

Tension-Free™ Modular Desktop Endurance Testing System v6

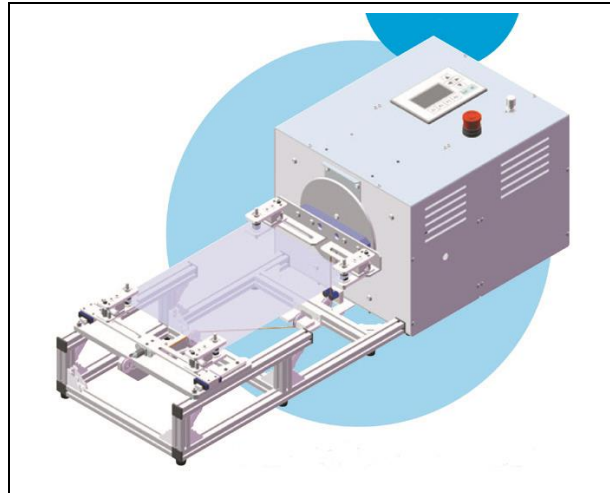
Jig for Tension-Free™ Torsion Test for Planar Object

DMLHB-FT and DMLHP-FT

*Tension-Free™ torsion test for planar objects including Flexible Displays, OLED devices, Barrier Film, Flat Cables, Flexible Printed Circuits, Wearables & automobile applications

*Conforms to IEC 62716, JEITA ET-4601 standards

*A twisting clamp twists one edge of test piece while a fixing clamp secures the other edge. Clamps at each corner of the test piece are separate so no tension is at the center of the test piece. A string connects the twisting clamp and the fixing clamp so no tension is placed on the test piece.



FT

YUASA SYSTEM has been developing Tension-Free™ endurance testing systems since 2012. With our in-house expertise in mechanical, electrical, and software engineering, we have developed accurate testing methods for next generation devices, components, and materials. Tension-Free™ endurance testing reduces product design time by producing more consistent and reliable test data. Samples undergo the desired testing without being subjected to undesired tension introduced by the needs of the test equipment. As desired, our jigs also can operate with tension.

The SMALL desktop motor unit (Rotary Reciprocating Mode) that drives the test jigs for bending and torsion tests is both reliable and quiet due to its mechanical linkage design and by its use of rugged plastic gears that ensure endurance and low noise. Fully automatic testing is possible because of the disconnection detector and preset counter. The motor/drive unit can be decoupled from the control unit for further layout flexibility using the supplied connecting cable.

This Tension-Free™ Torsion jig enables twisting tests on planar objects like flexible displays without tension on the test object. Clamps at each corner of the test piece plus the use of a string to connect the twisting and fixing clamps remove the tension that would normally be present on the object.

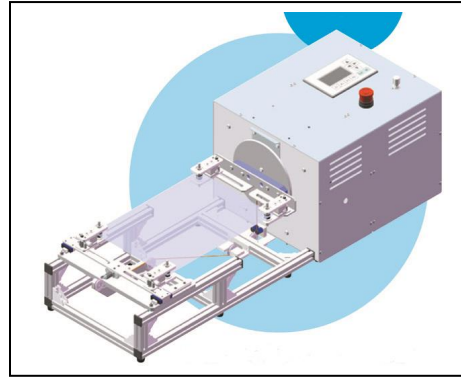
FT Video -- <https://www.youtube.com/watch?v=QtDmi4bhJ7A>

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FT — Tension-Free™ Torsion Test Jig for Planar Objects		
	DMLHB	DMLHP
Specifications - Jig	Tension-Free™ Torsion Test Jig for Planar Object	
Jig Model Number	DMX-FT	
Sample	Planar Objects	
Sample thickness	1mm (0.039") maximum	
Sample size (mm)	30mm x 60mm to 210mm x 300mm (W x L)	
Sample size (inches)	1.18" x 2.36" to 8.27" to 11.8" (W x L)	
Torsion angle	0 ~ ±90°	7 ~ ±90°
Torsion speed	10 ~ 90 rpm	5 ~ 90 rec/min
Torsion torque	1 Nm (0.738 foot pounds) maximum	1.8 Nm (1.33 foot pounds) maximum
Weight - Jig	3.4 kg (7.5 lb)	
Weight - Cover	2.3 kg (5.1 lb)	
Dimensions (mm)	272mm x 512mm x 273mm (WDH)	
Dimensions (inches)	10.7" x 20.2" x 10.75" (WDH)	
Specifications - Base Unit	Rotary and Linear Drive	
Machine Model Number	DMLHB	DMLHP
Motor	DC Brushless Motor	Stepping Motor
Motor gear ratio	1/20	
Motor Power	DC 24V, 3.5A (maximum), 30W	DC 48V, 1.72A (maximum), 30W
Counter	8 digit display	
Operating angle (Rotary Mode)	0 ~ ±270°	7 ~ ±270°
Operating distance (Linear Mode)	0 ~ ±60mm	3 ~ 120mm
Operating speed	10 ~ 120 rpm	5 ~ 90 rec/min
Installation Temp range	+5 ~ +40°C	
Installation Humidity	15 ~ 85% RH (no condensation)	
Power supply	AC (100V-240V, 50Hz/60 Hz, 100W)	
Weight	about 16.5 kg (36.4 lb)	about 15.2 kg (about 33.5 lb)
Dimensions (mm)	396mm x 343.5mm x 289mm (WDH)	
Dimensions (inches)	15.6" x 13.5" x 11.4" (WDH)	
Attached Units with Cover		
System Model Number	DMLHB-FT	DMLHP-FT
Weight	22.2 kg (49 lb)	20.9 kg (46 lb)
Dimensions (mm)	396mm x 873mm x 311.5mm (WDH)	
Dimensions (inches)	15.6" x 34.4" x 12.3" (WDH)	

US SERVICES AVAILABLE

Online training
 Technical support
 Installation & set-up
 Maintenance
 Guaranteed Warranty

YUASA YUASA SYSTEM CO., LTD.

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