

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.

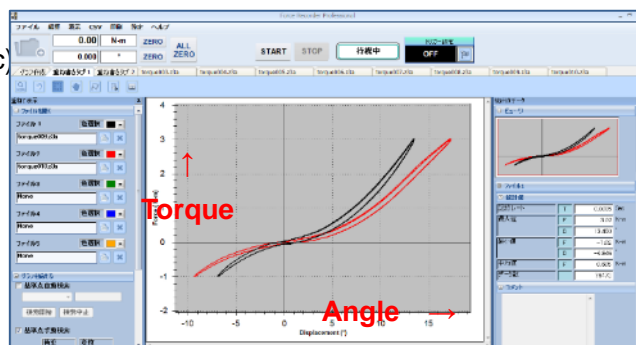
Easy

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
		<p>-Click feeling for rotary switches -Twisting characteristics for underwears and some medical supplies as such us diaper, napkin and fomentation etc. <u>Ideal for various characteristic evaluations.</u></p>

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

Product 2: For easy and handy measurements

Product Image	Features
<p>Indicator</p> <p>Sensor</p> <p>Stay</p> <p>Chuck</p>	<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"> -The bright and clear display indicator. -Continuous data saving for USB flash drive <p>⇒We offer the product based on your needs.</p>

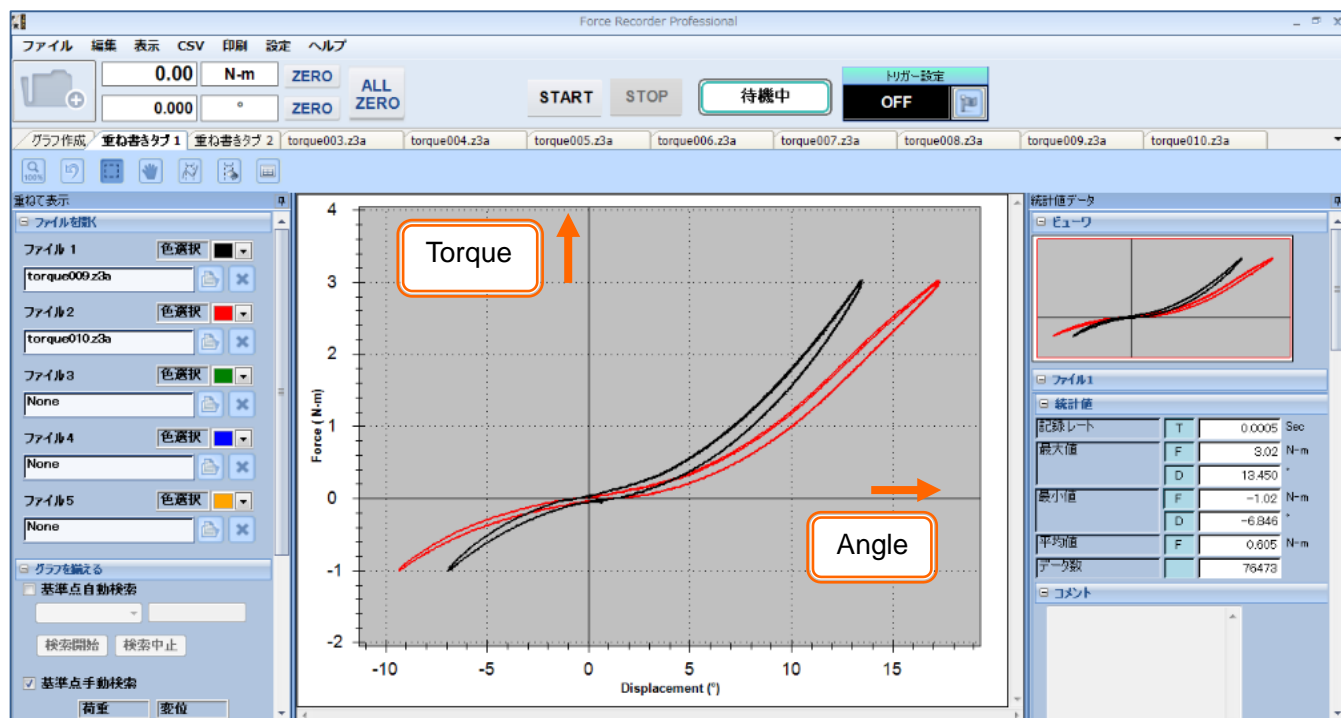
Measurement Image

for Door Knobs	for Rotary Switches on a car dashboard.
<p>The stays support the stable rotating motions.</p>	<p>Stable measurements are possible by the stay height adjustment.</p>

Product 3: For repeatability and handy measurements

Image	Feature
<p>Sample position</p> <p>Manual stand</p> <p>Sensor</p> <p>Handle</p>	<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>Complete unit for Torque-Angle measurement</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		10 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)/ Dumpling/ Time display/ 1st 2nd peak
	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 /8 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.

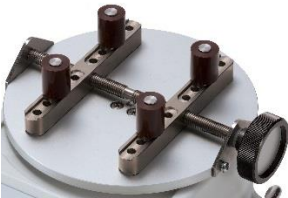


*1 It is necessary to connect a torque gauge with the included connecting cable to activate.

[Software operating environment]

Operating environment	OS: Windows XP/Vista/7/8/8.1 (7/8/8.1 are compatible for 32bit and 64bit)
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 or more
Execute environment	Microsoft Internet Explorer6.0 or more
	Windows Installer 3.1 or later
Image size	Resolution 1024x768 pixel or more
Connecting port	USB1.1 USB2.0 port *we are not guarantee operation in USB3.0.

[Optional chuck and table attachments]

	Standard chuck	Small chuck(*)	Pin chuck	M10 adapter
Upper MTS side				In preparation
	Model: MT-TB Sample diameter: 20~90mm	Model: MT-ST Sample diameter: 7~50mm	Sample diameter (Model) -Largeφ1.2~13mm(MT-DC-13) -Medium φ0.5~6.5mm (MT-DC-6.5) -Medium(Stain-less)(MT-DC-6.5SUS) -Smallφ0.5~4mm(MT-DC-4)	Model: MT-AD-M10 It helps to mount attachment with a M10 female screw.

	Standard table	Small table(*)	Pin chuck
Bottom DTXA side			
	Model: DT-TB Sample diameter: 20~90mm	Model: DT-ST Sample diameter: 7~50mm	Sample diameter (Model) - Largeφ1.2~13mm (DT-DC-13) - Medium φ0.5~6.5mm (DT-DC-6.5) - Medium(Stain-less) (DT-DC-6.5SUS) - Smallφ0.5~4mm (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.