

# Motorized Test Stand MX Series

## MX-500N/1000N

Achieves high repeatability with constant testing speed and position  
Handles a wide range of test applications such as tension, compression and peel test  
Offers overload prevention and force control function when connected with force gauge \*

\* Activated when ZTS/ZTA series force gauge and CB-508 cable are used together.



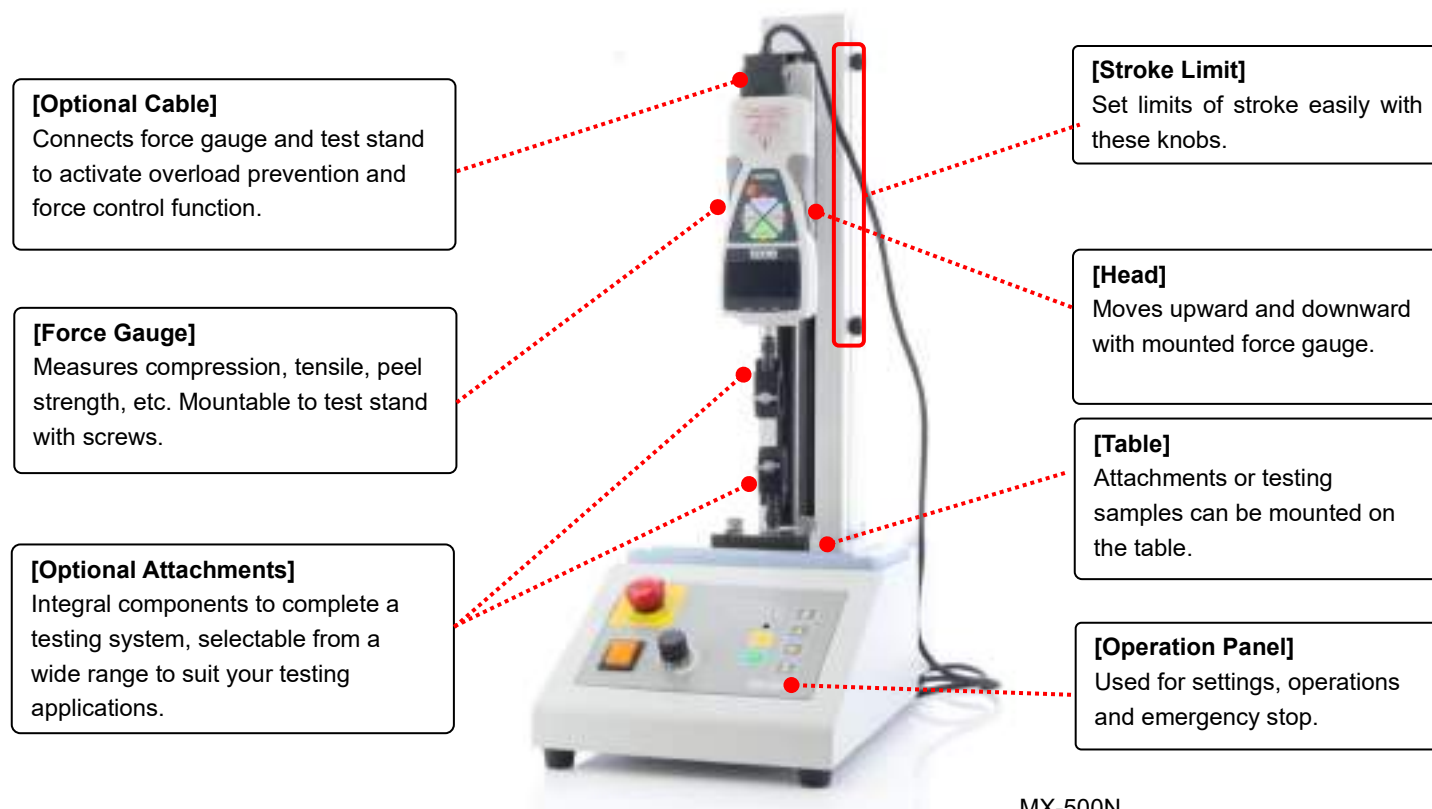
MX-500N



MX-1000N

| Three Modes                                    |   |   |
|--|---|---|
| Manual mode                                    | Single cycle mode   | Continuous cycle mode   |
| The head moves when press and hold the button. | The head starts moving after press the button, and it returns automatically when it reaches travel limit. | The head repeats travelling between its upper and lower travel limit. |





### [Application Example and Configurations]





MX-500N

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

### [Main Options]

| Long stroke (-L)  | Speed change (-V)   |
|---|---|
| This option provides extended stroke.<br>Useful when testing stretching samples or testing for long distance. | This option changes the speed range.<br>Useful for tests that require faster or slower speed condition. |
|                            |                    |
| Speed and length meter (-E)   | Length meter (-S)   |
| This option displays the measuring speed and travel distance of force gauge.                                  | Built in digital screen indicates travel distance of force gauge.                                       |
|                            |                    |

| Specifications                    |   |   |
|-----------------------------------|---|---|
| Model                             | MX-500N   | MX-1000N  |
| Image                             |    |    |
| Capacity                          | 500N  | 1000N   |
| Speed                             | 10-300mm/min  | 8-240mm/min   |
| Max. Sample Height *1             | Approx. 235mm   | Approx. 420mm   |
| Stroke Limit                      | Controllable with upper and lower knob  |   |
| Measuring Modes                   | Manual mode, Single cycle mode, Continuous cycle mode   |   |
| Functions                         | Emergency stop, force control (*2), overload prevention (*2, *3)  |   |
| Operating temperature<br>humidity | 0 to +40 degree Celsius<br>35 to 70% (avoid condensation)   |   |
| Voltage                           | AC100 to 240V, 50/60Hz<br>(Select from 100, 120 and 230V. Accessories are provided accordingly.)  |   |
| Power Consumption                 | 50W   |   |
| Dimensions                        | See [Dimensions]  |   |
| Weight                            | Approx. 13kg  | Approx. 24kg  |
| Accessories                       | Operation manual, power cable, spare fuse, tools  |   |
|                                   | GF-1 (Grip mounting adaptor)  | GF-2 (Grip mounting adaptor)  |
| Available Options<br>*4*5*6       | -E: Speed and length meter<br>-S: Length scale<br>-L: Extended stroke by 200mm<br>-V60: Speed 2 to 60mm/min<br>-V600: Speed 20 to 600mm/min<br>-V1200: Speed 40 to 1200mm/min | -E: Speed and length meter<br>-S: Length scale<br>-L: Extended stroke by 250mm<br>-V120: Speed 4 to 120mm/min<br>-V400: Speed 15 to 400mm/min<br>-V600: Speed 20 to 600mm/min<br>-V800: Speed 27 to 800mm/min<br>-V1200: Speed 40 to 1200mm/min |
| Mountable<br>Force Gauge<br>*7    | Mechanical Force Gauge: FB, PS, PSM series<br>Digital Force Gauge: DST, DSV, ZTS, ZTA series (Up to 1000N)  |   |
|                                   |   | Mechanical Force Gauge: PSH series<br>Digital Force Gauge: ZTS, ZTA series (Over 2500N)   |

\*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. (MX-500N/MX-1000N: up to 1000N model of ZTS/ZTA series)

\*2 ZTS/ZTA series force gauge and optional cable CB-508 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.




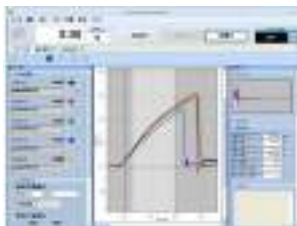

e.g. When adding long stroke option to MX-500N, the model becomes MX-500N-L.

\*5 The deflection amount becomes larger when the option (-L) is selected.

\*6 Capacity is reduced as below by some speed change options.

| Model  | MX-500N | MX-1000N |
|--------|---------|----------|
| -V400  |         | 500N     |
| -V600  | 250N    | 500N     |
| -V800  |         | 300N     |
| -V1200 | 100N    | 200N     |

\*7 Ensure to use within the capacity of force gauge and test stand regardless of the mountable models.

| Related Products  |   |   |
|---|---|---|
| <b>Digital Force Gauge<br/>ZTS/ZTA series</b>   | <b>Digital Force Gauge<br/>DST/DSV series</b>   | <b>Motorized Stand<br/>MX2 series</b>   |
| It offers precise measurement due to its high sampling rate up to 2000Hz. Use optional cable to control motion together with MX series. | Digital force gauge with excellent cost-performance capable to manage data with PC.                                       | Measuring mode and speed can be set digitally. A variety of control functions can be activated by connecting a force gauge. |
|    |    |    |
| <b>Software<br/>Force Recorder series</b>   | <b>Optional Cable<br/>CB-508</b>  |   |
| It is designed for data graphing with high accuracy when connected with digital force gauge ZTS/ZTA series.                             | Connects digital force gauge ZTS/ZTA series and test stand MX to activate overload prevention and force control function. |   |
|    |                                        |   |

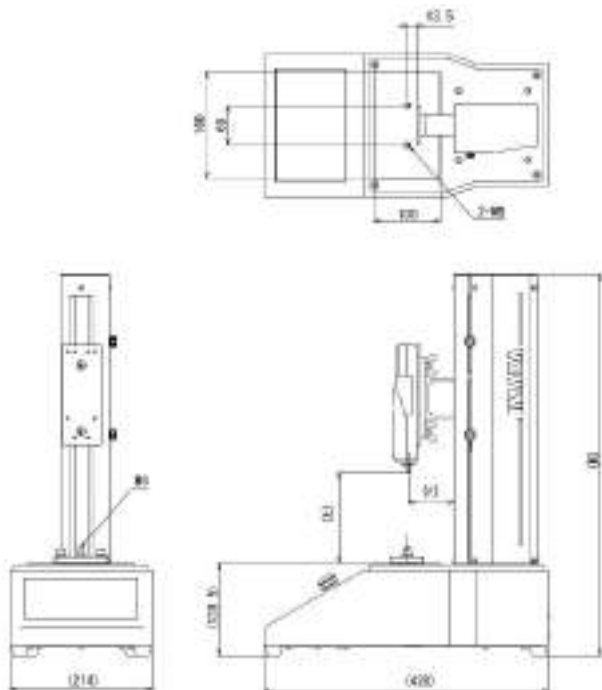
**[Control Functions]** Activated when ZTS/ZTA series force gauge and CB-508 are used together.

- 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.

**[About MX series Dimensions]**

Grip mounting adaptor, GF-1/GF-2, is depicted on the front view and the side view but not on the top view of MX2 series Dimensions. “M6” or “M10 (for 1000N or higher models)” on the front view and the side view are for attachment installation and “M8” on the top view indicates the position of holes for the screw to fix the grip mounting adaptor to the stand.

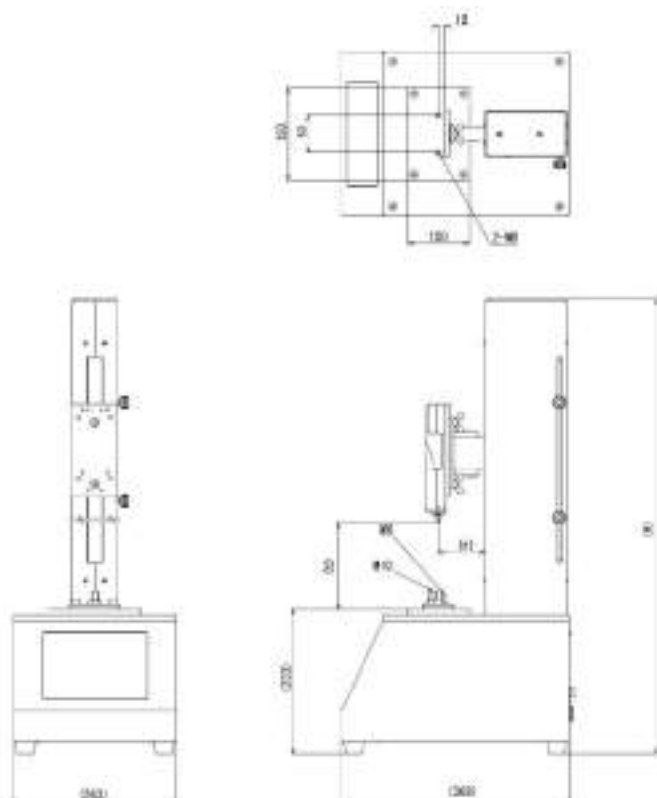
**[MX-500N Dimensions]**



|   |   | MX-500N | MX-500N-L |
|---|---|---------|-----------|
| H |   | 573     | 773       |
| r | With DST/DSV/ZTS/ZTA (2N to 500N) mounted | 68      |           |
| t | With DST/DSV (2N to 500N) mounted         | 260     | 460       |
|   | With ZTS/ZTA (2N to 500N) mounted         | 250     | 450       |

Unit: mm

**[MX-1000N Dimensions]**



|   |  | MX-1000N | MX-1000N-L |
|---|--|----------|------------|
| H |  | 903      | 1153       |
| r | With DST/DSV/ZTS/ZTA (2N to 1000N) mounted | 74       |            |
| t | With DST/DSV mounted                       | 430      | 680        |
|   | With ZTS/ZTA (2N to 1000N) mounted         | 420      | 670        |

Unit: mm

**[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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