

# **Motorized test stand MH2 series**

- High repeatability with constant testing speed and direction
- The horizontal design for easy sample setting
- Simple digital setting of testing modes and speed
- Various functions with force gauge

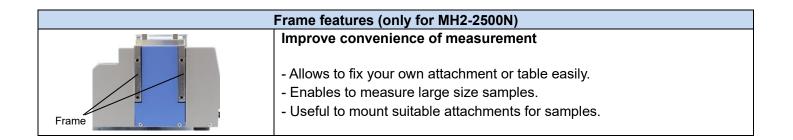


MH2-500N

MH2-2500N

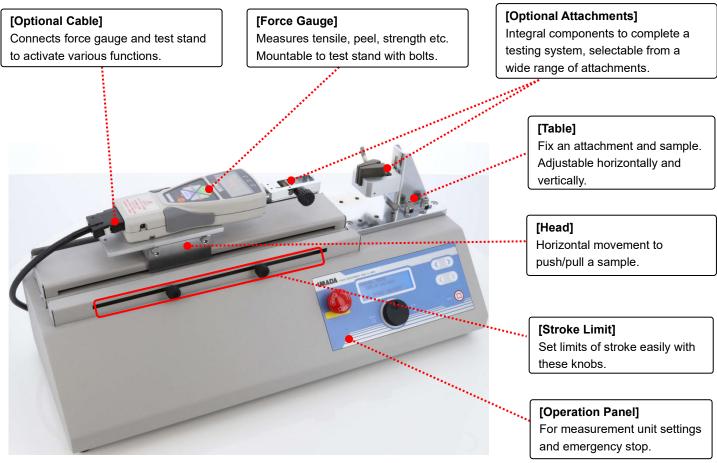
Special Features			
Easy Operation			
- Inclined control panel for easy operation			
- Easy dial operation for digital value			
- Three testing modes to meet testing requirements			
Functions for efficient testing			
- Easy setting of travel distance according to the sample			
size.			
- Automatically changes traveling and measuring speed			
at a set force value. (*)			
- Software records automatically according to stand			
operation.(*)			

\* Required certain models of force gauge and optional cable.





# [Application Example and Configurations]

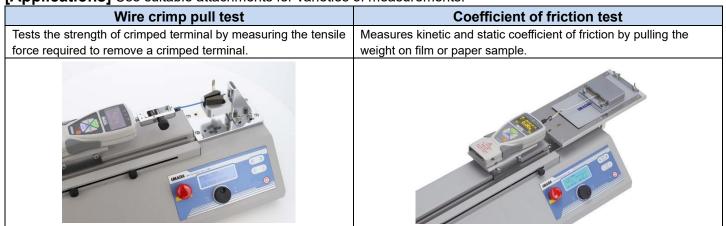


\*This stand is MH2-500N model.

\*Force gauge, optional attachments and optional cable are sold separately.

### [Operation Panel] [Emergency Button] Press for emergency stops. [Push Dial] For measuring unit settings by turning and pressing. [Operation Buttons] Press to move the head.

#### [Applications] Use suitable attachments for varieties of measurements.





# [Basic Operations]

Adjusting speed	MANUAL MODE 178.0 mm/min 4 SPEED ADJUST Salect R	Testing speed is easily adjustable by dialing. Setting resolution: [10-20mm/min: 0.5mm/min] [20-100mm/min: 5mm/min] [100-300mm/min: 10mm/min] Adjustable speed types: Start, Measuring, Return
Three measuring modes	MANUAL MODE 250.0 mm/min ± SPEED ADJUST	<ul> <li>- Manual mode: Moves while operation buttons are pressed.</li> <li>- JOG mode: Minute feeding by turning dial (approx. 0.05mm per 1 turn)</li> <li>- Cycle mode: Travels between stroke limit knobs for cycles.</li> </ul>
Other functions	CONFIG MODEL1J COUNTER LIMIT 100	Cycle mode allows to set the number of tests to repeat and pausing time. Counter (number of tests to repeat): Max. 65535 times Timer (pausing time): Up to 99 min 59 sec 9 (by 0.1 sec)

# [Main Options]

Speed change (-V)	Length meter (-S)
Changes the speed range.	Built in digital screen indicates travel distance of force
Useful for tests required faster/slower speed condition.	gauge.
FA option (-FA)	External signal input (-CN)
Provides built in liner scale.	The connector for external signal input.
Allows displaying displacement data on force gauge together	Allows inputs such as start, stop, and interlock.
with force value and drawing FS curves in PC via USB.	
*ZTA series force gauge and optional cable are required.	
*Force-displacement measurement unit FSA series includes	
the necessary products are also available.	
THE	



#### [Specifications]

Model	MH2-500N MH2-2500N		
Capacity	500N	2500N	
Speed	Digital 10 to 300mm/min [10 - 20mm/min: by 0.5mm/min] [20 - 100mm/min: by 5mm/min] [100 - 300mm/min: by 10mm/min]		
Max. Sample Height (*1)	Approx. 245mm	Approx. 340mm	
Rigidity	[Standard models	] 0.5mm or below	
Stroke Limit	Controllable with	n horizontal knob	
Measuring Modes	Manual / Jog		
Functions		99 min 59 sec 9 (by 0.1 sec)	
Control	Emergency stop, force control (	, , , ,	
Operating temperature humidity	0 to +40 degree Celsius 35 to 70% (avoid condensation)		
Voltage	AC100 to 240V, 50/60Hz (Select from 100, 120 and 230V. Accessories are provided accordingly.)		
Power Consumption	50	W	
Dimensions	Refer to dimensions show	n in the diagram page 6/7	
Weight	Approx. 14kg	Approx. 27kg	
Accessories	Operation manual, power cable, spare fuse, tools, grip mounting plate, warranty certificate	Operation manual, power cable, spare fuse, tools, attachment mounting plate (GF-2), warranty certificate	
Available Options (*4) (*5)	-CN: External signal input -S: Length scale -FA: Inbuilt liner scale -V45: Speed 1.5 to 45mm/min -V90: Speed 3 to 90mm/min -V450: Speed 15 to 450mm/min -V600: Speed 20 to 600mm/min -V900: Speed 30 to 900mm/min	-CN: External signal input -S: Length scale -FA: Inbuilt linear scale -V75: Speed 2.5 to 75mm/min -V150: Speed 5 to 150mm/min	
Mountable Force Gauge (*6)	Mechanical Force Gauge: FB, PS, PSM series Digital Force Gauge: DST, DSV, ZTS, ZTA series (1000N or lower) Load cell: DPU series (500N or lower)	Mechanical Force Gauge: FB, PS, PSM PSH series Digital Force Gauge: DST, DSV, ZTS, ZTA series Load cell: DPU series (500N or lower), DPU series (1000~5000N)(*7)	

\*1 Max. sample height refers to the distance between the table and the tip of force gauge measuring shaft when the head is at the top. (With up to 1000N model of ZTS/ZTA series)

\*2 ZTS/ZTA series force gauge and optional cable CB-528 are required.

\*3 It does not guarantee complete protection against overloading.

\*4 Add the option code after the model name to complete the model with options. e.g. When adding long stroke option to MH2-500N ... Model: MH2-500N-L

\*5 Capacity is reduced as below by some speed change options of MH2-500N.

-V600 capacity 250N, -V900 capacity 150N

\*6 Ensure to use within the capacity of force gauge and test stand regardless of the mountable models.

\*7 Mounting block is required to be attached to the DPU series (1000~5000N)

### [User Mounted Unit (only for MH2-2500N)]

OP-MH225-S : Length Scale	OP-MH225-FA : FA version *1
It digitally indicates travel distance of a force gauge.	It builds a linear scale into a test stand to output travel
	distance of a force gauge and allows to utilize it for
	analysis of force-displacement relations.

\* Requires to fix the unit to current MX2-5000N by yourself.

\* Amplifier such as ZTA or FA Plus2 (sold separately) or Software are required to record measuring value of linear scale.

\*1 Select -FA option if the test stand with built in linear scale is required.



# [Related Products]

-	ital Force Gau <b>TS/ZTA serie</b>	•	Software Force Recorder series	Force – Displacement Measurement Unit <b>FSA series</b>	
Precise measurement with high sampling rate of 2000Hz. Cable connection enables link with MH2 series.			Able to start and stop automatically based on the trigger setting of MH2 test stand function.	Draws a detailed graph of force and displacement suitable for tactile test, material evaluation and more. Includes a force gauge, a test stand with a linear scale, a cable and a graphing software.	
	CB-528	For connecting with force gauge ZTS/ZTA series: Enables useful functions			
Cable	CB-706	For –CN option: Open end cable to connect with external device			
	CB-718	For –FA option: Connects ZTA series force gauge and test stand to enable force and displacement measurement. (Motion control and related functions are also available.)			

#### **[Control Functions]** Able to be used by connecting ZTS/ZTA series and CB-528.

- Overload sensor failure prevention: Prevents the sensor from malfunction due to overloading.

- (Does not guarantee complete protection against overloading.)
- Force control: Sets a applying or stopping force value.
- Measuring speed setting: Enables automatic speed change at a point of contact by set force value.
- Automatic measurement: Automatically performs zero reset of force gauge and software recording

\* Refer to 'Advanced Functions of Test Stands' for details.

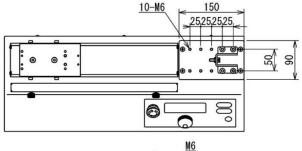
### [Examples of Customized Solutions]

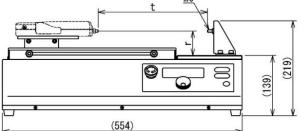
External signal inp	ut: -CN option	Interlock: -C	CN option
For switching on/off operation, foot pedal can be connected.		At the time of door opening, measuring operation stops automatically with correspondent safety regulations requirements.	
Large Sample testing attachment		Controller-sepa	arated Model
For testing larger size samples, those not possible to be placed fully on the test stand table, measuring with the multiple sample points with push/pull action is recommended.		<ul> <li>Recommended usage</li> <li>Fix to own equipment.</li> <li>Fix controller/drive part to a specific place.</li> <li>Keep distance to avoid risks during test.</li> </ul>	

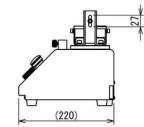
\*Images above show examples of vertical type test stand.

IMADA CO., LTD. Motorized Test Stand MH2 series

[MH2-500N Dimensions]



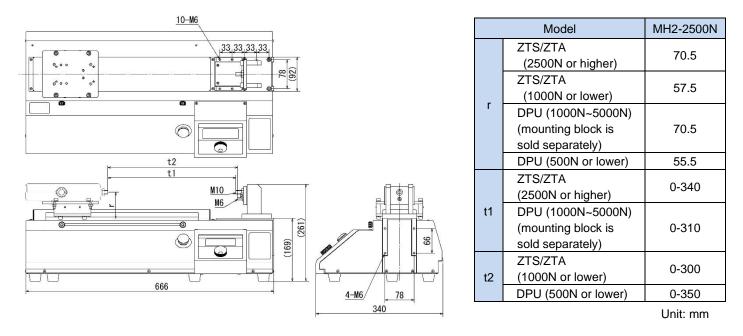




	Model	MH2-500N	
	DST/DSV/ZTS/ZTA	56	
r	(2N~500N)		
	DPU (500N or lower)	54	
	DST/DSV	250	
t	ZTS/ZTA (2N~500N)	245	
Ľ	DPU (2N~10N)	270	
	DPU (20N~500N)	260	
		Linit: mm	

Unit: mm

# [MH2-2500N Dimensions]



### [Cautions]

- Information in this document is subject to change without prior notice.
- This document is product descriptions and handling precautions, and do not guarantee various characteristics or safety.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.
- A force gauge (sold separately) is required to use this product.
- Do not use this product in the environments including fierce temperature changes, high temperature, high humidity, near water, dusty place.

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