤ 460 mm	10 < H ≤ 610 mm
Resolution (digital display)	0.001 mm		
Block step	20 mm (staggered)		
Micrometer adjustment	20 mm		
Micrometer feed	0.5 mm/rev		
Block pitch accuracy	±1.5 μm		
Parallelism of blocks	2.0 μm		
Feed error	±2.0 μm		
Retrace error	2.0 μm		
Mass	9.5 kg	13.6 kg	16 kg

Note: The block accuracy and the parallelism of blocks are based on main unit installation surface, which does not include the retrace error.

Inch			
Order No.	515-375	515-377	515-379
Range (H)	0.5 in < H ≤ 12 in	0.5 in < H ≤ 18 in	0.5 in < H ≤ 24 in
Resolution (digital display)	0.0001 in		
Block step	1 in (staggered)		
Micrometer adjustment	1 in		
Micrometer feed	0.025 in/rev		
Block pitch accuracy	±100 μin		
Parallelism of blocks	50 μin		
Feed error	±100 μin		
Retrace error	100 μin		
Mass	9.5 kg	13.6 kg	16 kg

Note: The block accuracy and the parallelism of blocks are based on main unit installation surface, which does not include the retrace error.

MeasurLink ENABLED

Data Management Software by Mitutoyo

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

Technical Data

- Display: LCD 6 digits
- Battery: SR44 (2 pcs.)
- Battery life: Approx. 1.8 years under normal use

Function

Zero setting, Origin-setting, Origin restoration, Data hold, Auto power off, Data output

Optional Accessories

515-111: Auxiliary block kit for bore gage (mm)

515-120: Auxiliary block kit for bore gage (inch)

—: Riser block (see page E-36.)

959149: SPC cable (1 m)

959150: SPC cable (2 m)



An inspection certificate is supplied as standard.
Refer to page U-11 for details.

Typical application

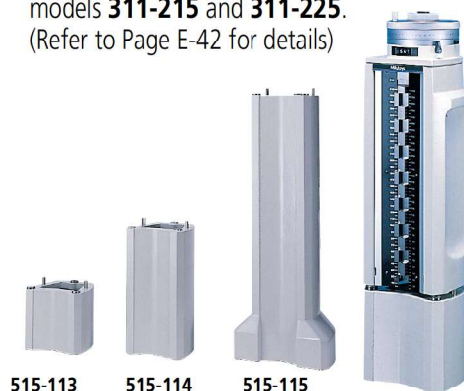


Bore gage zero-setting

Height Master SERIES 515 — Optional accessories

Riser Blocks SERIES 515

- These riser blocks are designed to increase the measurable height.
- They can also be used on Square Master models **311-215** and **311-225**.
(Refer to Page E-42 for details)



515-113

515-114

515-115

SPECIFICATIONS

Metric				
Order No.	Height (mm)	Accuracy (μm)	Variation in length (μm)	Mass (kg)
515-113	150	±0.6	0.6	5.7
515-114	300	±1.0	0.8	9.8
515-115	600	±2.0	1.0	26.8

Inch				
Order No.	Height (in)	Accuracy (μin)	Variation in length (μin)	Mass (kg)
515-116	6	±20	20	4.8
515-117	12	±40	30	11.3
515-118	24	±80	40	31

Auxiliary Block Kit SERIES 515 – for Bore Gage

- Enables efficient zero point adjustment of cylinder gages using the Height Master.
- Zero point adjustment range: 18 to 150 mm.



515-112

SPECIFICATIONS

Metric	
Order No.	Model
515-110	Universal Height Master
515-111	Digital Height Master (515-374/376/378)
515-112	Height Master (515-322)

Inch	
Order No.	Model
515-119	Universal Height Master, Height Master (515-310)
515-120	Digital Height Master (515-375/377/379)
515-121	Height Master (515-311)