

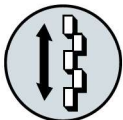
Reference Gages

Height Master
SERIES 515

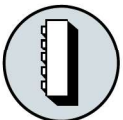
- For calibrating and setting height gages.
- Staggered arrangement of block stack have two measuring faces on the same level, one facing up and the other down (except for 515-310).



515-322



Staggered 20 mm blocks (movable)



Vertical orientation



Riser block

SPECIFICATIONS

Metric	
Code 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

Inch		
Code No.	515-310	515-311
Range (H)	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	

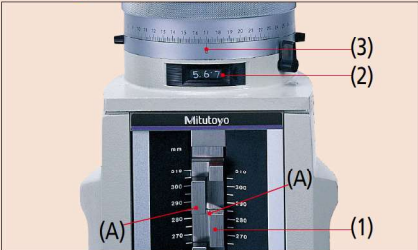
Note 1: The block pitch accuracy and the parallelism of blocks are relative to the main unit reference surface.
Note 2: Supplied with a wooden storage case as standard.



Typical application



Reading



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

Function

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

Optional Accessories

Code No.	Type	Description
959149	C	connection cable (1 m)
959150	C	connection cable (2 m)

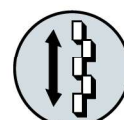
Digital Height Master SERIES 515

- For calibrating and setting height gages.

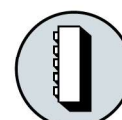


515-374

- Staggered arrangement of block stack have two measuring faces on the same level, one facing up and the other down.
- Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems. (Refer to page 09-3 for details)



Staggered 20 mm
blocks (movable)



Vertical
orientation



Riser block

SPECIFICATIONS

Metric				
Code 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	0 < H ≤ 310 mm	±1.5 μm		
	310 < H ≤ 460 mm	—	±2.5 μm	
	460 < H ≤ 610 mm	—	—	±3.5 μm
Parallelism of blocks	0 < H ≤ 310 mm	2.0 μm		
	310 < H ≤ 610 mm	—	2.5 μm	
Feed error		±2.0 μm		±2.5 μm
Retrace error		2.0 μm		2.5 μm
Mass		9.5 kg	13.6 kg	16 kg

Inch				
Code 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	0 < H ≤ 12 in	±100 μin		
	12 in < H ≤ 18 in	—	±100 μin	
	18 in < H ≤ 24 in	—	—	±150 μin
Parallelism of blocks	0 < H ≤ 12 in	50 μin		
	12 in < H ≤ 18 in	—	100 μin	
Feed error		±100 μin		
Retrace error		100 μin		
Mass		9.5 kg	13.6 kg	16 kg

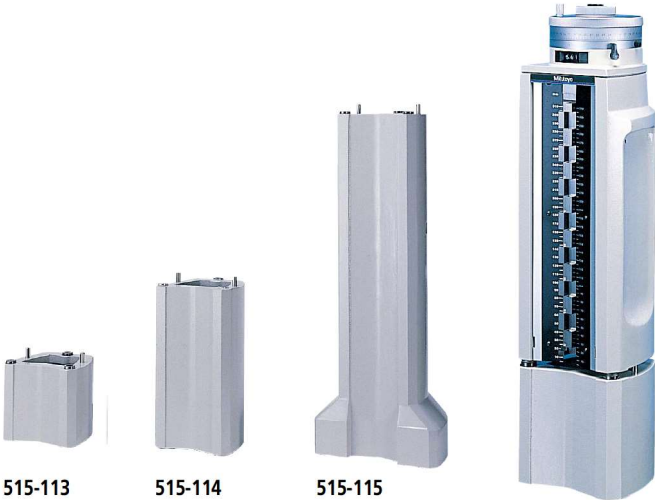
- Display: 6 digits
 - Power source: SR44 battery (2 pcs.), **938882** included as standard (for operational checks)
 - Battery life: Approx. 1.8 years under normal use
- Note: The block pitch accuracy and the parallelism of blocks are based on main unit reference surface, which does not include the retrace error.

Reference Gages

Height Master
SERIES 515 — Optional accessories

Riser Blocks
SERIES 515

- The measuring range of a Height Master can be extended by using riser blocks.
- They can also be used on Square Master models **311-215** and **311-225**. (Refer to page 01-48 for details)



SPECIFICATIONS

Metric				
Code 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				
Code 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



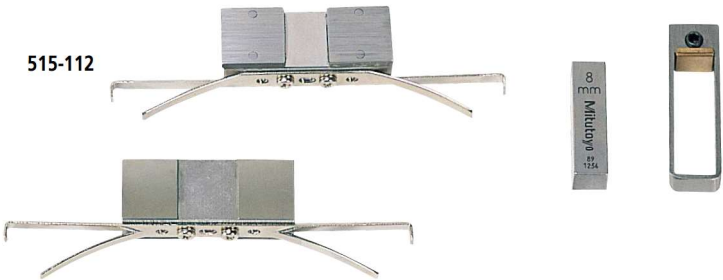
Typical application



Bore gage zero-setting

Auxiliary Block Kit SERIES 515 – for Bore Gage

- Used for efficient zero-setting of dial bore gages and tubular inside micrometers (18 - 150 mm) on a Height Master.



SPECIFICATIONS

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