

Screw-cap Tester DTXS/DTXA series

Feature 1: High repeatability by high speed sampling rate.

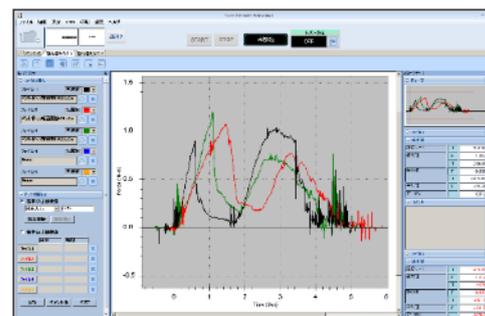
Feature 2: Various sample torque can be measured with the multiple tables and attachments.



↑DTXA-10N



↑Opening PET bottle cap torque test



↑ Graphing software Force Recorder Standard (Selling separated item)

Feature 1: High repeatability by high speed sampling.

The high speed data sampling rate (2000 data / sec) captures momentary force and digitizes it.

It helps to capture accurate force and realizes high repeatability at repeating the same measurements.

Feature 2: Various sample torque can be measured with the multiple tables and attachments

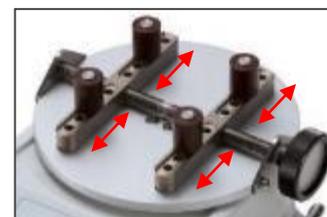
Changeable pins, tables and attachments. The users can choose the most suitable combination for their sample.



Change the table



Insert other attachment or table



The pin types and the positions are changeable.

Feature 3: Useful functions improving work efficiency.



Organic Electroluminescence Display

The display is visually clear as the user can see it from the side or in a dark place.



Various display

○Time display
Easy but certain data managements

○Bar graph

Prevention of breaking the sensor(over load)(*1).

High performance various displays!!

Captures date to PC by included software



Display Force value/Date and time/ OK/NG judgment by connecting PC via USB.

Stable body fixation



The body can be fixed on a desk with the carry handle holes. It supports testing stable.

*1 This function is NOT preventing system from overloading. It could cause overload when huge force at short time is applied on the sensor part.

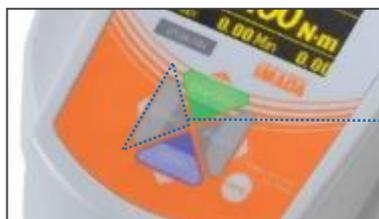
[DTXA limited functions]

Data saving to USB flash drive

Connect a USB flash drive with the included cable and save continuous data (100 data/min).



⇒ The measurements without PC can be drawn graphs on Microsoft Excel.

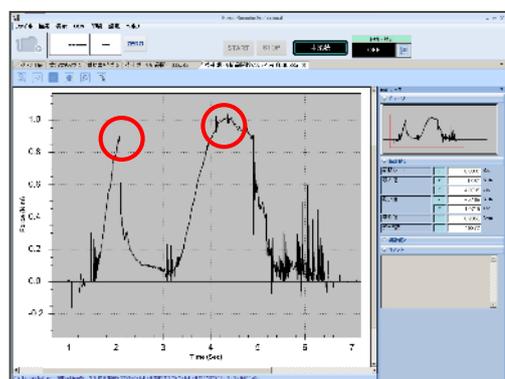


Saving Start/ Stop by pressing the send button.

Displaying multiple peaks

On the DTXA monitor, measuring 2 peak values and Max. value can be displayed at the same time.

⇒ For example, when measuring PET bottle cap torque.



- 1. Opening start force
- 2. Opening finish force

Two peak values are possible to see on the same monitor.



[DTX series force range]

Standard table / Standard pins are included

Model		Range	Display	Resolution
DTXA-2N	DTXS-2N	2 N·m (200N·cm)	2.000N·m (200.0N·cm)	0.001N·m (0.1N·cm)
DTXA-5N	DTXS-5N	5 N·m (500N·cm)	5.000N·m (500.0N·cm)	0.001N·m (0.1N·cm)
DTXA-10N	DTXS-10N	10N·m (1000N·cm)	10.00N·m (1000N·cm)	0.01N·m (1N·cm)

[DTXS/DTXA series specification]

2 models are available for your needs.

Model	DTXA	DTXS
Outline	Advanced model equipping various functions such as input/output the angles and saving to USB flash drive.	Simple standard model maintaining DTXA performance.
Accuracy	±0.5%F.S.±1digit	
Unit of measurement	N·m, N·cm, kgf·m, kgf·cm, lbf·in, ozf·in (Unit switching is possible.)(*1)	
Display	4-digit	
Display update	16 times /sec	
Sampling rate	Maximum 2000 data/ sec(*2)	
Battery	8 hours (2 hours full charge)(*3)	
Safe overload rating	Approx. 200%	
Operating Environment	Temperature: 0 – 40 degree Celsius Humidity: 20 -80%RH	
Function	Customized display(header and footer) / Peak hold(Clockwise and Counterclockwise)/ Internal memory(1000 point data) / Comparator (OK or NG judgment)/ Reversible display/ Sign inversion/ Zero clear timer/ +NG alarm/ Off timer(Auto power off)/ Dumping/ Time display/ setting lock	
	1st2nd peak/ Angle detection at torque peak value(*4) / Angle zero reset at selected torque(*4)	-
Output	USB, RS232C, Mitutoyo digimatic (*5), 2 VDC analog output (D/A), Comparator 3 steps (-NG/OK/+NG), Overload alarm	
	Sub comparator 2 steps (output of large or small judgment), USB flash drive, Angle(displacement)	-
Overload warning	Approx.110%F.S. (Warning message and alarm)	
External connecting switch	SEND (a point of contact holding), Zero reset, Peak ON/OFF setting	
Weight	Approx. 4.5kg	
Dimensions	Please refer to dimensions.	
Accessory	AC adapter, Inspection certificate, CD driver (including simple software for data logging),USB cable, Carrying case, L wrench	
	USB flash drive adapter(*6)	-
Approved standard	JIS S 0022 (2001) Guidelines for all people including elderly and people with disabilities -- Packaging and receptacles -- Test methods for opening “6.3 Screw top receptacle”	

*1 These are the specifications for International model. Please note that this unit is different from Japanese domestic model and international one.

*2 Up to 100 data/sec. is saved in USB memory (selectable among 1, 50, and 100 /sec)

*3 The battery is more consumed when connected to USB flash drive or a displacement scale.

*4 Angle(displacement) scale is necessary to valid this function.

*5 Not always available for Mitutoyo digimatic products.

*6 USB flash drive is not included.

[Included Accessories]

Data logging software Force Logger	Features	<ul style="list-style-type: none"> - You can continuously transfer data to PC at 10Hz with ease. - It automatically calculates Maximum, Minimum, and Average values. - You can store data in CSV format. - You can register measurement conditions and measurer's name. - You can setup the force gauge's function. 	
	Operating environment	<ul style="list-style-type: none"> - OS : 7/8/8.1/10 (32/64bit version is available) - Hardware : CPU Pentium4(1GHz or more), Memory 2GB, Hard disk : 10GB or more recommended - Plat form : .NET Framework4 or later - Execute environment : Internet Explorer 6.0, Windows Installer 3.1 or later - Connection port : USB1.1, USB2.0 connector 	

[Table Variations]

DTX series can be changed the table depending on the varieties of samples.

◆ **Standard Table**

Standard table	Standard pin	Feature
		The table is available for $\phi 20\text{mm} \sim \phi 160\text{mm}$ samples such as PET bottles, cans, bins and so on. Capacity is 10N·m. (The pin material: Stainless-steel and Urethane)
Standard model (with Standard Table and Standard pins)		
DTXS series : DTXS- $\circ\circ$ N DTXA series : DTXA- $\circ\circ$ N		
*Please, choose $\circ\circ$ N from 2N, 5N or 10N.		

*The pins are able to change below types.
Please refer to option attachment specifications for the details.

	Notch pin	Long clamp pin
Material	Stainless-steel	Stainless-steel and Urethane
Option pin		
Optional model (with standard table and option pins)	DTXS- $\circ\circ$ N-TB-01 DTXA- $\circ\circ$ N-TB-01	DTXS- $\circ\circ$ N-TB-02 DTXA- $\circ\circ$ N-TB-02

◆Small table

Small table	Standard pin	Feature
		Ideal table attachment for small samples $\phi 7\text{mm} \sim \phi 50\text{mm}$. (The pin material: Stainless-steel and Urethane) *It is not able to mount to 10N-m type.
		The combination model of DTXS/DTXA and Small table and Standard pins
		DTXS series:DTXS- $\circ\circ$ N-ST DTXA series:DTXA- $\circ\circ$ N-ST *Please, choose $\circ\circ$ N from 2N,5N or 10N.

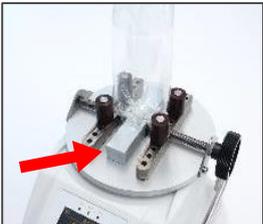
* The pins are able to change below types.
Please refer to option attachment specifications for the details.

	Notch pin	Long clamp pin
Material	Stainless-steel	Stainless-steel and Urethane
Option pin		
Model with Small table	DTXS- $\circ\circ$ N-ST-01 DTXA- $\circ\circ$ N-ST-01	DTXS- $\circ\circ$ N-ST-02 DTXA- $\circ\circ$ N-ST-02

◆No table model

No table model	Feature
	No table model is also available. It is able to install pin chuck DT-DC series and your attachments.
	No table model
	DTXS series:DTXS- $\circ\circ$ N-Z DTXA series:DTXA- $\circ\circ$ N-Z *Please choose $\circ\circ$ N from 2N, 5N or 10N.

[Table Accessory]

Sample stage for Standard table : TB-SP		
	Feature The stage helps setting samples stably.	Using Image 

[Related products]

Motorized Torque Stand : MTS

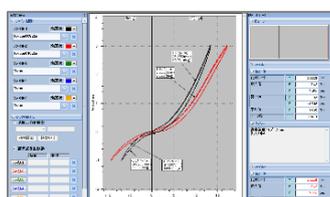


MTS series

- Regulated rotation speed enables you to measure torque with better accuracy.
- Easy installation, Easy set-up and Easy operation.

**** Analyzing torque and angle relationships ****

MTS series can be equipped with a rotary encoder to analyze torque and angle relationships (DTXA series is required)

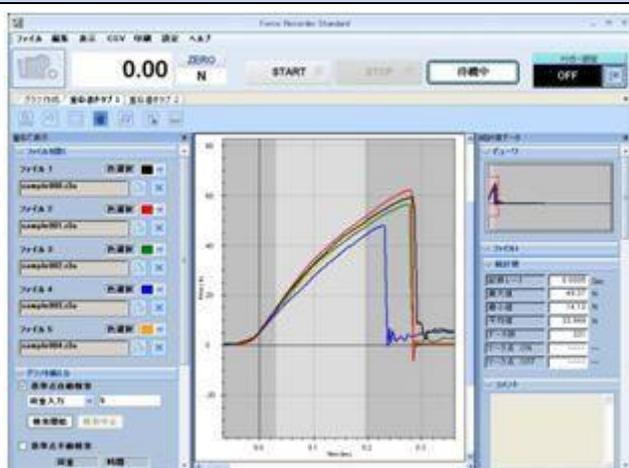


Torque vs Angle graph

* We have TAA series:Truque-Angle Measurement Unit which includes all items that are required to analyze torque and angle relationships.

* Please refer to TAA series specifications for more details.

Graphing Software: Force Recorder



Main functions

- You can make graphs of force-displacement at real time via USB connection at 2000Hz.
- 5 graphs at maximum can be overlaid. (Standard, Professional edition)
- You can write memo on each graph. You may write down testing conditions such as testing speed.

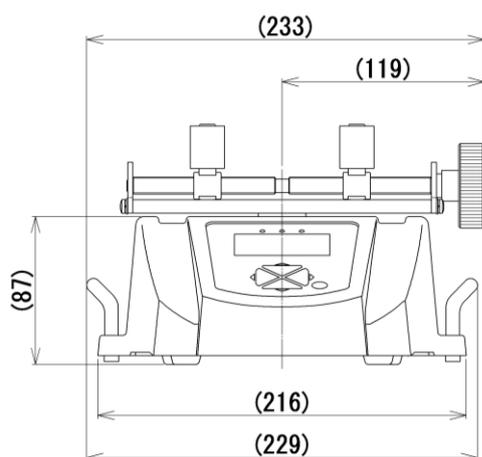
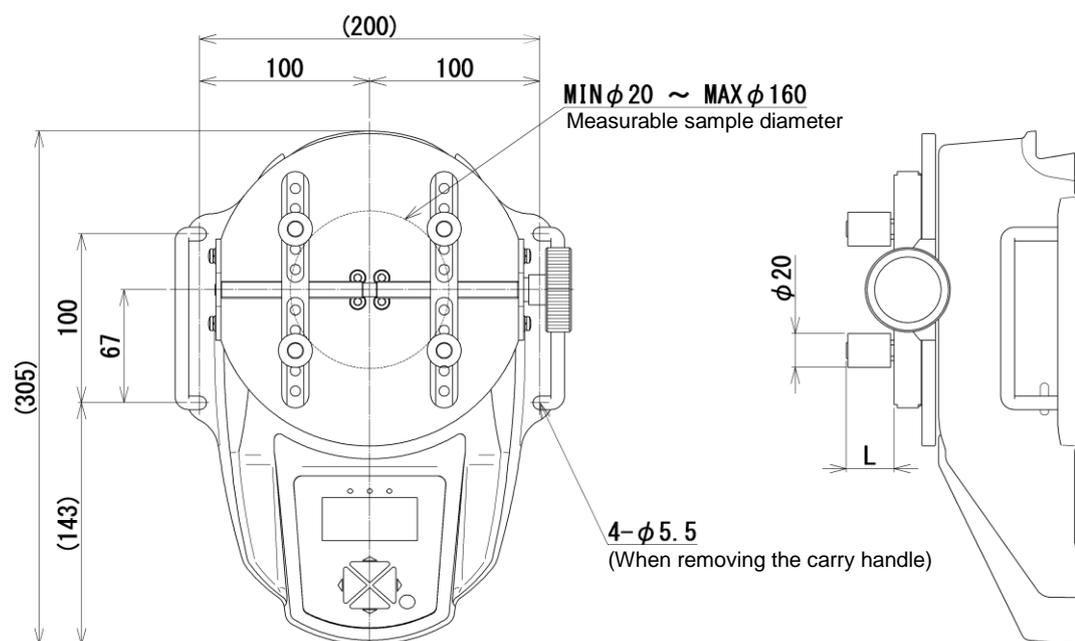
* 3 editions are available as Light, Standard, and Professional.

* Please refer to each specification for further information.

*The image is Force Recorders Standard.

Printer : DP-1VA	Option cable	Replacement battery : BP-308
	Analog(3m) : CB-108	
	RS232C Cable (3m) : CB-208	
	Digimatic cable(3m) : CB-308	
	Contact point cable (3m) : CB-808	
	Open end cable (3m) : CB-908	
It prints out the displayed force values. (*CB-308 cable is necessary.)	Various cables are available.	Battery for replacement.

[Dimensions]



Unit: mm

[Calibration Certificate]

- We offer calibration certificate with extra charge.
- * Please contact us or our distributor in your country for further information.

[Cautions]

- The contents may be changed without previous notice.
- All of products are designed for measurement purpose only.
- Do not copy and use this content without authority.
- Please note if you add load over capacity, its sensor would be broken down.
- Please note some samples are not able to be clamp by the materials or the clamp pin types.

IMADA CO., LTD

99 Jinnoshinden-cho aza Kanowari Toyohashi
Japan 441-8077

Tel: +81-(0)532-33-3288

Fax: +81-(0)532-33-3866

E-mail: info@forcegauge.net

Website: <http://www.forcegauge.net/en/>



Visit our website for more information on wide product specifications, measurement applications and videos.