

# Motorized test stand MX2 series MX2-500N/1000N/2500N/5000N

- Achieves high repeatability with constant testing speed and position
- Easy digital setting of testing modes and speed
- Offers useful functions operated together with force gauge



MX2-500N



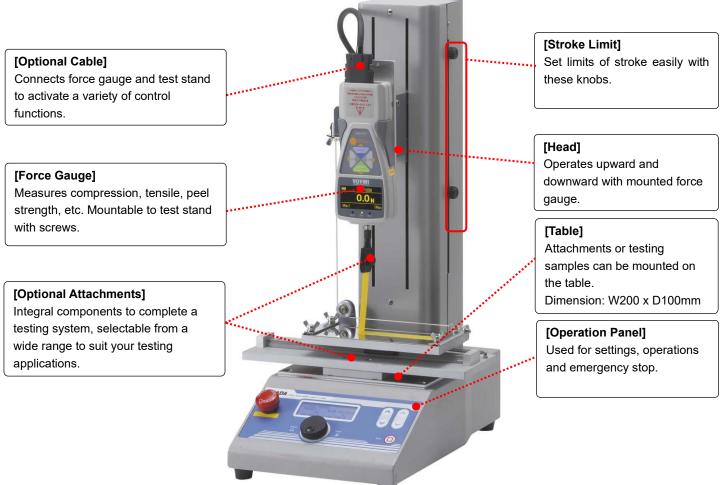
MX2-2500N

Features				
Improved Repeatability	Easy Operation			
<ul> <li>Constant testing speed and position for applying</li> </ul>	<ul> <li>Ergonomically inclined control panel</li> </ul>			
compression and tensile force	<ul> <li>Dial operation for digital setting</li> </ul>			
·Rugged design minimizes influence of deformation	Three testing modes to meet testing requirements			
(max.0.5mm)				
Versatility for a wide variety of testing	Functions for efficient testing			
·Ideal for durability test by setting the number of test	·Easy setting of travel distance depending on the sample			
cycles to repeat	height.			
·Useful timer function for compression testing allows	<ul> <li>Automatically changes traveling and measuring speed</li> </ul>			
pausing at a set force value. (*)	at a set force value. (*)			
•Attached table can mount a wide range of grips and	<ul> <li>Starts software together with test stand motion.(*)</li> </ul>			
fixtures.				
<ul> <li>Optional functions for various purposes</li> </ul>				

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

#### IMADA CO., LTD. Motorized Test Stand MX2-500N/1000N/2500N/5000N [Application Example and Configurations]





#### MX2-500N

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

# [Operation Panel]



MX2-500N display

#### [Applications] Use suitable attachments to perform a variety of measurements.

Wire crimp pull test	Peel test of tapes	3-point bend material testing	
Tests the strength of crimped terminal by	Tests adhesive strength by peeling off the	Applies compression force to test strength of	
measuring the tensile force required to	adhesive tape affixed on the table.	materials such as metal by bending or	
remove a crimped terminal.		breaking.	



### [Basic Operations]

Adjusting speed	MANURL MODE 178.0 mm/min ± SPEED ADJUST Select Ω	Testing speed is easily adjustable with dial. 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>Three testing modes are available to meet requirements.</li> <li>Manual mode: Moves while up/down 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]

Long stroke (-L/-2L)	Speed ch	ange (-V)	Length meter (-S)	
This option provides extended stroke.	This option changes the speed range.		Built in digital screen indicates travel	
Useful when testing stretching	Useful for tests that		distance of force gauge.	
samples or testing for long distance.	faster/slower speed	d condition.		
FA option (-FA)		External signal input (-CN)		
This option provides inbuilt linear scale.		This option mounts the connector for external signal input.		
It allows displaying displacement data of		It allows inputs such as start, stop, and interlock.		
together with force value and drawing F USB.	S curves in PC via			
*ZTA series force gauge and optional ca	able are required.			
*Force-displacement measurement unit	FSA series are			
also available, which includes the neces	ssary products.			
-NG CK +NG 10.30 mm 5.49 N Min Min Max Min Min Max				



### [Specifications]

Model	MX2-500N	MX2-1000N	MX2-2500N	MX2-5000N	
Image					
Capacity	500N	1000N	2500N	5000N	
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]			Digital 0.5 to 300mm/min [0.5 - 20mm/min: by 0.5mm/min] [20 - 100mm/min: by 5mm/min] [100 - 300mm/min: by 10mm/min]	
Max. Sample Height*1	Approx. 235mm	Approx. 300mm	Approx. 320mm	Approx. 380mm	
D::!:(		[Standard models]	less than 0.5mm,	<b>1</b>	
Rigidity	[Long	g stroke (optional)] less than 1.	0mm	[extended column (optional)] less than 1.0mm	
Stroke Limit		Controllable with up	pper and lower knob		
Measuring Modes		Manual / Jog	-		
Functions	Counter (number of tests to repeat): Max. 65535 times Timer (pausing time): Up to 99 min 59 sec 9 (by 0.1 sec)				
Control	Emergency stop, force control (*2), overload prevention (*2, *3)				
Operating temperature humidity	0 to +40 degree Celsius 35 to 70% (avoid condensation)				
Voltage	AC100 to 240V, 50	)/60Hz (Select from 100, 120 a	and 230V. Accessories are pro	vided accordingly.)	
Power Consumption		50W		150W	
Dimensions		See [Dim	_	Γ	
Weight	Approx. 18kg	Approx. 19kg	Approx. 26kg	Approx. 51kg	
Accessories	Operation	n manual, power cable, spare f	use, tools	Operation manual, power cable, spare fuse, tools, carrying handle, yellow cap	
Accessories	GF-1 (Grip mounting adaptor)	GF-2 (Grip mounting adaptor), mounting plate for high capacity force gauge		unting adaptor), tandard force gauge	
 (' Available Options *4*5*6  	CN: External signal input S: Length scale FA: Inbuilt linear scale V45: Speed 1.5 to 45mm/min V90: Speed 3 to 90mm/min V450: Speed 15 to 450mm/min	L: Extended stroke by 300mm CN: External signal input -S: Length scale FA: Inbuilt linear scale V75: Speed 2.5 to 75mm/min V150: Speed 5 to 150mm/min V750: Speed 25 to 750mm/min V1000: Speed 35 to 1000mm/min	-L: Extended stroke by 300mm -CN: External signal input -S: Length scale -FA: Inbuilt linear scale -V75: Speed 2.5 to 75mm/min -V150: Speed 5 to 150mm/min	-EXT: Extended column by 200mm (*8) -CN: External signal input -S: Length scale -FA: Inbuilt linear scale	
Mountable	Mechanical Force Gauge: FB, PS, PSM series Digital Force Gauge: DST, DSV, ZTS, ZTA series (up to 1000N) Load cell: DPU series (up to 500N *10)				
Force Gauge	D			•)	



- \*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. (MX2-500N/MX2-1000N: up to 1000N model of ZTS/ZTA series, MX2-2500N/MX2-5000N: With over 2500N model of ZTS/ZTA series is mounted.)
- \*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 MX2-500N ... Model: MX2-500N-L
- \*5 Capacity is reduced as below by some speed change options.

MX2-500N: -V600 capacity 250N, –V900 capacity 150N MX2-1000N:-V750 capacity 500N, –V1000 capacity 250N \*6 Amplifier such as ZTA and FA Plus2 (sold separately) or software are required to record measuring value of linear scale.

- \*7 Additional charge for wooden packing (Japan domestic shipping) or LVL wooden packing (oversea shipping) are required for shipping. \*8 The stroke does not extend. It extends the column of test stand and max. sample height is approx. 580mm.
- \*9 Ensure to use within the capacity of force gauge and test stand regardless of the mountable models.

\*10 Mounting block (sold separately) is required to mount over 1000N range of DPU to MX2-1000N/MX2-2500N/MX2-5000N.

### [User Mounted Unit (only for MX2-5000N)]

Length Scale : OP-MX250-S	FA version : OP-MX250-FA *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.
	analysis of force-displacement relations.

Requires to mount the unit to current MX2-5000N by yourself.

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

Can be retrofitted to MX2-5000N-EXT (extended column option).

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

### [Related Products]

	jital Force Gau <b>TS/ZTA serie</b>		Software Force Recorder series	Force – Displacement Measuremen Unit <b>FSA series</b>	
With high sampling rate of 2000Hz, it offers highly precise measurement. Use optional cable to control motion together with MX2 series.		ement. Use	This graphing software can start and stop automatically based on the trigger setting of MX2 test stand function.	It draws a detailed graph of force and displacement, which is suitable for tactile test, material evaluation and more. The unit 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: Activates useful functions			es useful functions		
Cable	CB-706	For –CN option: Open end cable to connect with external device			
<b>CB-718</b> For –FA option: Connects ZTA series force gauge and test stand to provide force an measurement. (Motion control and related functions are also available.)					

#### [Control Functions] Activated when ZTS/ZTA series force gauge and CB-528 are used together.

- Overload Prevention: Prevents the sensor from getting damaged due to overloading.
- (It does not guarantee complete protection against overloading.)
- · Force control: Allows to set a force value to apply or to stop.
- Measuring speed setting: Enables automatic speed change at a point of contact using the set force value.
- Automatic measurement: Software recording and zeroing force gauge can be automatically done.

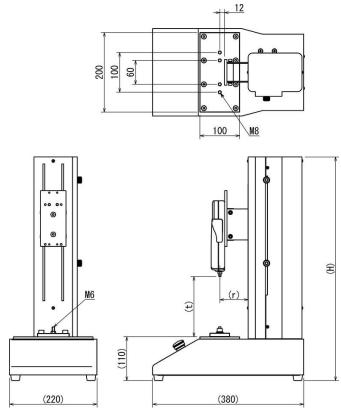
\* See 'Advanced Functions of Test Stands' for details.



# [Examples of Customized Solutions]

External signal inpu	it: -CN option	Interlock: -C	N option
Allows to mount a switch to start and stop operation such as a foot pedal, which improves efficiency or allows operating it together with your equipment.		Enables you to comply with a safety code by having safety shield, which stops movement of test stand when opened.	
Testing Large	Samples	Controller-separated Model	
<ul> <li>Recommended when you</li> <li>Test a sample larger than test stand table.</li> <li>Test multiple points on a large sample to push in/pull.</li> </ul>		<ul> <li>Recommended when you</li> <li>Want to incorporate IMADA testing system into your equipment</li> <li>Fix controller/drive part on a specific place</li> <li>Need to prevent dangers in testing by keeping distance.</li> </ul>	

# [MX2-500N Dimensions]

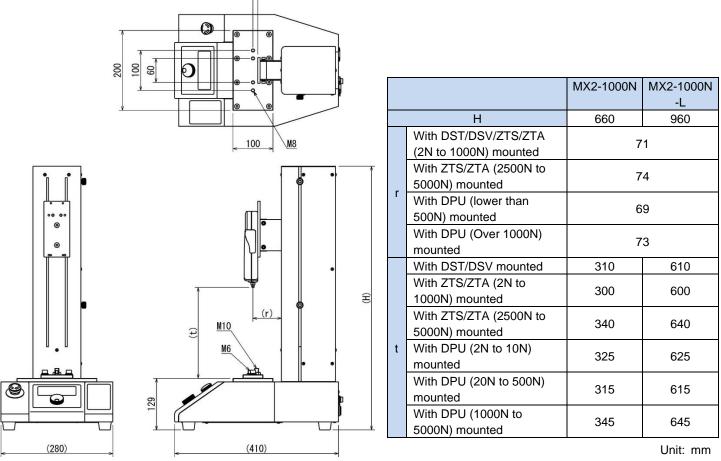


		MX2-500N	MX2-500N -L	
	Н	562	762	
	With DST/DSV/ZTS/ZTA (2N to 500N) mounted	71		
ſ	With DPU (lower than 500N) mounted	69		
	With DST/DSV mounted	245	445	
	With ZTS/ZTA (2N to 500N) mounted	235	435	
t	With DPU (2N to 10N) mounted	260	460	
	With DPU (20N to 500N) mounted	250	450	

Unit: mm

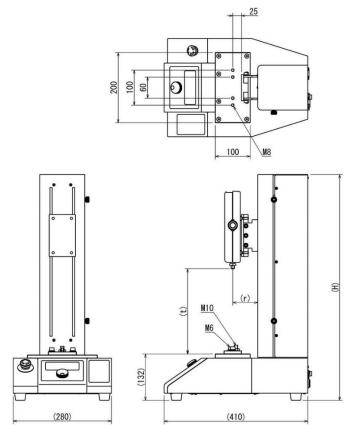
#### IMADA CO., LTD. Motorized Test Stand MX2-500N/1000N/2500N/5000N [MX2-1000N Dimensions]

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\* Mounting block (sold separately) is required when mounting DPU-1000N to 5000N.

### [MX2-2500N Dimensions]



		MX2- 2500N	MX2- 2500N -L	
	Н	644	944	
	With DST/DSV/ZTS/ZTA (2N to 1000N) mounted	7	2	
	With ZTS/ZTA (2500N to 5000N) mounted	7	1	
r	With DPU (lower than 500N) mounted	70		
	With DPU (Over 1000N) mounted	74		
	With DST/DSV mounted	320	620	
	With ZTS/ZTA (2N to 1000N) mounted	315	615	
	With ZTS/ZTA (2500N to 5000N) mounted	320	620	
t	With DPU (2N to 10N) mounted	290	590	
	With DPU (20N to 500N) mounted	285	585	
	With DPU (1000N to 5000N) mounted	210 510		

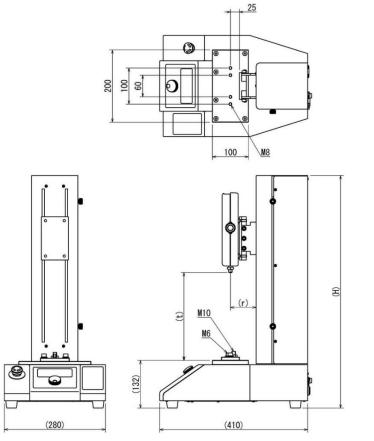
Unit: mm

\* Mounting block (sold separately) is required when mounting DPU-1000N to 5000N.





### [MX2-5000N Dimensions]



		MX2- 5000N	MX2- 5000N -EXT	
	Н	823	1023	
	With ZTS/ZTA(2N to 1000N) mounted	7	8	
r	With ZTS/ZTA (2500N to 5000N) mounted	69		
	With DPU (2N~500N) mounted	76		
	With DPU (1000N $\sim$ 5000N) mounted	69		
	With ZTS/ZTA (2N to 1000N) mounted	88-370	288-570	
1	With ZTS/ZTA (2500N to 5000N) mounted	95-380	295-580	
t *1	With DPU (2N to 50N) mounted	65-350	265-550	
	With DPU (100N to 500N) mounted	58-350	258-550	
	With DPU (1000N to 5000N) mounted	45-335	245-535	

Unit: mm

\* Mounting block (sold separately) is required when mounting DPU-1000N to 5000N.

\* The stroke of MX2-5000N (-EXT) has lower limit. It depends on each of force gauges and load cells.

### [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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