



HUNG TA INSTRUMENT CO., LTD.

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

HT-2332DB
Bicycle Brakes Road
Testing Machine



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 on 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, bicycle parts, electrical wire and cable, They meet the needs of testing products like automobile, motorcycle, rackets, clubs, hardware items as well, 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, Testing Laboratory No. 2717). And we are licensed to issue certificates of calibration which recognized by the government.

We welcome you to contact us, email, or visit our website for further information.



**Hung Ta, Taiwan's First Maker
of Precision Testing and
Inspection Equipment**

<http://www.hungta.com>

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 ISO & EN.
- 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.

HT-8505BM
Precision Type
Bicycle Material Tester



Specification

Model		8505BM-50	8505BM-100
Unit Conversion	kN	50	100
	Force	N / kN / lb / kg	
	Disp.	mm / cm / inch	
Load Resolution		1/200,000	
Load Accuracy		± 1 %	
Testing Space	mm	1000	
Stroke	mm	1400	
Test Stroke	mm	The crosshead stroke is excluded upper and lower grip and the length of clamping specimen	
Test Speed Range	mm/min	0.2 ~ 200	
Displacement Resolution	mm	0.01	
Power Control		Servo Motor / Servo Driver	
Power		3 φ ; 220 V / 380 V	
		2.5 kW	3.5 kW
Dimension (WxDxH)	cm	225 x 180 x 230	
Machine Weight (about)	kg	1200	1250
Standard Accessories		Tool Kit, Operation Manual, Calibration Report, 1 Year Warranty Paper	

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

Bicycle Fixtures : Optional, upon request by the customer, price sperately.

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as ISO & EN.
- 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-2333B2
Dynamic Fatigue Testing Machine



HT-2333-2CH
Dynamic Fatigue Testing Machine

HT-1233 Series Dynamic Fatigue Testing Machine

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as ISO & EN.
- 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-1233B2
Dynamic Fatigue Testing Machine



HT-1233-2CH
Dynamic Fatigue Testing Machine

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as ISO & EN.
- 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-1231B2
Dynamic Fatigue Testing Machine



HT-1231-2CH
Dynamic Fatigue Testing Machine

HT-8531, HT-8533 Series Dynamic Fatigue Testing Machine

- Each test module and test fixture is designed to be flexible enough to meet most relevant International Standards as ISO & EN.
- 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)

Specification

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 Frequency - Amplitude 3 kN / 120 kg / cm ²		HT - 2333-2CH w/ QR-20 Test Frequency - Amplitude 5 kN / 200 kg / cm ²
			
2. Load Cell	HT-8336 - 3kN / 5kN / 10kN		
2.1 Load Resolution	1/200,000		
2.2 Load Accuracy	± 1 %		
3. Displacement Sensor	Resistive (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	Standard QR-20 (Optional QR-40)		
6.1 Working Pressure (kg/cm ²)	120 / 200 kg/cm ²		
6.2 Motor	15 Hp.		
6.3 Oil Capacity	150 L		
6.4 Protection Device	<input checked="" type="checkbox"/> Over Heat Protection <input checked="" type="checkbox"/> Oveload Protection <input checked="" type="checkbox"/> 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 800 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 1200 x 3310	
7.4 Crosshead Fixed	<input checked="" type="checkbox"/> By Motor <input checked="" type="checkbox"/> By Manual Operation		
8. Power	3 ø ; 220 V / 380 V ; 50Hz / 60Hz		
9. Cooling System	QR-20 <input type="checkbox"/> Water Tower Cooler <input type="checkbox"/> Air-Cooled Oil Cooler		
(Supply by the customer)	QR-40 <input type="checkbox"/> Water Tower Cooler <input type="checkbox"/> Air-Cooled Oil Cooler		



Specification

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	<div style="text-align: center;"> <p>HT - 1233-2CH Test Frequency - Amplitude 200 kg / 70 kg / cm²</p> <table border="1"> <caption>Graph Data: Amplitude (mm) vs Frequency (Hz)</caption> <thead> <tr> <th>Frequency (Hz)</th> <th>Amplitude (mm)</th> </tr> </thead> <tbody> <tr><td>0</td><td>70.0</td></tr> <tr><td>1</td><td>68.0</td></tr> <tr><td>2</td><td>60.0</td></tr> <tr><td>3</td><td>45.0</td></tr> <tr><td>4</td><td>35.0</td></tr> <tr><td>5</td><td>28.0</td></tr> <tr><td>6</td><td>22.0</td></tr> <tr><td>7</td><td>18.0</td></tr> <tr><td>8</td><td>15.0</td></tr> <tr><td>9</td><td>13.0</td></tr> <tr><td>10</td><td>11.0</td></tr> <tr><td>11</td><td>10.0</td></tr> <tr><td>12</td><td>9.0</td></tr> <tr><td>13</td><td>8.0</td></tr> <tr><td>14</td><td>7.0</td></tr> <tr><td>15</td><td>6.0</td></tr> </tbody> </table> </div>				Frequency (Hz)	Amplitude (mm)	0	70.0	1	68.0	2	60.0	3	45.0	4	35.0	5	28.0	6	22.0	7	18.0	8	15.0	9	13.0	10	11.0	11	10.0	12	9.0	13	8.0	14	7.0	15	6.0
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4.2 Displacement (mm)	150 mm (±75mm)																																					
5. Servo Valve	MOOG																																					
6. Power Unit	QR-20-L																																					
6.1 Working Pressure (kg/cm ²)	70 kg/cm ²																																					
6.2 Motor	7.5 Hp.		3 Hp.																																			
6.3 Oil Capacity	90 L		45 L																																			
6.4 Protection Device	<input checked="" type="checkbox"/> Over Heat Protectio <input checked="" type="checkbox"/> Oveload Protection <input checked="" type="checkbox"/> Liquid Over Low																																					
6.5 Accumulator	None-Equipped																																					
6.6 Oil Filter System	None-Equipped																																					
7. Machine Structure																																						
7.1 Testing Space (WxDxH) (mm)	1200 x 600 x 800	1000 x 800 x 1200		560 x 480 x 800																																		
7.2 Distance Between Two Cylinders (mm)	140 x 900	140 x 750		140 x 750																																		
7.3 Machine Dimension (WxDxH) (mm)	1820 x 850 x 2470	1380 x 800 x 2730		1300 x 600 x 2250																																		
7.4 Machine Weight (kg)	1100	1250		800																																		
7.5 Crosshead Fixed	<input checked="" type="checkbox"/> By Motor <input checked="" type="checkbox"/> By Manual Operation																																					
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9. Cooling System (Supply by the customer)	<input checked="" type="checkbox"/> QR-20 <input type="checkbox"/> Water Tower Cooler <input type="checkbox"/> Air-Cooled Oil Cooler																																					

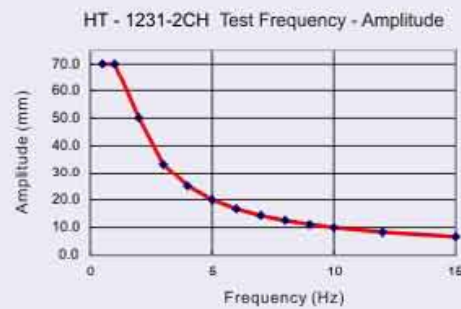
Bicycle Fixtures : Optional, upon request by the customer, price sperately.

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

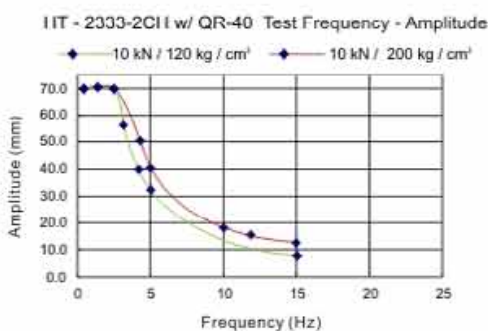
Advantages :

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 environment is **EXCELLENT** : Mechanical operation of the low-noise undisturbed.
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	<p>1.1 Capacity/ Test Frequency (Hz) Amplitude (mm)</p> <p>2 kN / 5 Hz / ± 20</p> <p>1.2 Test Frequency - Amplitude</p> <p>1.3 Test Wave Form : Sine Wave, Triangular Wave</p>			
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 Displacement (mm)	150 mm (±75mm)			
4. Machine Structure				
4.1 Testing Space (WxDxH) (mm)	1200 x 600 x 800	1000 x 800 x 1200		560 x 400 x 800
5. Power	3 ∅ ; 220 V / 380 V : 50Hz / 60Hz			
6. Cooling System	<input type="checkbox"/> Oil Type Cooling System			



HT-2333 series (Option QR-40)



QR-20 / QR-40 Hydraulic Power Package



Optional Bicycle Fixtures

1233-3CH-00A / 2333CH3-00C
Frame Horizontal Fatigue Test (Third Station)



DBG008-C
Rear Ends / Dropouts Fatigue Test



DBG008-D
Frame with Pedaling Force Test



DBG008-E
Frame with Steel Bar Fatigue Test



DBG001-B
Front Fork Fatigue Test (Horizontal Test)



DBG002-A
Front Fork Fatigue Test (Vertical Test)



DBG020A-A
Front Fork & Disc Brakes Fatigue Test



DBG020A-B
 Frame Rear Disc Brake Test



DBG006-C
 Handlebar Fatigue Test



DBG006-E
 Handlebar Fatigue Test
 (Racing bike)



DBG008-A
 Frame Horizontal Fatigue Test



DBG009-A
 Crank Assembly Fatigue Test



DBG009-B
 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)



HT-2532 FD 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 ISO, EN, 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 environment is **EXCELLENT**
 4. Energy saving is **TERRIFIC**
 5. Equipment costs is **LOW**
 6. After-sales service is **CONVENIENT**



HT-2532 FD
Front-Fork Dynamic Testing Machine

Specification

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	
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	3 Ø ; 220 V / 380 V ; 50Hz / 60Hz
6. Cooling System	Oil Type Cooling System

- 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)

Specification

Model	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

- This tester applied for bike frame and bike frontfork horizontal fatigue testing. Base on the setting of force , frequency , cycles to execute the target value that operator set and then inspect the specimen shape.



HT-2707FFH Bike Frame, Fron Ffork Horizontal Fatigue Tester

Specification

Model	2707FFH
Actuator	Hydraulic Servo Driver, 2 sets
Capacity	200 kgf (2 kN)
Stroke	± 75 mm
Testing Frequency	5 Hz
Servo Valve	2 sets
Displacement Gauge	NOVOTECHNIK (German, Resistive). Stroke ± 75 mm
Loadcell	2 sets, Platen Shape, Fatigue Loadcell
Calibration Accuracy	± 1%
Power Unit	<ul style="list-style-type: none"> ● Motor : 3phase 220V / 380V ● Pump : Operation pressure 70 kg / cm² ● Higher pressure filter ● Accumulator : Pressure head ● Over Heat : Lliquid too lower warning, Overloading warning.
Cooling System	By Liquid or By Air (Optional)

Bike Frame, Seat Post Vertical Fatigue Tester

- This tester applied for bike frame with seat post fatigue testing. Base on the setting of force 、 frequency 、 cycles to execute the target value and cycles that operator set and then inspect the specimen shape.



HT-2707SS Bike Frame, Seat Post Vertical Fatigue Tester

Specification

Model	2707SS
Actuator	Hydraulic Servo Driver, 1 set
Capacity	200 kgf (2 kN)
Stroke	± 75 mm
Testing Frequency	5 Hz
Servo Valve	1 set
Displacement Gauge	NOVOTECHNIK (German, Resistive). Stroke ± 75 mm
Loadcell	2 sets, Platen Shape, Fatigue Loadcell
Calibration Accuracy	± 1%
Power Unit	<ul style="list-style-type: none"> ● Motor : 3 phase 220V / 380V ● Pump : Operation pressure 70 kg / cm² ● Higher pressure filter ● Accumulator : Pressure head ● Over Heat : Lliquid too lower warning, Overloading warning.
Cooling System	By Liquid or By Air (Optional)

- Affix rear ends of the fram on the testing 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.



Specification

HT-2708 Complete Cycles Vibration Tester

Model	2708
Eccentric Cam	25 mm
Speed	250 rpm Adjustable (Max. 500 rpm)
Testing Sensor	1 Set
Counter Weight	MAX.120 kg
	B.B. 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	1φ ; 220VAC ; 50 / 60 Hz

HT-1437 Series

Computer Servo Control Stress-on For Bike Assembling Line

- This machine can be set the stress force for assembling line of bike parts, applied servo motor control and ball screws to generate the most accuracy, equipped the force sensor to measure the closeness when assembling on bike production lines. This machine can be set the stress force for assembling line of bike parts, applied servo motor control and ball screws to generate the most accuracy, equipped the force sensor to measure the closeness when assembling on bike production lines.



HT-1437A
Computer Servo Control
Head Tube & Inner Tube Tester

HT-1437B
Computer Servo Control
Stem & Crown Stress Tester

HT-1437C
Computer Servo Control
Inner Ring Stress Tester

Specification

Model	1437A	1437B	1437C
Machine Capacity	5 Ton or Indicator		2 Ton or Indicator
Inside Space	50 cm x 50 cm x 100 cm		
Movement stroke	30 cm or Indicated		
Speed	10 ~ 200 mm / min or Indicated		
Power	3 Φ · 220 V / 380 · 50 / 60 Hz		

- This machine applied for bike front fork fatigue testing and the relevant bike suspension, based on its compression stroke, frequency, cycles to execute the testing. When the testing cycles are reached, compare the value conform to the testing norms requirement or not? The testing results be the guideline for quality control and new product development.



HT-2816 Bike Front Fork Fatigue Tester

Specification

Model	2816
Testing Sample Number	2 Sets
Motor	5 HP
Testing Frequency	2 Hz or Indicated or Adjustable
Testing Stroke	150 mm or Indicated or Adjustable
Testing Force	500 kg or Indicated
Power	3 Φ · 220 V / 380 V · 60 Hz / 50 Hz or Indicated
Dimension	2200 x 1280 x 2230 mm
Weight	1350 kg

HT-9726
Torque Tester

- This machine suitable for metal, screw, hand tooling, compound material, bike hub and axis. Maxima fatigue force and torque testing. Detective the testing graph and material break analysis. Testing data and results are as references for creating and designing new products.



HT-9726 Torque Tester

Specification

Model	9726
Capacity	200 Nf-m · 500 Nf-m · 1000 Nf-m or Indicated
Testing Fixture	Fixture for Hub Torque and Brake Connector Torque Testing, 1 of each
Spam of Ttesting	200 mm Adjustable or Indicated
Speed Torque	About 0.5 ~ 5 rpm
Control System	Servo Motor Control System
Power	3 Φ · 220 V / 380 · 50 / 60 Hz

HT-2910 Bicycle Wheel Tester

- This testing machine is able to test wheel set endurance fatigue 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

Specification

Model	2910
1. Diameter of Roller	760 mm
2. Jump Block	10(H) × 50(D) × 150 (L) mm, Cutaway 45°C or appointed
3. Test Speed	5 ~ 50 km/hr (Adjustable) or Appointed, Speed Resolution : 0.1 km/hr
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

- 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 ISO & EN.

HT-2332DB
 Bicycle Brakes Road
 Testing Machine



Specification

Model		2332DB	2332B	2332D
		Brake Run Test	Brake Test	Run Test
Adjust Range Between Front & Rear Wheels	mm	860 ~ 1200 / (600 ~ 1200 Optional)		
	Diameter (mm)	Ø760 / (Ø560 Optional)		
Counter Setting	Jump Block Amount & Combination Phase	Conform ISO / EN Standard		Conform ISO / EN Standard
	Power	Servo Motor + Reducer + Clutch		AC Reduce Motor + Speed Regulation + Clutch
	Testing Speed (km/hr)	7-27 km/hr (Special speed upon request)		
Crank Drive Mechanism(optional)	Testing Speed (km/hr)	7-27 km/hr (Special speed – upon request)		
Counter Weight	Seat Post (kg)	36		Overall Weight 120
	Pedals (kg)	18 each		
	Handlebar (kg)	6.75 each		
	Luggage Carriers(kg)	10, 18, 25 according to luggage carriers, area 204 x 240(Assembly Type)		
	Head Tube (kg)	14		
Force to Brake Handlebars		Conform EN 14764 Standard (Auto Weight 40 ~ 180N)		
Water Spray	ml/s	4 ml/s		4 ml/s
Brake Force	Brake Force (N)	2000		
	Resolution	1/200000		
	Accuracy (%)	±1		
Power		3ø ; 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 Manual x1, Warranty Certification x1		

HT-2346 Series

Electric Assisted Bike and Electric Bike Performance Tester



- This tester is suitable for electric assisted bike and electric bike and design, manufacture and conform the international Standard of EN 15194 / JIS D 9115 / GB 17761 / CNS 14126.



HT-2346 Electric Assisted Bike and Electric Bike Performance Tester

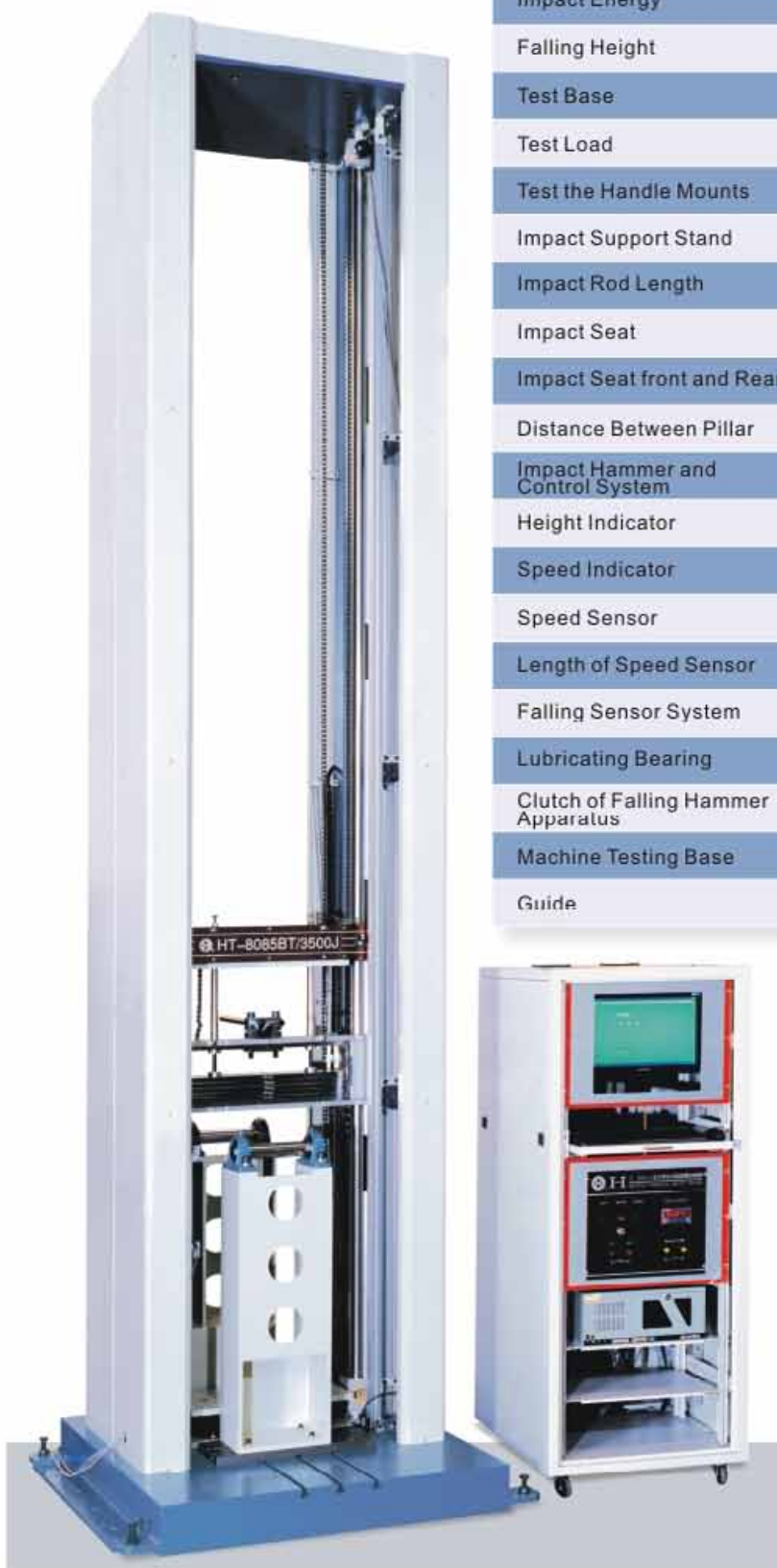
Specification

Inspection Item	Model and Fittable Item			Measure Range
	EBA	EBL	EBC	
Activation Performance		●	●	0 ~ 99 sec.
Acceleration Deceleration Performance			●	m ² / sec
Highest Speed / Adjust Performance	●	●	●	0 ~ 40 km/h
Climb Ability			●	0 ~ 18 degree
Endurance of Milage	●		●	20 ~ 100 km
Electricity Consumption per Hundred km / Consumption Ampere	●		●	0~3 kW-H / 100 km
Maxima Torque	●	●	●	0~200 N-m
Brake Mechanism / Auto Power Off While Brake	●		●	A
Lack Pressure Security Protection	●	●	●	0 ~ 60 V
Over Ampere Protection	●	●	●	0 ~ 30 A
Watt / Efficiency			●	< 400 W
Brake Distance / Slide Distance			●	m
Auto Resistance Loading Simulation			●	5 ~ 200 N-m
Loading Simulation	●	●	●	kg
1 : 1 Performance Inspection			●	Assistant Ratio
Whole Bike Acceleration Durance			●	

- 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

Model	8085BT
Impact Energy	3500 J
Falling Height	300 cm (adjustable) (Speed can be reach at 300 in/sec before impact the specimen)
Test Base	1 Set
Test Load	110 kg
Test the Handle Mounts	Wheel Test x 1 set
Impact Support Stand	2 Sets
Impact Rod Length	About 200 mm, Impact Diameter is 50 mm
Impact Seat	Adjustable Front and Back
Impact Seat front and Rear	About 780 mm (Adjustable)
Distance Between Pillar	About 500 mm
Impact Hammer and Control System	1 Set
Height Indicator	1 Set (Resolution 1 mm)
Speed Indicator	2 Sets
Speed Sensor	2 Sets
Length of Speed Sensor	5 cm
Falling Sensor System	1 Set
Lubricating Bearing	1 Set
Clutch of Falling Hammer Apparatus	T-Slot Design
Machine Testing Base	2 Pieces
Guide	1 Set



HT-8085BT
 High Energy
 Drop Weight Impact Testing Machine

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 front-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

Specification

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
Impacting Mechanism	Bench Area (W x H)	60 cm x 180 cm (Bicycle Frame) 60 cm x 60 cm (Part) (Optional)
	Trigger Shock Hammer	Apply mechanical pin-type EM clutch device to avoid falling with double security system. Safe & Endurable.
	Impact Hammer Module	Impact hammer is changeable in accordance with Test Standard, Convenient & economic in application
Control System	Anti-rebound-collision Device	Use the anti-rebound-collision device to ensure the test accuracy
	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 board
Power	(Hz)	3 ϕ x 220v x 50 / 60Hz or Specified
Machine Dimension (WxDxH)	(cm)	100 x 180 x 240 / 100 x 60 x 240
Weight	(kg)	160

✪ Indicate the Impact Velocity (Optional)

- This tester applied to bike seat which composed by synthetic resin material, conformed with the standard regulated at (- 40°C ± 2°C) degree for execute the impact testing. Let the hard head to impact the seat at 600 mm height position to impact the seat which is sustained by hard ball.



HT-8045BT
 Bike Seat Low Temperature
 Impact Tester

Specification

Model	8045BT
Chamber	
Temperature	RT - 40 °C
Chamber Dimension	50 x 50 x 60 (cm)
Temperature Control	Digital Temperature Controller / Micro-computer PID
Temperature accuracy	± 0.1 % FS °C
Temperature Uniformity	± 1 °C
Safety Protection Function	Equipped Safety Protection for Interruptible Power Supply, Electricity Leakage, Over Height Guard.
Impact Mechanism	
Impact Weight	8 kg
Impact Height	Max 600 mm (be settable)
Hammer and Apparatus	JIS D9431 3.3
Rise Height Device	Impact Hammer Rise Device
Clutch Device	Impact Hammer Clutch Device

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
Type	Wheel Hub Testing	Paddle Testing	Wheel Hub & Paddle Testing
Rotating Speed (rpm)	250	100	250 / 100
Counter Setting	Six-digit Setting to Stop Automatically		
Counter (Each)	Optional	Optional	Perform Separate 4-Sets Failure-stop
Number of Specimen	4 pcs.	4 pcs.	4 pcs.
Counter	None	999 hr	999 hr
Counterpoise	20 kg x 28 / 10 kg x 2	20 kg x 12 / 10 kg x 8	20 kg x 24 / 10 kg x 2
Jig	Front Wheel Hub x 2 Rear Wheel Hub x 2	Stepper : W 1/2" 9/16"	All
Standard Accessories	Operation Manual x 1, Certificate x 1, Tool Kit x 1, 1 Year Warranty Paper x 1		

- 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.



Specification

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 ϕ ; 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

Specification

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 ± 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

- Use this tester to evaluate the Run-exercise endurance to the Drop-hammer.
- Six-digit counter (one set).
- Electronic thermal controller (one set).
- Thermal sensor bar (one set).
- Temperature recorder (one set).



HT-2389
 Drop-Hammer
 Endurance Tester for Treadmill

Specification

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)

- 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:
 1. Display and print test chart generated
 2. Able to input test procedure and perform test run automatically
 3. Display and print temperature time, RPM, torque power value
 4. Save test data

HT-2390
Power Tester of
Physical Exercise Bike



Specification

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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