

# Reference Gages

Length Standards Brought to You by Mitutoyo

## Black Granite Surface Plates SERIES 517

- Natural granite is free from deterioration or dimensional change over time.
  - Granite surface plates have significant advantages over cast iron surface plates: Twice as hard as cast iron. Non-magnetic. Low thermal expansion.
  - Free from wringing, so there is no interruption of work.
  - Free from burrs or protrusions because of the fine grain structure and insignificant stickiness; this ensures a high degree of flatness over a long service life and causes no damage to workpieces or instruments.
- Use these plates in a stable temperature environment. Since flatness error occurs when there is a temperature difference between the working surface and the underside, avoid working in direct sunlight. Also, do not place a plate in the vicinity of an air conditioner, etc. (Recommended environment: Temperature  $20\pm 1^{\circ}\text{C}$ , Humidity  $58\pm 2\%$ )



## Custom-made Granite Products

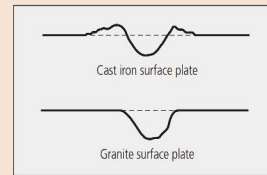
Mitutoyo can manufacture granite products to your design (such as main structural components of semiconductor instruments and process machinery).



Grinding CMM granite tables on a large grinding machine



An inspection certificate is supplied as standard. Refer to page IX for details.



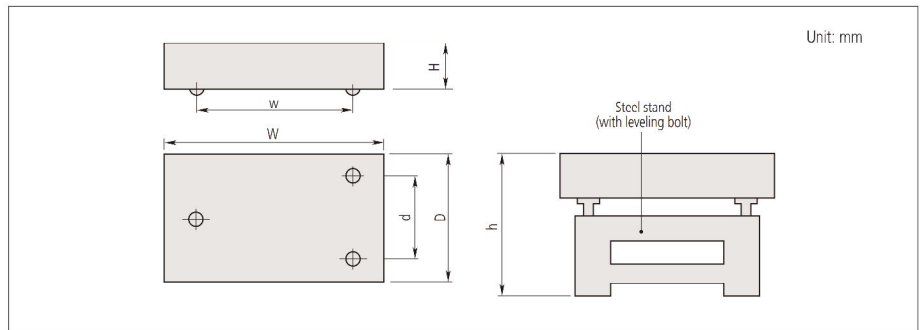
## SPECIFICATIONS

Order No.	Size			Flatness	Mass	Stand (Option) Order No.			h
	WxDxh	d	w			Normal type	with safty frame	with caster	
517-401	300x300x100mm	240mm	240mm	2μm	27kg	—	—	—	—
517-301				3μm					
517-101				5μm					
517-411	450x300x100mm	240mm	390mm	2μm	40kg	—	—	—	—
517-311				3μm					
517-111				6μm					
517-414	600x450x100mm	370mm	500mm	2.5μm	80kg	517-203	517-203R	517-203CR	755 - 775mm*1
517-314				4μm					
517-114				8μm					
517-403	600x600x130mm	500mm	500mm	2.5μm	140kg	517-20	517-204R	517-204CR	755 - 775mm*1
517-303				5μm					
517-103				8μm					
517-405	750x500x130mm	420mm	630mm	3μm	146kg	517-205	517-205R	517-205CR	755 - 775mm*1
517-305				5μm					
517-105				9μm					
517-407	1000x750x150mm	630mm	700mm	3μm	337kg	517-206	517-206R	517-206CR	755 - 775mm*1
517-307				6μm					
517-107				12μm					
517-409	1000x1000x150mm	700mm	700mm	3.5μm	450kg	517-207	517-207R	517-207CR	735 - 775mm*1
517-309				7μm					
517-109				13μm					
517-413	1500x1000x200mm	700mm	1100mm	4μm	900kg	517-208	517-208R	517-208CR	735 - 775mm*1
517-313				8μm					
517-113				16μm					
517-410	2000x1000x250mm	700mm	1500mm	4.5μm	1500kg	517-209	517-209R	517-209CR	735 - 775mm*1
517-310				9.5μm					
517-110				19μm					
517-416	2000x1500x300mm	1100mm	1500mm	5μm	2700kg	517-210	517-210R	517-210CR	735 - 775mm*1
517-316				10μm					
517-116				20μm					
517-317	2000x2000x350mm	1500mm	1500mm	11μm	4200kg	—	—	—	700 - 706mm*1
517-117				22μm					
517-318	3000x1500x400mm	1100mm	2000mm	12.5μm	5400kg	—	—	—	700 - 706mm*1
517-118				25μm					
517-319	3000x2000x500mm	1500mm	2000mm	13.5μm	9000kg	—	—	—	700 - 706mm*1
517-119				27μm					

\* With leveling bolt.

\*1 Distance from the bottom of the large granite plate block mount to the granite plate top surface.

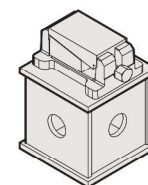
## DIMENSIONS



## SPECIFICATIONS: Stand

Block mount	Applicable surface plate	
Order No.	Order No.	Size (W x D x H)
06AAY174	517-317	2000 x 2000 x 350mm
	517-117	
06AAY175	17-318	3000 x 1500 x 400mm
	517-118	
06AAY176	517-319	3000 x 2000 x 500mm
	517-119	

Block platform for supporting legs



Block platform for auxiliary legs

