

Profession Testing Machine for Bicycle, Bicycle's Parts, Health Care & Fitness Equipments



Advanced Testing Systems
helping engineers worldwide develop safer,
more reliable materials and components.







# Company Profile

HUNG TA INSTRUMENT CO., LTD., a pioneer in manufacturing quality control instruments, was established in September 1975. With a corporate philosophy based on the principles of quality, technology and service. HUNG TA devotes a great deal of energy, effort, and R&D resources to create the best testing devices tailored for each field.

Our CAD-CAM and R&D center is fully equipped to ensure products of advanced technology, state of art knowhow in order to meet our company's strict policy of reliability, tenacity of purpose and good after sales service.

In order to comply with world wide requirement of quality control management, our R&D department has spared no effort in developing up to 2000 types of various reliable testing instruments.

Our range of testing equipments are suitable for quality control of products of various fields, including rubber, plastic, shoe manufacturing, paper and pulp industries, machinery and hardware, construction industries, automobile parts, electrical wire and cable, motorcycle, rackets, reinforced concrete, bridge, optical fiber, cable, textile, dyeing and finishing, as well as environmental test equipments.

We also represent a number of reputable quality control equipments manufactured by renown. American and European producers.

We are proud to be the first Taiwanese manufacturer approved by Taiwan Accreditation Foundation as an laboratory for inspection and calibration (Calibration cert. No. 0002). And we are licensed to issue certificates of calibration which are recognized by the government.

We welcome you to call, write, email, or visit our website for more information.



# HT-8505 Series Bicycle Material Tester Series

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as EN 14764 / EN14765 / EN14766 / EN14781.
- Suitable to bike's parts and materials, applied to the tests of bike product's tensile, compression & torsion strength of wide application scope.
- This instrument's fabrication has passed the ISO-9000 international quality certification, compliant with the ISO 7500 / 1, EN 1002-2, BS 1610, DIN 5122, ASTM E4, JIS B7721 / B 7733, CNS 9471 / 9470 & JJG 475-88 test standards to material tester.



### Specification

Model		8505BM-50	8505BM-100	8505-20
	kN	50	100	20
Unit Conversion	Force	N/kN/lb/kg		
	Disp.		mm/cm/inch	
Load Resolution			1/200,000	
Load Accuracy			± 1 %	
Testing Space (WxDxH)	mm	1200 x 6	00 x 800	1000 x 600 x 800
Stroke	mm		1400	
Test Stroke	mm	The crosshead stroke is exclude	ded upper and lower grip and th	e length of clamping specimen
Test Speed Range	mm/min	0.2 ~ 200		
Displacement Resolution	mm		0.01	
Power Control		Servo Motor / Servo Driver		
Denies			3 ø; 220 V/380 V	
Power		2.5 kW	3 kW	2 kW
Dimension (WxDxH)	mm	1820 x 85	50 x 2470	1500 x 630 x 2200
Machine Weight (about)	kg	1100 900		900
Standard Accessories	Standard Accessories		nual, Calibration Report,	1 Year Warranty Paper

Working Table -T Slot size - upon request by the customer ( Optional )



# HT-2333 Series Dynamic Fatigue Testing Machilne

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as EN 14764 / EN14765 / EN14766 / EN14781.
- This tester is suitable to test bicycle parts & materials & cycles and integrated dynamic fatigue tests, the
  test function are sufficient with wide applications, compliant to test standards applied in numerous countries.
- This tester is module designed and able to select single mode type, due mode or third mode of structure specifications.
- This tester is manufactured under ISO-9001 quality certification standard.



# HT-1233 Series Dynamic Fatigue Testing Machilne

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as EN 14764 / EN14765 / EN14766 / EN14781.
- The force calibration conforms to ISO 7500/1, EN 1002-2, BS1016, DIN 5122, ASTM E4, JIS B7721/B7733, CNS 9471/9470, JJG 475-88.





# HT-1231 Series Dynamic Fatigue Testing Machilne

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as EN 14764 / EN14765 / EN14766 / EN14781.
- This tester is suitable to test bicycle parts & materials & cycles and integrated dynamic fatigue tests, the
  test function are sufficient with wide applications, compliant to test standards applied in numerous countries.
- This tester is module designed and able to select single mode type, due mode or third mode of structure specifications.
- This tester is manufactured under ISO-9001 quality certification standard.



# HT-8531, HT-8533 Series Dynamic Fatigue Testing Machilne

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as EN 14764 / EN14765 / EN14766 / EN14781.
- The force calibration conforms to ISO 7500/1, EN 1002-2, BS1016, DIN 5122, ASTM E4, JIS B7721/B7733, CNS 9471/9470, JJG 475-88.





### Hydraulic Power Package

- QR-20L
- QR-20
- QR-40



QR-20L Hydraulic Power Package

# **Cooling System**



Water Tower Cooler



Air-Cooled Oil Cooler (Optional)



# HT-2333 Series Dynamic Fatigue Testing Machilne

Model	2333-B2	2333-2CH	2333-3CH
1. Testing Graph  1. 1 Capacity/ Test Frequency (Hz)    Amplitude (mm)    3 kN / 5 Hz / ± 32    10 kN / 5 Hz / ±15  1.2 Test Frequency - Amplitude  1.3 Test Wave Form:    Sine Wave, Triangular Wave	HT - 2333-2CH w/ QR-20 Test Fred 3 kN / 120 kg / cm²  70.0  80.0  90 40.0  10.0  10.0  5 10 16  Frequency (		5 kN / 200 kg / cm <sup>2</sup>
2. Load Cell	F	HT-8336 - 3kN / 5kN /10k	N
2.1 Load Resolution		1/200,000	
2.2 Load Accuracy		± 1 %	
3. Displacement Sensor		LVDT ( Germany Brand )	)
3.1 Displacement (mm)		150 mm (±75mm)	
4. Electro-hydraulic Servo Actuator			
4.1 Capacity (kN)	3 kN / 5kN / ( Optional 10kN)		
4.2 Displacement (mm)		150 mm (±75mm)	
5. Servo Valve		MOOG	
6. Power Unit	Stand	lard QR-20 (Optional Q	R-40)
6.1 Working Pressure (kg/cm²)		120 / 200 kg/cm²	
6.2 Motor		15 Hp.	
6.3 Oil Capacity		150 L	
6.4 Protection Device	☑ Over Heat Protect	ion 🗹 Oveload Protection	☑ Liquid Over Low
6.5 Accumulator		Equipped	
6.6 Oil Filter System	Equipped		
7. Machine Structure			
7.1 Testing Space (WxDxH) (mm)	1200 x 600 x 800	1400 x 8	00 x 1400
7.2 Distance Between Two Cylinders (mm)	140 x 900	140 x	: 1000
7.3 Machine Dimension ( WxDxH ) (mm)	1820 x 850 x 2470	220 x 12	00 x 3310
7.4 Crosshead Fixed	<b>☑</b> By	Motor ☑ By Manual	Operation
8. Power	3 ø	; 220 V / 380 V ; 50Hz / 6	0Hz
9. Cooling System	QR-20 □ Wate	r Tower Cooler □ Air-0	Cooled Oil Cooler
(Supply by the customer)	QR-40 □ Wate	r Tower Cooler □ Air-0	Cooled Oil Cooler

# HT-1233 Series Dynamic Fatigue Testing Machilne

Model	1233-B2	1233-2CH	1233-3CH	8533-1CH
1. Testing Graph  1. 1 Capacity/ Test Frequency (Hz)     Amplitude (mm)  2 kN / 5 Hz / ± 25  1.2 Test Frequency - Amplitude  1.3 Test Wave Form:     Sine Wave, Triangular Wave  2. Load Cell		70.0 60.0 60.0 40.0 10.0 0,0 0 5	Test Frequency - Amplitude kg / 70 kg / cm²  10 15 requency (Hz)	
2.1 Load Resolution			36 - 2kN 0,000	
200				
2.2 Load Accuracy     3. Displacement Sensor			1 % ermany Brand )	
3.1 Displacement (mm)			(±75mm)	
Electro-hydraulic Servo Actuator		130 11111	(±75mm)	
		2	kN	
4.1 Capacity (kN) 4.2 Displacement (mm)			(±75mm)	
5. Servo Valve				
6. Power Unit	MOOG QR-20-L			
6.1 Working Pressure (kg/cm²)	70 kg/cm²			
6.2 Motor		7.5 Hp.	9/0111	3 Hp.
6.3 Oil Capacity			0 L	45 L
6.4 Protection Device	✓ Over Heat		ad Protection 🗹 Lic	
6.5 Accumulator	2 over ried.		Equipped	quid Over Low
6.6 Oil Filter System			Equipped	
7. Machine Structure		.,,,,,	ципрои	
7.1 Testing Space ( WxDxH ) (mm)	1200 x 600 x 800	1000 x 8	00 x 1200	560 x 480 x 800
7.2 Distance Between Two Cylinders (mm)	140 x 900		x 750	140 x 750
7.3 Machine Dimension ( WxDxH ) (mm)	1820 x 850 x 2470		00 x 2730	1300 x 600 x 2250
7.4 Machine Weight (kg)	1100	75.5	250	800
7.5 Crosshead Fixed	☑	By Motor ☑	By Manual Operat	1
8. Power	3 ø ; 220 V / 380 V : 50Hz / 60Hz			
9. Cooling System (Supply by the customer)	QR-20   Water Tower Cooler   Air-Cooled Oil Cooler			d Oil Cooler



# HT-1231 Series Dynamic Fatigue Testing Machilne

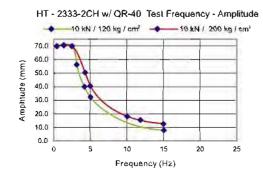
- Power source is AC Servo Motor, without convertional hydraulic pressure source or other auxiliary unit.
- Compare with Hydraulic Servo System :

### Advantages:

- 1. Testing space is SMALL: Do not need any hydraulic equipment or large cooling power system, save space.
- 2. Laboratory cleanliness is GOOD: Meet the green energy environmental protection, will not pollute the workplace.
- 3. Work enivronment is EXCELLENT: Mechanical operation of the low-noise undistrubed.
- 4. Energy saving is TERRIFIC: One-third of the power consumption hydraulically achieve Eco performance.
- 5. Equipment costs is LOW: Equipment investment and maintenance costs are low.
- 6. After-sales service is **CONVENIENT**: Easy maintenance do not need to manage the oil temperature, oil change or any waste oil.

Model	1231-B2	1231-2CH	1231-3CH	8531-1CH
1. Testing Graph  1. 1 Capacity/ Test Frequency (Hz) Amplitude (mm)  2 kN / 5 Hz / ± 20  1.2 Test Frequency - Amplitude  1.3 Test Wave Form: Sine Wave, Triangular Wave				
2. Load Cell		HT-833	36 - 2kN	
2.1 Load Resolution		1/200	0,000	
2.2 Load Accuracy	± 1 %			
3. Electric Linear Servo Actuator				
3.1 Capacity (kN)		2	kN	
3.2 Displacement (mm)		150 mm	(±75mm)	
4. Machine Structure				
4.1 Testing Space ( WxDxH ) (mm)	1200 x 600 x 800	1000 x 80	00 x 1200	560 x 400 x 800
5. Power		3 ø ; 220 V / 380	V:50Hz/60Hz	
6. Cooling System		☐ Oil Type Co	ooling System	

### HT-2333 series (Option QR-40)





# Software & Optional Bicycle Fixture





DBG008-C Rear Ends / Dropouts Fatigue Test



DBG001-B Front Fork Fatigue Test (Horizontal Test)



# **Optional Fixture Application**





Frame Rear Disc Brake Test



Handlebar Fatigue Test



DBG006-E Handlebar Fatigue Test ( Mountain bike )



DBG008-A Frame Horizontal Fatigue Test



DBG009-A Crank Assembly Fatigue Test



Crank Assembly Fatigue Test



DBG007-C Saddle Fatigue Test



DBG007-D Seat Post Fatigue Test ( Due Force )



DBG007-F Seat Post Fatigue Test (Single Force)

### Front-Fork Dynamic Testing Machine

- This tester is suitable to test bike's front-forks dynamic fatigue, tested items include front-fork structure
  dynamic fatigue test, disk brake structure dynamic fatigue test, brake frames structure dynamic fatigue test.
- This tester is compliant with the international bike's standards under EN14764 / EN14765 / EN14766 / EN 14781 and test fixtures are interchangeable by standardization method.
- PC / Software Measurement
  - Hung Ta Bicycle Dynamic Test Software
  - Hung Ta Measurement Interface
- Power drive by AC servo motor, not apply by any hydraulic system.
- Advantages such as HT-1231:
  - 1. Testing space is SMALL
  - 2. Laboratory cleanliness is GOOD
  - 3. Work enivronment is EXCELLENT
  - 4. Energy saving is TERRIFIC
  - 5. Equipment costs is LOW
  - 6. After-sales service is CONVENIENT



Model	2532FD		
1. Testing Graph  1. 1 Capacity/ Test Frequency (Hz)    Amplitude (mm)  2 kN / 5 Hz / ± 25  1.2 Test Frequency - Amplitude  1.3 Test Wave Form:    Sine Wave, Triangular Wave	HT - 2532FD Test Frequency - Amplitude  70.0 60.0 50.0 20.0 10.0 0.0 5 frequency (Hz)		
2. Load Cell	HT-8336 - 2kN		
2.1 Load Resolution	1/200,000		
2.2 Load Accuracy	± 1 %		
3. Electric Linear Servo Actuator			
3.1 Capacity (kN)	2 kN		
3.2 Stroke (mm)	150 mm (±75mm)		
4. Machine Structure			
4.1 Testing Space ( WxDxH ) (mm)	1750 x 550 x 1200		
5. Power	3ø;220V/380V:50Hz/60Hz		
6. Cooling System	☐ Oil Type Cooling System		



# HT-2331A, HT-2134B Pneumatic Type Bike Dynamic Fatigue Testing Machine

- Pneumatic power source of this tester is suitable for bicycle parts and materials which cooperate fatigue and dynamic test by module fixture.
- Accumulator pressure and compressed air system supply by the customer.





HT-2331A Computerized Pneumatic Frame-Pedal Dynamic Fatigue Testing Machine

HT-2134B Bicycle Dynamic Fatigue Testing Machine (Pneumatic Type)

型號	2331A 2134B
1. Load Cell	HT-8336 - 2kN
2. Testing Accuracy	± 5 %
3. Testing Frequency (Hz)	1 ~ 5 Hz ( Adjustable )
4. Max. Frequency, Testing Stroke	About 3 Hz / ± 15 mm
5. Stroke of Pneumatic Cylinder	150 mm (± 75 mm)
6. Stroke of Displacement Sensor	150 mm (± 75 mm)
7. Distance Between Pneumatic Cylinder	By Manual
8. High-Frequency Precision Pneumatic Control	1 Set
9. Control System	Computer Control & Manual Control Panel
10. Machine Dimension (W x D x H) (mm)	1500 x 750 x 1600
Control Box (W x D x H) (mm)	700 x 630 x 1750
11. Power	3φ; 220V / 380V; 50 / 60 Hz
12. Pneumatic Power Source	Supply by the Customer

### Bicycle Frame Horizontal & Vertical Dynamic Fatigue Tester Complete Cycles Vibration Tester

(Pneumatic Type)

#### HT-2707PC Bicycle Frame Horizontal & Vertical Dynamic Fatigue Tester

This tester is suitable to test the fatigue of bicycle frames. Fasten the bicycle frames onto the front fork fixture and rear fixture and test it by constant frequency with constant load. Set up number of times to get the final testing result for determining the qualities of bicycle frames which are confrom to develop and to manufacture of the products for Quality Certification Standard.

Model	2707PC
Campaiku	Horizontal 500 N ~ 2 kN
Capacity	Vertical 500 N ~ 2 kN
Test Frequency	1 ~ 8 Hz
Testing Accuracy	± 5 %
Vertical Testing Stroke	Max.100 mm ( ± 50 mm )
Horizontal Testing Stroke	Max.200 mm ( ± 100 mm )
Sofatu Davida	Automatically Top Sensor Device for Destruction
Safety Device	Emergent Stop & Safety Device
Testing Function	Testing Report, Data Storage & Report Printing Function
latera di californi	EN 14781 4.7.1, 4.7.4
International Standard	EN 14766 4.8.1, 4.8.5
Air System	Buyer Provides Test-use Air System and Air Reservoir ( 6 bar. Above )
Power	1 φ; 220V ; 50 / 60 Hz



HT-2707PC Bicycle Frame Horizontal & Vertical Dynamic Fatigue Tester ( Pneumatic Type )

### HT-2708 Complete Cycles Vibration Tester

Affix rear ends of the fram on thesting machine, let front fork touch with of 25 mm eccentric cam, Testing standard of front forks refer to GB 3567-83. Apply a certain load at the central point of the intersection point between tube and seat post, cam rotates at the speed of 250 rpm, after the given test cycle are finished, Check if there is any crack, break of or off-welding on the specimen of frame or front fork.

Model	2708
Eccentric Cam	25 mm
Speed	250 rpm Adjustable (Max. 500 rpm)
Testing Sensor	1 Set
	Max.120 kg
Counter Weight	Handle 18 kg, Seat tube 50 kg, Head Pipe 20 kg
Adjustable Range	500 ~ 1,200 mm
Counter	0 - 999999 With Shutdown Setup
Testing Standard	GB 3576-83
Power	1 φ;220V;50 / 60 Hz



HT-2708 Complete Cycles Vibration Tester



# HT-2332 Series Bicycle Brakes Road Testing Machine

• This tester is suitable to test bike's run test & brakes performance test. The tester is formed by two rollers with varied diameter and follows specification to install jump plates at bike's seat post, pedals, bars, luggage carries, with load set to this tester. Adjust the distance between front and rear wheels base on the Standard for complete cycles, constantly rotate the wheels by 7-27 km/hr and the bike is supposed to maintain its normal function, no part damage or crack is found. For brake test, follow the specification specified roller's friction coefficient, wind speed and water-spray amount of loaded brake & handlebars to test the performance. ■

This tester is designed as per
 International Standard EN 14764 /
 EN14765 / EN14766 / EN 14781

HT-2332DB Bicycle Brakes Road Testing Machine



Model		2332DB	2332B	2332D
		Brake Run Test	Brake Test	Run Test
Adjust Range Between Front & Rear Wheels	mm	860	0 ~ 1200 / ( 600 ~ 1200 Option	al)
	Diameter (mm)			
0	Jump Block Amount & Combination Phase	Conform EN 14764 Standard		Conform EN 14764 Standard
Counter Setting	Power	Servo Motor + Reducer + Clutch		+ Speed Regulation + Clutch
	Testing Speed (km/hr)	7-27 kr	m/hr (Special speed – upon re	
Crank Drive Mechanism (optional)	Testing Speed (km/hr)	7-27 kr	n/hr (Special speed – upon r	equest)
	Seat Post (kg)	3	6	
	Pedals (kg)	18		Overall Weight 120
Counter Weight	Handlebar (kg)	6.75		
	Luggage Carriers(kg)	10. 18. 25 according to luggage carriers, area 204 x 240(Assembly Type)		
	Head Tube (kg)	1.	4	
Force to Brake Handlebars		Conform EN 14764 Standar	d (Auto Weight 40 ~ 180N)	
Water Spray	ml/s	4 ml/s		4 ml/s
	Brake Force (N)	2000		
Brake Force	Resolution	1/200000		
	Accuracy (%)	<u>±</u> 1		
Power		3 ø ; 220V ; 50/60Hz (3ø : 380V Optional)		
Consumption	kW	10	5	8
Dimension (WxDxH)	Main Body (mm)		3210 x 1780 x 700	
	Equipment Cabinet (mm)		700 x 900 x 1750	
Standard Accessories		Tool Kit x1, Operational M	Manual x1, Warranty Certific	cation x1

- This testing machine is able to test wheel set endurance faligue test.
- In accordance with the testing requirements, it is able to test running performance executable wheels, wheel deflection, the wheel group to go line deflection reciprocated durable, flat relocated overlying durable..... endurance testing.



HT-2910 Bicycle Wheel Tester

Model	2910
1. Diameter of Roller	760 mm
2. Jump Block	10(H) × 50(D) × 150 (L) mm, Cutaway 45℃ or appointed
3. Test Speed	5~50 km/hr (Adjustable) or Appointed, Speed Resolution: 0.1 km/h
4. Testing Weight	80 kg or appointed
5. Tire & Wheel Fasten Holder	1 Set
6. Stiffness Front Fork	1 Set (Able to Adjust the Length)
7. Wheel Destruction Detector	1 Set
8. Wheels and Wheel Sets Lateral Deflection Detector	1 Set
9. Control System	Bicycle Wheel Testing Software x 1 set
10. Safety Device	
	10.1 Safety protection x 1 set (The machine is unable running when the protection guard is opened.)
	10.2 Emergency stop device x 1 set
	10.3 Specimen broken automatic shutdown device
	10.4 Automatic shutdown device when test reaches setting cycles
11. Testing Main Functions	
(Optional - Please select)	11.1 Repeating swing mechanism; angle ± 20 degree adjustable
	11.2 Left and Right switch slip mechanism x 1 set
	11.3 Slip displacement: ± 100 mm

3500 J

1 Set

110 kg

2 Sets

1 Set

2 Sets

2 Sets

5 cm

1 Set

1 Set

2 Pieces

1 Set



# High Energy Drop Weight Impact Testing Machine

The tester can test the high energy impact test for handle bar, transmission parts, crank of car the motorcycle or bicycle's components including handlebar, wheel, crank, pedal spindle...etc.

### Specification



**Drop Weight Impact Testing Machine** 

# HT-2334 Series Bicycle Hub Abrasion Tester

#### Test Procedure:

Set bike's wheel hub or peddle at the shaft of wood instrument and exert load & select suitable rpm according to respective test spec, to evaluate if the specimen is failure or fracture to ensure the product quality.



HT-2334 Bicycle Hub Abrasion Tester

### Specification

Model	2334A	2334B	2334C
Туре	Wheel Hub Testing	Paddle Testing	Wheel Hub & Paddle Testing
Rotating Speed (rpm)	250	80	250 / 80
Counter Setting	Si	x-digit Setting to Stop Automatic	ally
Counter (Each)	Optional	Optional	Perform Separate 4-Set Failure-stop
Number of Specimen	2 Sets	2 Sets	2 Sets
Counter	None	199 hr	199 hr
Counterpoise	20 kg x 5 / 10 kg x 2	20 kg x 3 / 10 kg x 2	20 kg x 3 / 10 kg x 2
Jig	Front Wheel Hub x2	Stepper: W5/6, 9/16	All
Standard Accessories	Operation Manual x 1, Certificate x 1, Tool Kit x 1, 1 Year Warranty Paper x 1		

### HT-8085 Series

### Multi-Functional Bicycle Impact Tester

- Suitable to perform the impact test of bike's parts or assemblies, including the vertical drop-hammer impact tests toward font-fork, front-fork frame assembly's drop-hammer, drop-down impact toward front-fork frame assembly, x-, y- & diagonal drop-hammer impact toward peddle, impact test toward handlebar assembly, and vertical impact toward crankshaft. The tester is based on modular design and is designed flexible enough to meet the national spec requirement, safe and user friendly operation system.
- This tester is compliant with the international bike's standards under EN14764 / EN14765 / EN14766 / EN 14781 and test fixtures are interchangeable by standardization method.

HT-8085 Multi-Functional Bicycle Impact Tester

pecincation		
Model		8085
Impact Height		According to International EN Standard
Elevation Scale	(mm)	Can follow the mold & specimen height to adjust datum indication
Impact Weight	(kg)	Interchangeable module within 5kg~40kg, equipped according to test requirement
	Bench Area (W x H)	60 cm x 180 cm (Bicycle Frame) 60 cm x 60 cm (Part) (Optional)
Impacting Mechanism	Trigger Shock Hammer	Apply mechanical pin-type EM clutch device to avoid falling with double security system. Safe & Endurab
Wechanism	Impact Hammer Module	Impact hammer is changeable in accordance with Test Standard, Convenient & economic in applicati
	Anti-rebound-collision Device	Use the anti-rebound-collision device to ensure the test accuracy
Control System	Adjustable Control Box	Can adjust height and operation setting angle. Twin-key trigger to make secured protection.
	Escalation Limiting Device	Including the highest & lowest limit switches and location setting
Machine Structure		Security board well painted. Flexible module combination with double-T fixture boa
Power	(Hz)	3 ø ; 220V : 50 / 60Hz or Specified
Machine Dimension	(WxDxH) (cm)	110 x 180 x 278 / 42 x 55 x 108
Weight	(kg)	160
		Indicate the Impact Velocity (Optional)



 This tester applies high accuracy servo motor, force sensor and torque sensor, matching and loading on magnetic brake device on rear bike hub, this machine mainly testing the performance of smoothness of the derailleur, and fatigue and durability of chain and gear.



HT-2525 Transmission Testing Machine

Model	2525
Bottom Bracket	Crank Transmission Motor
Bottom Bracket / Crank Speed	0 ~ 100 rpm Adjustable or Appointed
Load Generator	1100 N-m or Appointed
Speed Stroke Cylinder	1 Set
Stroke Sensor	1 Set
Chain Force Sensor	1 Set
Computer Hardware	1 Set
Testing Software	1 Set
Recorder	Test on Speed Linear Displacement, Force, Torque, Mileage
Optional Accessories	Bottom Bracket / Crank Torque Sensor, Loading Torque Sensor
Power	3 ø ; 220V / 380V ; 50 / 60 Hz

# Wheel-chair's Dynamic Endurance Tester (Simulate under Run Status)

This tester is able to test the electrical-driven and hand-driven wheel chair under simulated run status.
 The tester is designed flexible enough to meet the international standard and the length of impact block is 400 mm conforms to ISO 7176 Standard.

Drill a block-fixing hole at 90° of each roller.

Embossed the roller's surface with flower design.

Chain-driven roller design.

Perform anti-corrosion process on roller's surface.

 The distance between the center of each roll pair is 395~1100 mm which is adjustable.
 (or specified one).

 Use hand-wheel to fast modulate to the distance between the center of roll pair.

- Six-digit electronic counter (one set).
- Structure-failure-shutdown sensor (two set).
- Motor rpm meter (one set)
- Electronic timer (one set)
- EM clutch (one set)
- Test Module: Conforms to ISO 7176-11
- Security Devices:
  - 1. Emergent stop switch
  - 2. Current overflow auto-shutdown system
  - 3. Auto-shutdown sensor when the installed specimen position is offset.
- One set of magnetic brake, able to simulate ramp control. The control range is within 0°~15° (Optional)



HT-2388
Wheel-chair's Dynamic Endurance Tester

Model	2388
Roller Wheel Diameter	ø 250 mm x 2 Sets
Roller Wheel Length	1000 mm
Test Velocity	1.0 ± 0.1 m/s
Test Speed	Rollers can reach Up to $1.0 \pm 0.1$ m/s mean within 10 cycles
Holding Structure	Assembled with extruded aluminum frame
Test Module	Conforms to ISO 7176-11
Weight	50kg, 75kg, 100kg, Back, Base, Seat / 25kg Rear, Seat



# **Drop-Hammer Endurance Tester for Treadmill**

- Use this tester to evaluate the Run-exercise endurance to the Drop-hammer.
- Six-digit counter (one set).



Model	2389
Dimension of Testing Board	About 1000 mm x 1800 mm (or Request by the Customer)
Testing Tyre	155/13, Tyer Pressure 15 bar
Impact Weight	125 kg, Increased by Counterpoises
Testing Position	Able to Adjust 200 mm by Horizontally and Vertically
Drop Height	Max. Height 100 mm (Adjustable)
Impact Frequency	Max. Speed 60 times/minute (Adjustable)

# Power Tester of Physical Exercise Bike

- Use this tester to perform the following tests:
  - 1. Temperature-rise test
  - 2. Braking torque test
  - 3. Long-term load variation state test (speed-relevant physical exercise bike)
  - 4. Variation state of intermitted test (speed-relevant physical exercise bike)
  - 5. Power test
- This machine includes:
  - ◆ One set of transmission motor.
  - One set of operation tool kit.
  - One set of computer hardware & software.
  - Windows version software are:
    - Display and print test chart generated
    - Able to input test procedure and perform test run automatically
    - 3. Display and print temperature time, RPM, torque power value
    - 4. Save test data



Model	2390	
Fixed Test Bench	1500 mm × 600 mm or by Customer Request	
Range of x- and y-Direction Adjustable Space	200mm (x-direction), 300 mm (y-direction) or by Customer Request	
Torque Sensor	100 N-m	
Test Power	Max. 500 W	
Rotating Speed	Max. 130 rpm	
Temperature Measurement	Above 100 °C	
Motor-Driven	Bolt-Type 5-Core Spindle : M8 × 1.0 mm, 5/16" × 22TPI, 5/16" × 26TPI	
	Nut-Type 5-Core Spindle: M10 × 1.25, M10 × 1.0 mm	





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