

# Torque-Angle Measurement Unit TAA series

- Measurement unit to analyze Torque (Rotating/Twisting force) and Angle easily.
- Easy but Accurate Torque- Angle measurements are possible.
- Drawing and Analyzing graphs on PC with simple operations.
- Selectable products for your needs such as Desktop type and Portable type.

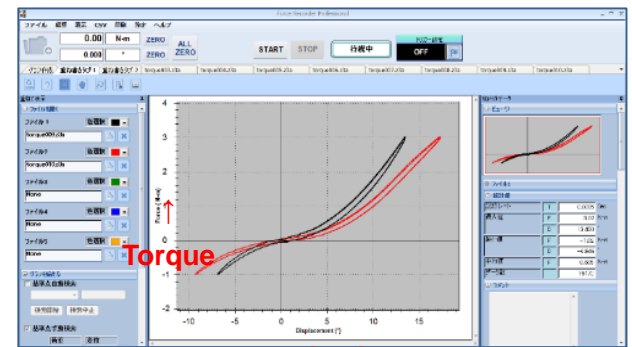
## Easy

Simple wire connecting/Easy setup/  
Simple operation

## Accurate

High speed sampling rate (2000 data/ sec)  
follows the rapid force change

Graph drawing of Torque-Angle curve on real time



Included Software  
Force Recorder Professional

←Product 1: TAA-MTS-TB series

**Space-saving desktop  
type for Torque-Angle  
analyses**

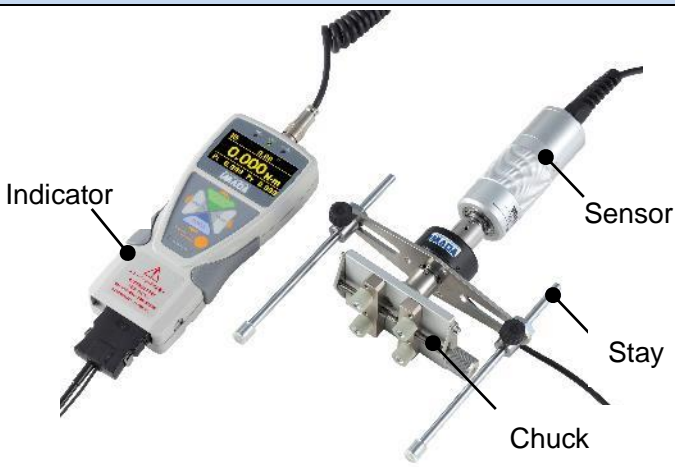




[TAA-MTS-TB series applications]

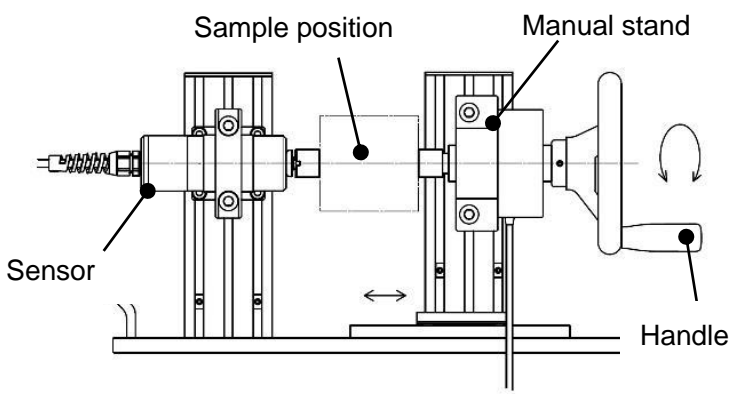
Opening/ Closing torque	Twisting strength for circuit boards	Others
		<ul style="list-style-type: none"> <li>-Click feeling for rotary switches</li> <li>-Twisting characteristics for underwears and some medical supplies as such us diaper, napkin and fomentation etc.</li> <li><u>Ideal for various characteristic evaluations.</u></li> </ul>

## Portable type or Manual test stand of Torque- Angle measurements (Custom-made order)

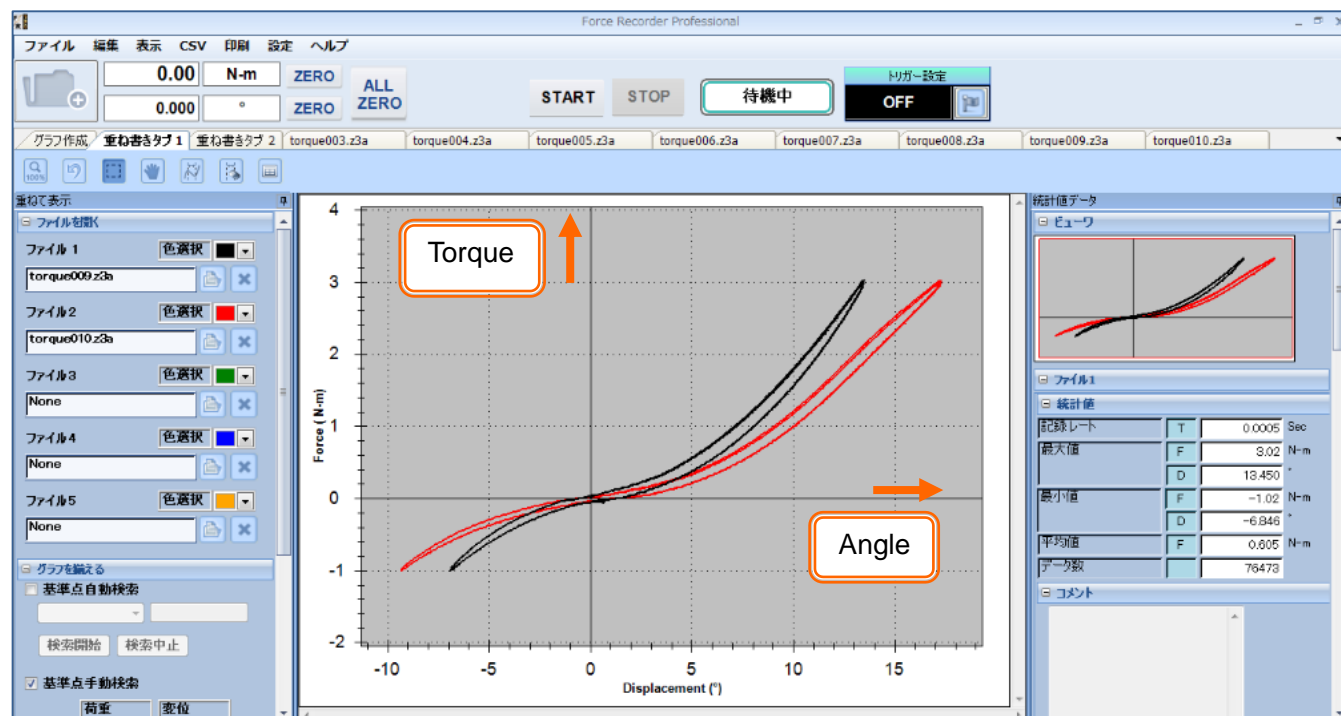
### Product 2: For easy and handy measurements

Product Image		Features
		<p>Fix a sample by the chuck and twist the sensor by a hand.</p> <p>This portable system equips useful functions for measurements.</p> <ul style="list-style-type: none"> <li>-The bright and clear display indicator.</li> <li>-Continuous data saving for USB flash drive</li> </ul> <p>⇒We offer the product based on your needs.</p>
Measurement Image		
for Door Knobs	for Rotary Switches on a car dashboard.	
		
The stays support the stable rotating motions.	Stable measurements are possible by the stay height adjustment.	

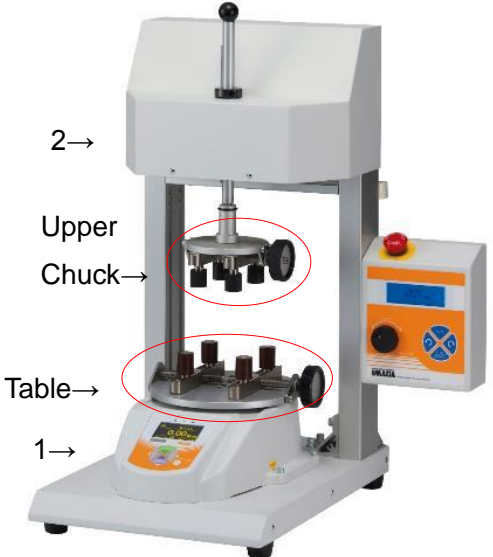
### Product 3: For repeatability and handy measurements

Image	Feature
	<p>Put a sample on the fixed sensor and turn the handle.</p> <p>Realize high repeatability with no sample shaking.</p> <p>⇒We offer the product based on your needs.</p>

⇒The products on this page are custom-made order. Please feel free to contact us for the specifications or the measurement solutions +81-(0)532-33-3288.



[TAA-MTS-TB series configuration]

TAA-MTS series	Product configuration
 <p>2→ Upper Chuck→ Table→ 1→</p> <p>←4</p>	<p>1 Torque gauge: DTXA series (with a table)</p> <p>2 Torque stand: MTS-10N-RA ( with a chuck)</p> <p>3 Connecting cable: CB-728</p> <p>4 Software: Force Recorder Professional</p>
	<p><b>Complete unit for Torque-Angle measurement</b></p> <p>This unit is including 1~4 items which are necessary for Torque-Angle measurements. Various Torque-Angle measurements are possible by optional chuck or table attachments.</p> <p>*TAA-MTS-Z series, the model with no table and no upper chuck, is also available.</p> <p>Please refer to the page 4 for the detail.</p>

Model *1	Type	Allowable sample height *2	Capacity
TAA-MTS-□□N-TB	Standard	140mm	Choose from 2N-m/5N-m/10N-m.
TAA-MTS-□□N-L-TB	Long stroke	240mm	
TAA-MTS-□□N-2L-TB		340mm	
TAA-MTS-□□N-Z	No chuck and no table	140mm (*2)	

\*1 □□: Please choose from the suitable capacity.

\*2 We accept custom made order for the sample height more than 340mm.

Long stroke option is also able to add Model “Z” type.

### [TAA-MTS series specification]





Model		TAA-MTS-□N
Unit	Torque	N-m, N-cm Switching type
	Angle	°(degree)
Range		2N-m(200N-cm), 5N-m(500N-cm), 10N-m(1000N-cm)
Resolution	Force	4 digit (Ex: The resolution of TAA-MTS-5N is 0.001N-m[0.1N-cm])
	Angle	0.001°(On Force Recorder Professional) 0.01°(On the torque gauge monitor)
Accuracy	Force	+/- 0.5% F.S. +/- 1 digit
	Angle	+/- 0.1° +/- 1 digit
Model: Allowable sample height		TAA-MTS-□□N-TB: 140mm TAA-MTS-□□N-L-TB 240mm TAA-MTS-□□N-2L-TB : 340mm *Other sample height is allowable. Please contact us. *The allowable sample diameter is depending on the attachments (separately sold) Please refer to the specification “Torque Gauge/ Motorized Torque Stand Table Attachments” or “Torque Gauge/ Motorized Torque Stand Attachments”
Torque data sampling rate		2000 data/ sec
Torque display update		16 data/sec
Output		USB, serial (RS232C), analogue(Approx. +/- 2V), comparator, overload, sub comparator, USB flash drive *USB flash drive is not included.
Function	Torque gauge	Customized display(header and footer )/ Peak Hold mode(CW/CWW)/ Internal memory (1000 data)/ Comparator(OK/NG judgment)/ Reversible display/ Sign inversion/ Zero clear timer/ +NG alarm/Off timer(Auto power off)/ Dimpling/ Time display/ 1st 2nd peak/ Setting lock
	Test stand	Manual mode, JOG mode, Speed adjustment
	Link function (*1)	Angle detection at torque peak / Angle zero reset at the selected torque/Automatic mode (CONTINUOUS,ONE WAY), Torque control, Overload prevention
Power supply	Torque gauge	Rechargeable battery (8 hour using /2 hour full charge)
	Test stand	AC100V~ 240V
Operating environment		Temperature: 0 – 40 degree Celsius Humidity: 20 -80%RH
Accessory		Graphing software Force-Recorder Professional, Driver CD-ROM(with data logger simple software), Power cable, AC adapter, Torque gauge connecting cable(CB-728), USB cable, Spare fuse, Instruction manual, Inspection certificate, tool, packing cardboard box.




\*1 It is necessary to connect a torque gauge with the included connecting cable to activate.

[Software operating environment]

Operating environment	OS: Windows 7/8/8.1/10
Hardware	CPU :Pentium4(1GHz or more) or later recommended
	Memory: 2GB or more recommended
	Hard disk: 10GB(Data storage area) or more
Plat form	.NET Framework4.6 or more
Execute environment	Microsoft Internet Explorer6.0 or more
	Windows Installer 3.1 or later
Image size	Resolution 1024×768 pixel or more
Connecting port	USB1.1 USB2.0 port *we are not guarantee operation in USB3.0.

[Optional chuck and table attachments]

Upper MTS side	Standard chuck	Small chuck(*)	Pin chuck	M10 adapter
				
	<b>Model: MT-TB</b> <b>Sample diameter:</b> 20~90mm	<b>Model: MT-ST</b> <b>Sample diameter:</b> 7~50mm	<b>Sample diameter (Model)</b> - Large $\phi$ 1.2~13mm (MT-DC-13) - Medium $\phi$ 0.5~6.5mm (MT-DC-6.5) - Medium (Stain-less) (MT-DC-6.5SUS) - Small $\phi$ 0.5~4mm (MT-DC-4)	<b>Model:</b> <b>MT-AD-M10</b> It helps to mount attachment with a M10 female screw.

Bottom DTXA side	Standard table	Small table(*)	Pin chuck
			
	<b>Model: DT-TB</b> <b>Sample diameter:</b> 20~90mm	<b>Model: DT-ST</b> <b>Sample diameter:</b> 7~50mm	<b>Sample diameter (Model)</b> - Large $\phi$ 1.2~13mm (DT-DC-13) - Medium $\phi$ 0.5~6.5mm (DT-DC-6.5) - Medium (Stain-less) (DT-DC-6.5SUS) - Small $\phi$ 0.5~4mm (DT-DC-4)

Please refer to the table and chuck attachment specification for the details.



[Caution]

- Please note if you add load over capacity, its sensor would be broken down.
- While loading torque, the deflection of the sensor or the stand could be detected as a displacement error.
- An optional attachment and PC are not included.
- The software may not work by conditions.

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