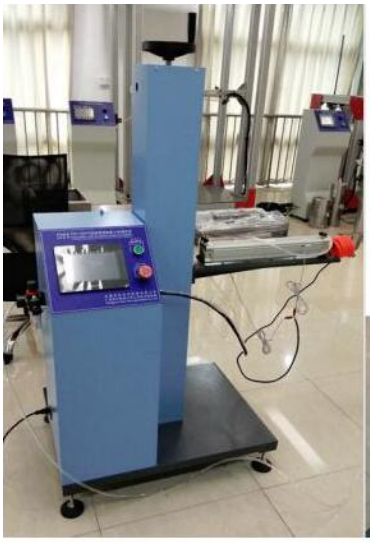
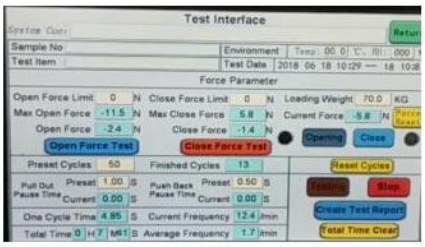
Product Information

TNJ- 005A Drawer Slides Durability Strength Cycle Tester

Use: Designed to test drawers, desks, cabinets and wardrobe.Apply a certain load inside the drawer, repeated pull-out and close of the drawer.

Standards
BSEN 1728 : 2012 , ANSI/BIFMA X5.1-2017 Durability Test





specifications
Maximum stroke: 400mm
Speed : 0.25m/s
Test height : Max.108cm
Count: 0 ~ 999999 can be set
Control mode : Text controller + PLC control
Dimension(W x D x H): 80x60x120cm
Weight (about): ≈80Kg
Power supply : 240 Volts: 13 Amps: 50 Hz
Gas source: ≥ 6kgf / cm2 stable gas so

AC motor –to control the height from 250-1000mm
6- digits Electronic Predetermine Counter (EPC)
The EPC will display the number of stroke achieved during the test, EPC also able to store the number of cycles when the power interruption take place and able to display the actual reading and continues counting when operation resumes

Note: one stroke is counted as one cycle

Product Information

TNJ-010 Furniture Sofa Comprehensive Durability Tester

Use : The tester load to the surface of soft using a fixed shape and weigh loading block.Backrest and armrest are loaded repeatedly with a certain height, frequency and power.TO test the Compression capability of soft when it is loader repeatedly in a long-term.

Standard :
QB/T 1952.1

Specifications：
Weigh of loading block:50±5kg
Loading position:350 mm before Seat surface
Armrest loading block:Φ50mm,edge of loading surface:R10mm
Armrest loading position:80mm before armrest
Armrest loading direction:45°according to horizontal direction
Armrest loading force:250N
Backrest loading block:100mmX200mm,edge of loading surface:R10mm
Backrest loading position:The center of two loading parts' distance is 300mm,450mm height or it is the same level according to the Backrest upward.
Backrest loading force:300N
The way of loading:load alternately
Testing disc:Φ100mm Edge of testing surface:R10mm
Testing speed:100±20mm/min
Weigh:Loading surface Φ350mm edge:R3,weigh:70±0.5kg
Lift way of testing group:Motor drive screw to lift. Controller:touch screen to display.
Frequency of testing:0.33~0.42Hz(20~25times/min)
Air supply:7kgf/cm^2 or more stable air supply
Size:host:152x200x165cm
Weigh:1350kg
Power: three-phase four-wire 380V

Product Information

TNJ-023 Chair Seat Stability Testing Machine

Use : This machine is suitable to test the seats (such as chairs, office chairs) forward stability. The purpose of these tests is to evaluate the front and rear stability of chairs.

Standard :

ANSI/BIFMA X5.1-2017-12.4 Front Stability;

EN 1022,

EN 1729-2

Power	Electronic
Seat surface loading Max	600N
Horizontal force	20N
Loading point position	seat surface center position,60mm from front edge
Seat surface loading pad	dia:200mm, camber surface:R300mm,9 pins
Weights basket lifting	manual control
Dimensions(WxDxH)	100x140x105cm
Weight	500kg
Air source	6kgf/cm2 stable air source
Seat impatct testing	office chair impact test

Product Information

TNJ-020 Chair Swivel Rotation Durability Test Instrument

Use : Chair Swivel / caster Durability Test Instrument is suitable for all kinds of office chair with rotary function. Chair Swivel testing machine is used for evaluating rotary function of office chair under loading condition.

Standard :
EN 1728-2012 Section 6.29 method 1, 7.11 ,7.13 method 1
ANSI/BIFMA X5.1 - 2017,
EN1335-3 -2009 Section 7.3.3, 7.3.5 method 1

Specifications:
Cycle rate: 5 ~ 15 rotations per minute.
Rotation Angle: 360 ° Continuous rotation
Loading weight: 102kg (225lb)
Counter: 1-999 999 can be set
Standard: QB/T2280 BIFMA X5.1

Reference Test Method :
Applicability: This test applies to all types of chairs with a swivel seat.
Test feature: Comprehensive testing program, to test the swivel durability of office chair under the cycling pressure.
Test procedure: Fix chair on rotary plate, loading 225lbs standard weight, rotary plate rotate 120000times in the speed of 5-15CPM, can be ajusted rotation angle by customers. Put the mattress on the test platform, using loading plate to load to the tseting parts.

Results evaluation: After testing, no lose function
Specimen clamping with no tools required
Humanized operation control, a key to complete the test

Product Information

TNJ-019 Chair Surface Drop & Impact Durability Testing Machine

Use : used for impact testing of all kinds furniture,such as home furniture,Hotel furniture,restaurant furniture etc.Seat Impact Testing Machine simulates furniture in process of daily use and Habits misuse,Test the strength of desktop parts by accidental impact load.

Standard :
EN 581-2 B.2.1.6, EN 1728 ,QB/T2280 BIFMA X5.1-2017

Specifications:
Impact head component weight:25kg

Seat impactor diameter: 200mm

Seat height:30~65cm

Loading times:0~99999times,adjustable

Strength adjust: pressure adjust

Control: PLC,text display

Beams lifting way: Electric lift

Ar supply: Seat surface height kgf/cm^2 or above,customer provides it for himself

Power:1∮ AC 220V 50Hz 5A

Product Information

TNJ-018 Arm Rest Durability Test Machine

Use : This machine use for making test on durability chair arm based BS EN and BIFMA

Standard :
BS EN 1728 , ANSI/BIFMA 5.1 , ANSI/BIFMA 5.4

Technical specifications
This machine needed to be design for making test on arm rest durability chair with apply force on it repeatedly. This machine also needed to fulfill specification based on BS EN 1728 and ANSI/BIFMA 5.1 & 5.4

a.Platform with plywood 25mm flooring & size: 2m x 1.5m
b.Pneumatic cylinder
-2 unit cylinder fixed vertically with adjustable angle outward
-Adjustable height and horizontal distance
-Speed: adjustable (10 to 30 times/min)
-Stroke length: adjustable 600±10mm, measured from the cylinder low friction pivot point to the horizontal surface of arm loading pad
c.Load cell
-Type : compact size, compression, S-type load cell
-Rated capacity: maximum 1000N (250lb)
-Rated output: 3mV/V(maximum)
-Input resistance : 350 ± 50 Ohms
-Output resistance: 350 ± 3.5 Ohms
-Cable : 5mm dia., 4 core and 3 meter length
d.Arm loading pad/ device
-Material: steel

-Shall be allowed to pivot freely during the force application
-Refer to figure for dimensions according to BIFMA and BS EN specifications
e.Control panel / console- to control operation of cylinder. It consists of:
-Power supply : 240 Volts: 13 Amps: 50 Hz
-User interface to set the force required
-Force meter – the meter will indicate the actual force produced by cylinder to the test sample
-ON/OFF switch: to control electrical supply
-Mode selector
To operate 2 cylinder simultaneously or
To operate 1 cylinder only
-6-digits electronic predetermine counter (EPC)
EPC Features:

a. The EPC will register every stroke of the cylinder up to six digits. Will stop the operation to the preset stroke,
b. The EPC will display the number of stroke achieved during the test ,
c. EPC also able to store the number of cycles when the power interruption take place and able to display actual reading and continues counting when operation resumes.
d. The signal shall maintain until the counter is reset

Note: One stroke is counted as one cycle.
-Load sensing setting – to ensure the furniture under test is not overloaded

TNJ-018B Chair Arm Rest Tester

Use : This test machine use for progress an arm rest horizontal static test and durability & arm rest vertical test static and durability based on BIFMA X5.1 and BIFMA X5.4
.

Standard :

a. Arm strength test-vertical-static (ANSI/BIFMA X5.1-2017 , Clause 12)
b. Arm strength test-Horizontal -static (ANSI/BIFMA X5.1-2017 , Clause 13)
c. Arm strength test-Horizontal -static (ANSI/BIFMA X5.4-2012 , Clause 9)
d. Arm Strength test - vertical-static (ANSI/BIFMA X5.4-2012 , Clause 10)
e. Arm Durability test for multiple set units-horizontal-cyclic (ANSI/BIFMA X5.4-2012 , Clause 11)
f. Arm Durability test for multiple set units-horizontal-cyclic (ANSI/BIFMA X5.4-2012 , Clause 12)

Technical specifications

This machine must to be designed for apply load on horizontal (inward & outward) and load on
vertical following time and cycle was decided. This machine need to fulfill minimum needed as follow:

a)Base size : 1.5 m(W) x 2m(L) x 2m(H)

b)Vertical post

– Quantity: 2 units, Height: 1.5m

c)Cross bar -

Quantity: 1 unit, height adjustable (powered)

d)Horizontal force application (strength test)

-One (1) unit pulley system (pneumatic) to pull & push (specific force)
-The arm rest of single or multiple seating chair
-Height adjustable – 500 – 1500mm
-The minimum horizontal distance between pulley and armrest – 30mm (adjustable)

-Timer – 1 minute pulley pull & 1 minute push

e)Vertical force application (strength test)

-Can use the same pulley for horizontal force but the position is under the arm rest to create a vertical force

-The minimum vertical distance between armrest and pulley shall be 30 mm (adjustable)

-Timer – 1 minute vertical downward force

f)Horizontal (outward) force (durability test)

-1 pulley system using cable /strap to apply horizontal force for 50,000 cycles on the arm rest (heavy duty)

-The minimum horizontal distance between pulley and armrest – 30 mm (adjustable)

-Height adjustable – 500-1500mm

-Counter – 6 digit

-Speed – 10- 30 cycle/minute

g)Vertical (downward) force (durability test)

-1 pulley system using cable/strap to apply vertical force for 10,000 cycles on the armrest(heavy duty)

-The minimum vertical distance between pulley and armrest – 30 mm (adjustable)

-Flexible positioning on the platform(under the arm rest)

-Counter

- 6 digit

-Speed - 10-30 cycle / minute

h)Pneumatic cylinder to operate the pulley system

Type of cylinder: Double-acting cylinder

Maximum force: 2000 Newton

Air supply requirement: 6 bar (minimum)

i)Control panel

-ON/OFF button

-LCD display – load meter, speed, cycle, time

-Load sensing setting – to ensure the furniture under test is not overloaded

-Force selector- to select the predetermine force for testing

-Air regulator – air regulator complete with pressure indicator shall be provided

j)Safety feature

-Safety feature shall be installed to stop the operation of machine in case of emergency or when needs arise. This shall result in retraction of pneumatic cylinder and unloading of the test sample. The safety feature shall also able:

-To stop the test machine in the event of test sample failed

-To protect test machine from mechanical damage in event of test sample failed, and the pneumatic cylinder will retract unloading the test sample

-To stop the machine in the event of the interrupted power supply

-To stop the test machine at the end of a predetermined number of cycles/strokes

Product Information

TNJ-017 Chair Seat and Back Strength and Durability Tester

Use : Office Chair Seat Back durability tester is used for testing the strength and durability of office chair. Made of Aluminum material frame, **PLC control**, easy operation; high precision force sensor for the load application.

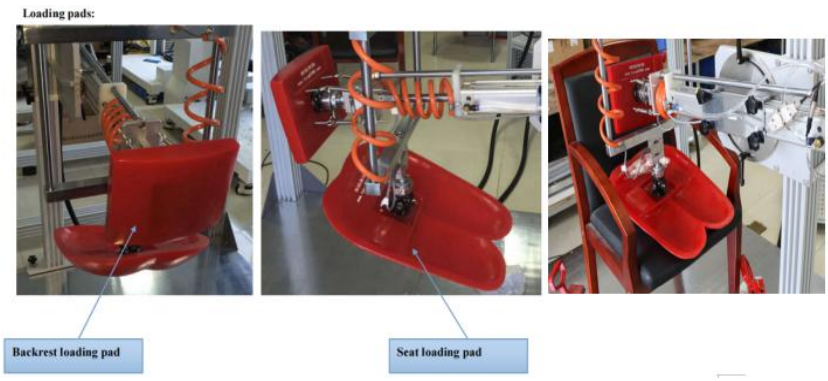
Standard :
BS EN 1728:2012 6.4 Seat static load and back static load test;

BS EN 1728:2012 6.17 Combined seat and back durability test;

BS EN 581-2 B.2.1.1 and B.2.1.2

One seat

Multiple seats



Specifications:

The machine used for testing one(1) unit length chair or three(3) units chair one(1) seater in sentence time.

Load apply was permanent for chair seat following load for chair dock with cycle used to be and needed

fulfill minimum of:-

a) **Frame size :** 2m(D) x 3m(W) x 1.5 (H), shall have removable stops (12 mm thickness) to restrain chair legs

b) **Pneumatic cylinde**r with load cell capacity 1000N (horizontal) & 2000N(vertical)

c) Three(3) horizontal cylinder & Three(3) vertical cylinder – to test multiple seat chair or Three(3) single chair simultaneously

d) Mechanism – a specified vertical load is applied first to the seat and the load is maintained when horizontal load is applied. The force shall be maintained for 10±2 s or 2±1 s (adjustable). This constitutes one cycle.

e) Adjustable horizontal load orientation (90˚ to the chair backrest)

f) Adjustable height (500-1000m) and horizontal distance between 2 set cylinders

g) Loading pad – attached to the cylinder and can pivot freely

- Three(3) units seat loading pad – attached to the vertical cylinder (refer attachment)
- Three(3) units back loading pad – attached to the horizontal cylinder (refer attachment)

h) Cylinder operation selector

- To operate all cylinder set (vertical & horizontal) to test 1 seat & back only
- To operate individual cylinder set (vertical & horizontal) to test one(1) seat & back only
- To operate vertical or horizontal cylinder only

i) Electronic predetermined counter (EPC) – six(6) digit counter to stroke the cylinder up to 200,000 cycles

j) Compressed air:- ±6kg/m²

k) Single phase AC220V

l) Speed: adjustable (10-20 cycle/minute)

Apparatus structure: This tester uses aluminum alloy frame, iron and aluminum plates for the structure manufacturing. Motor part has a air cylinder operation with electronic components for operation.

Spare Parts:1. Distribution box with aluminum alloy frame x 1
2. Portable magnetic sucker x 4
3. Loading pad x 2

Product Information

TNJ-006 Chair Backward Durability Tester

Use : Evaluate durability of the chair with backward function under the loading status.

Standard :
ANSI/BIFMA X5.1-2017 ,EN 1335: 2000

Specifications

This machine need to fulfill minimum as follow for apply load was decided on backrest following cycle or time decided:

a)One pneumatic cylinder with load cell capacity 2000N

b)Adjustable load direction (90˚to the chair backrest)

c)Form- fitting load distribution device which distributes a force over a 305±13mm x 70 ± 32mm (12±0.5” 2.75”± 1.25”) area of the chair backrest

d)Two(2) operation mode:

-Electronic predetermined counter (EPC) – 6 digit counter to stroke the cylinder up to 120,000 cycles

-Timer – to apply and release the force after One (1) minute. Compress air: ±6kg/m²

e)PLC programming code supplied

f)Single phase AC220V

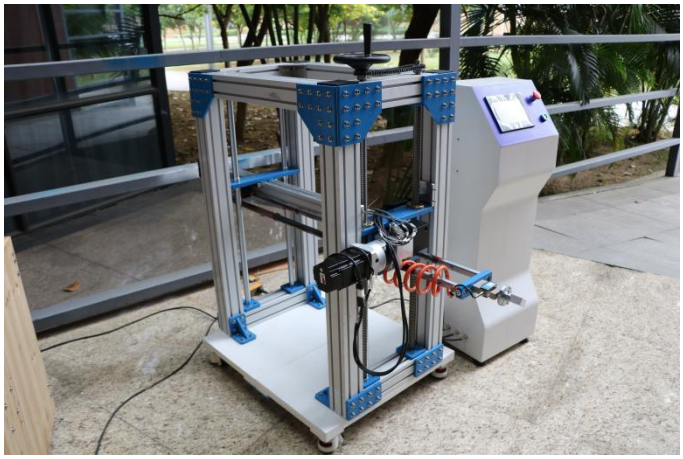
g)Speed: adjustable (10-30 cycle/minute)

Product Information

TNJ-005 Drawer Durability Furniture Testing Machine

Use : Designed to test drawers, desks, cabinets and wardrobe.

Standard :
ANSI BIFMA X5.1.15/16 Backrest Durability Test,
EN 1335:2000,
QB/T2280-2007



Specifications

Drawer size: 150-1300mm/adjustable

Loading: 0-100N, overloading shutdown can be set

Speed: 0.3—2m/s

Test Stroke absolute error: ≤±0.25m

Stroke Control range: 0.05—99.9km degree0.25m

Measure time absolute error: 0.1secs

The parameters above can be adjusted according to customer’s requirement,such as the damage range,stroke,time to shutdown. Etc.

Machine Size (L*W*H): 800*600*1200mm

Product Information

TNJ-004 Chair Base Caster Durability Tester

Use : To evaluate the ability of chair base and casters to withstand fatigue stresses and wear caused by moving the chair back and forth .

Standard :
BIFMA X5.1-2011 17 Caster/Chair Base Durability Test-Cyclic

Specifications

Test bed size : 85x160cm

Test speed :10± 2/min
Test stroke :≥ 762mm
Load : 102kg± 1g
Blocks : thickness 3.2mm, width 51mm, edge blend 3 pcs
Test times barrier: 2000 times;
Barrier free: 98000 times
Counting : 0~999 999 adjustable
Control mode : PLC+TEXT screen control
Size(WxDxH) Test machine: 270x85x129cm;
Weight(Kg) : 500kg
Air supply : 7kgf/cm^2 and above stable gas source
Power: 1 AC 220V 3

Product Information

TNJ - 003 Chair legs pressure-resistant tester

Use : Chair Legs Pressure-resistant Tester is used to test the Office Chair supports five claws,by vertical pressure to test compressive strength of five claws.

Standard :
ANSI BIFMA X5.1 Leg strength Test - Front and Side

Specifications

Capacity: 2000N
Max stroke:700mm.
Accuracy of force to display: 0.1 units
Accuracy of force: indicating value ±0.05%.
Accuracy of shift: 0.01mm
Accuracy of force to display: indicating value ±0.01%
Special fixture : uses to fix five claws.
Accessories : lenovo computers and HP printer.

Test compressive strength of the Office Chair claws.Control the quality of products.Find the position of defect.Provide a reference for improvement.

Product Information

TNJ-002 Table desk testing machine for furniture mechanics

Use : This machine use for horizontal static test & durability test, vertical static & durability test on table base on BS EN 1730:2012

Test items for tables:

BS EN 1730: 2012 Domestic Furniture - Tables Test Methods for Determination of Strength Durability and Stability

Standard :

BS EN12521 ; BS EN 1730: 2012 ; BS EN1728:2012

1)Quantity required : Two(2) unit – BS EN

2)Technical specifications

This machine use for progression of horizontal test and vertical on table with variable size. It is need to fulfill minimum needed as follow:

a)Type of cylinder: Double-acting cylinder

b)Maximum force: 2000 Newton

c)4 cylinder horizontal:

-For apply load on base side table from four(4) directions

-Adjustable height & position with following size, shape and table height
-Mode operation:
1,2 – alternate
3,4 – alternate
1,3,2,4 – alternate
-Stroke length: 500mm
d)One(1) vertical cylinder:
-For apply load vertical on top table
e)Working area; (3 x 2 x 1.8) m
f)Voltage : single phase AC 220V, 50/60Hz
g)Compress air : 6 kg/cm²
h)Loading pad – attached to each cylinder, 100mm radius
i)Control panel
-ON/OFF button
-Load display
-Cycle display- 6 digit
-Force holding time :10s ±2s (strength test)/ 2s±1 s(durability test)
j)Mode operation
-Manual – can operate individual cylinder
-Automatic – as above

competitive features

1.Europe standard aluminum profile
(Thickness and strength 5 times higher than industry)
2. U.S.-origin high-precision force sensors
3. Ades a cylinder
4. Portable magnet retainer
5. Customize the 1 to 1 load block to standard

Product Information

TNJ-002B Chair Universal Test Machine

Use:Tester chairs is used to test the strength and durability of each part of furniture through each part of furniture is under one-off or repetitive load in the normal use or wrong use condition.It is used for testing the mechanical performance of all kinds of chairs.

Standards
i) Seat and back static/durability test--EN1728:2012 6.4/ 6.17
ii) Seat front edge static test--EN1728:2012 6.5
iii) Armrest upward and downward static test--EN1728:2012 6.13/6.11
iv) Legs forward/sideways static test--EN1728:2012 6.15/6.16
v) Back impact test--EN1728:2012 6.25
vi) Seat impact test--EN1728:2012 6.24

Quantity required:-
One (1)-unit – **BS EN 1728:2012**

Technical specifications:-
>Need of 5 type different testing station and needed fulfill minimum of specifications:-
1) Dimension machine frame: (2700 X 1990 X 2300) mm
2) Power supply: Single Phase, Ac220V
3) Having 5 testing station:-
I) Seat and back static/durability & seat front edge static tester
a) Pneumatic cylinder with load cell capacity 1000N (horizontal) & 2000N (Vertical)

b) 1 horizontal cylinder and 1 vertical cylinder
c) Mechanism – a specified vertical load is applied first to seat and the load is maintained
when the horizontal is applied
d) Adjustable load direction (90˚ to the chair backrest)
e) Adjustable height
f) Loading pad- attached to the cylinder and can pivot freely
- Seat loading pad- attached to the vertical cylinder (refer attachment)
- Back loading pad – attached to the horizontal cylinder (refer attachment)
g) Electronic predetermined counter (EPC) – 6 digit counter to stroke the cylinder up to 200,000 cycles
h) Compressed air: ±6kg/m²
i) Plc programming code available
j) Single phase AC 220V
k) Speed: adjustable (10 – 20 cycle/minute)

II) Armrest Upward and Downward Static Tester

a) Consist of 2 cylinders. Both cylinder can be set to:-
- Vertical position with adjustable horizontal distance (up to 1m)
- To apply vertical downward force (up to 900N) on the arm rest and to lift the chair off the platform.
b) The height is adjustable up to 1m
c) Loading pad attached to the cylinder: removable, 100mm diameter , 50 mm thickness, 12mm radius rounded edges & flat surface.
d) Three (3) operation mode:
- Mode 1: operate 1st cylinder only (for chair with one sided armrest)
- Mode 2: operate 2nd cylinder only(for chair with one sided armrest)
- Mode 3: operated both cylinder simultaneously
e) Force shall be maintained for 10±2 s

III) Legs Forward/Sideways Static Tester

a) Consists of 1 cylinder which can be set to the horizontal and vertical position
b) Load cell: capacity 1000N
c) The height is adjustable up to 1m
d) Loading pad attached to the cylinder : 100mm diameter,50 mm thickness, 12 radius rounded edges and flat surface
e) Force application: 10 times, maintained for 10±2s

IV) Back/Arm Impact Tester

a) Impact hammer
- Hanging and pivoting pendulum hammer for free fall
- Height adjustable (300-1000mm)
- Construction – refer attachment
b) Height measurement scale
- Floor standing and mobile
- Range: 1.5m
c) Rubber mat
- Size: 1.5 x 1.5 x 0.002 m

- Hardness: (85±10) IRHD according to ISO7619-2:2010, tested by accredited lab

V) Seat Impact tester

a) Pneumatic cylinder

- To hold , release and raise the impactor
- Height: adjustable height up to 2m from the floor
- Attached to the impactor and allow the impactor to fall freely on the test surface at height up to 300 mm (adjustable)

b) Impactor - refer attachment

>>> Additional component

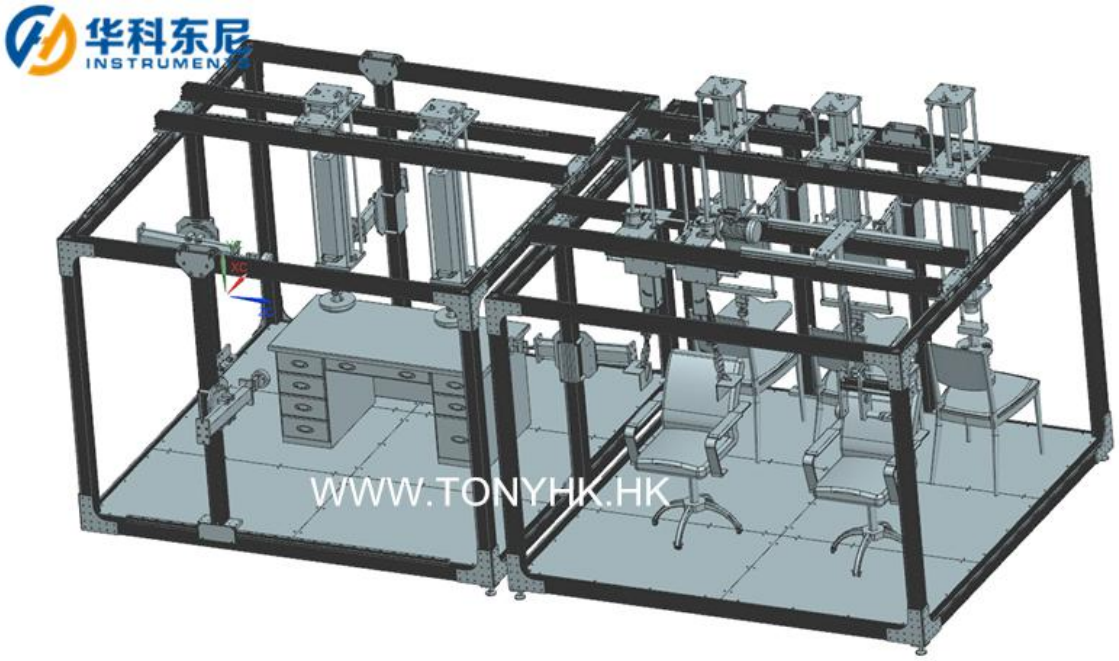
- Having ‘connectors’ on control panel for ease integration
- Stopper 12mm thickness

TNJ-001 Best Furniture Universal Testing Machine

Use :This machine based on BIFMA X5.1, BIFMA X5.4 & BIFMA X5.9:
-Chair – vertical backrest, tablet, foot rest, arm durability for multi seating, structural durability
-Cabinet- leg/glide assembly strength test

Standard :

1. **BIFMA X5.1 , BIFMA X5.9**
   - Chair -Vertical backrest , tablet , foot , rest, arm , durability for multi-seating, structural durability , dan tilting durability .
   - Cabinet - leg/glide assembly strength test
2. **BS EN 1728 , BSEN 1725 , BS 1730**
   - Chairs , Desk ,Bed .



Technical specifications
This machine use for apply load on vertical and horizontal on chair and cabinet with variety size. It is need to fulfill minimum needed as follow:
a)Frame
-6 vertical post – 4 fixed, 2 adjustable position along the frame length (3m) to hold horizontal cylinder
-5 horizontal cross bar – 4 fixed, 1 adjustable position along the frame length (3m) and height (2m) to hold vertical cylinder,
-Adjustable position& height
b)Size: 2m x 3m x 2m(H)
c)Type of cylinder: double-acting cylinder

d)Maximum force:2000Newton
e)One(1) unit horizontal Cylinder:
-To apply a horizontal force for tilting and legs/glide tests
-Attached to the pulley system (adjustable & removable)
-Adjustable height (500-1800mm) & horizontal position (along the frame length, 3m)
-Stroke length :500mm
f)1 unit vertical cylinder:
-To apply a vertical force for back rest, tablet and arm rest tests
-Adjustable position along the cross bar (2m)
-Stroke length: 500mm
g)Voltage : single phase AC 220V, 50/60Hz
h)Compress air : 6 kg /cm²
i)Control panel
-ON/OFF button
- Load display
-Cycle display- 6 digit
-Force holding time: one(1) minute (strength test)

Test items:

(BIFMA) APPLICABLE TEST	CLAUSE
Seating durability tests -Front corner load ease only	ANSI/BIFMA X5.1-2017, clause 10.4
Tilt mechanism test -Cyclic	ANSI/BIFMA X5.1-2017, clause 9
Leg strength test-Front and side application	ANSI/BIFMA X5.1-2017, clause 17
Tablet arm chair static load test	ANSI/BIFMA X5.1-2017, clause 22
Table arm chair load ease test	ANSI/BIFMA X5.1-2017, clause 23
Leg/glide assembly strength test	ANSI/BIFMA X5.9-2012, clause 5
Top load ease cycle test	ANSI/BIFMA X5.9-2012, clause 7.1
Top load ease cycle test	ANSI/BIFMA X5.5-2014, clause 6
Leg strength test	ANSI/BIFMA X5.5-2014, clause 8
Tilting table top -Cycle test	ANSI/BIFMA X5.5-2014, clause 20

Satu (1) unit mesin hendaklah direkabentuk mengikut keperluan ujian berikut:

(BS EN)	
Vertical static load test & durability test	BS EN 1730:2012, clause 6.3&6.5
Static test & durability test	BS EN 1725:1998, clause 7.3,7.5,7.6&7.7
Leg sideways & leg forward	BS EN 1728:2012,clause 6.15&6.16

Product Information

TNJ-001B Durability Test On Bed Frame , Base And Fastening

Purpose of equipment

This machine test is use for bed frame fastening durability, bed base and edge durability for single bed
and double decker bed with following BS EN

Standard :

- vertical impact test (BS EN 1725:1998,Clause 7.4)
- Durability test on bed base (BS EN 1725:1998,Clause 7.4& BS EN 747-2:2012+A1 :2015 ,clause 5.4.5)
- Durability of treads (BS EN 747-2:2012+A1:2015, Clause 5.6.3)
- Durability test on frame and fastening (BS EN 747-2: 2012+A1 : 2015, Clause 5.5)
- Static load test of safety barriers (BS EN 747-2: 2012+ A1: 2015,clause 5.4.2)
- Vertical static load on treads (BS EN 747-2:2012 + A1 :2015, clause 5.6.1)
- Horizontal static load on treads (BS EN 747-2:2012+ A1: 2015, clause 5.6.2)
- Vertical static load (BS EN 1725: 1998 , Clause 7.6)

Quantity required

One(1) unit – BS EN1725:1998 & EN 747-2:2012:A1:2015

Technical specifications

This machine need to be designed that can able to handle vertical load and horizontal load apply to
single bed or double decker bed and need to fulfill needed at minimum as follow:
a) Size frame : 4m (W) x 2.5m (L) x 3m (H)
b)Cylinder
-Pneumatic double acting cylinder

-Four (4) horizontal cylinder-For frame fastening (EN747) test
-Two (2) vertical cylinder- for bed base/edge durability test
-Adjustable position – height (500-2500 mm from the platform), horizontal distance (adjustable along
the frame perimeter)
c)Loading pad (spec En 1728)
-4 X Local loading pad- 100 mm diameter attached to the horizontal cylinder
-2 X seat loading pad – attached to the vertical cylinder (bed edge test)
-2 X smaller loading pad- 200 mm diameter attached to the vertical cylinder (bed base test)
d)One(1) impact tester – for impact test (spec En1728) research
e)Timer
–
to apply and hold the vertical force for One(1) minute
f)Cycle
–
1-100000 (6-digit)
g)Air source 7kg/cm²
h)PLC programmable color controller, touch screen interface, program coding supplied

EN1728 Impactor:

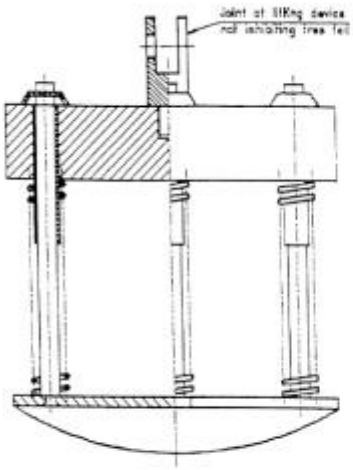


Figure 5 — Impactor

4)Features :

Our furniture instrument competitive features :
1.European standard aluminum profile
(Thickness and strength 5 times higher than industry)
2. U.S.-origin high-precision force sensors
3. Ades a cylinder
4. Portable magnet retainer
5. Customize the 1 to 1 load block to standard

Product Information

TNJ-019 Impact Tester - Durability on chair seat, table, and bed

1) **Purpose of equipment**

Tester machine for durability on chair seat, table, and bed based on BS EN

2)**Standard :**

- Seat impact test (BS EN 1728:2012,Clause 6.24)
- Vertical impact test (BS EN 1730:2012, clause 6.6)
- Impact test on bed base (BS EN 747-2:2012+ A1: 2015, clause 5.4.4)
- Vertical impact test (BS EN 1725: 1998 , Clause 7.4)

2)Quantity required

One(1) unit- standard BS EN

3)Technical specifications

a.Vertical post and cross bar

-To hold cylinder/impactor

b.Pneumatic cylinder

-To hold, release and raise the impactor

-Height: Adjustable height up to 300mm (adjustable)

c.Impactor consists of (refer attachment):

-Circular body –200 mm in diameter, separated from the striking surface by helical compression springs
and free to move relative to it on a line perpendicular to the plane of the central area of the striking
surface. The body and associated parts minus the springs shall have a mass of (17±0.1) kg and the whole

apparatus including mass, springs and striking surface shall have a mass of (25±0.1) kg.

-Spring – the nominal spring rate of the combined spring system is (7±2) N/mm and the total friction
resistance of the moving parts is less than 1 N. The spring system shall be compressed to an initial
force of (1040±5) N(measured statistically) and the amount of spring compression point to the point where the
springs become fully closed shall be not less than 60 mm.

-Striking surface- shall be a rigid circular object, 200 mm in diameter, the face of which has a convex
spherical curvature of 300 mm radius with a 12 mm front edge radius
d.On/Off switch, machine can be operated manually

EN1728 Impactor:

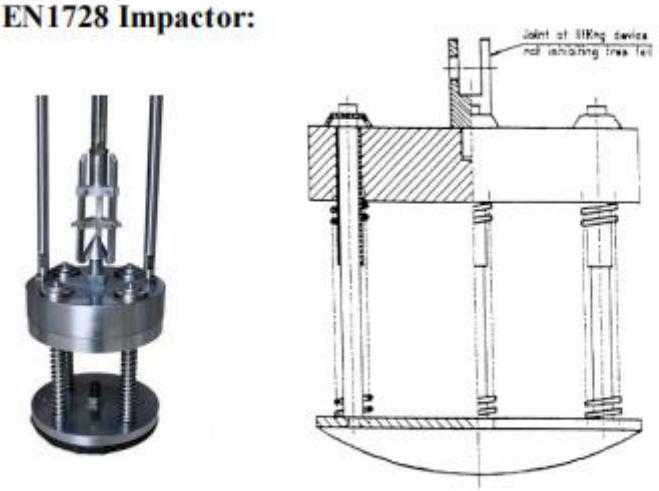


Figure 5 — Impactor

Product Information

TNJ-021 Furniture Horizontal Swing Pendulum Impact Tester

Use : Machine use for testing horizontal impacts on table and storage with different size.

Standard :

table with base ANSI/BIFMA X5.5-2014,

storage base on ANSI/BIFMA X5.9

specifications

a.Machine structure

1)Machine base
Base Frame: size, 1500mm x 1500mm
Material: mild steel, 15mm thickness Portable
2)Vertical post units
Materials: GI, 100mm x 50 mm (rectangular hollow)
Height: 2500mm
3)Cross arm 2 units –with a hook device to hold a swing bag
Materials: GI, 100mm x 50mm (rectangular Hollow)
Length : 1500mm

b.Control panel/console

1)Power supply: 240volts, 13 Amps, 50 Hz
2)ON/OFF switch: to control electric supply
3)UP/Down switch: to control cross arm movement

c.Construction

1) Machine base
Vertical post shall be securely welded to the machine base
Supply with wheel for portable purpose- can be locked
2) Cross arm
Adjustment of height (Y-axis) by motorized to maximum 2500mm
Attach with hook device at the center for hanging purpose
Control panel:It can be part of the machine bur shall not obstruct the operation of the machine

Product Information

TNJ-026 Cupboard Door Hinge Durability Tester

Use: Link the furniture contains hinge with this tester,simulate in process of repeating open and close the sliding door in daily use.Repeat it after a certain numbers,evaluate the hinge whether exists damage or other effect of using.
It Can be used in installed products to test, connect various sliding door and side direction firmly, no producing any acting force to effect the testing.

Standards: QB/T 2189 , ANSI/ BIFMA X5.9 , ANSI/BIFMA X5.5 -2014，
BSEN 1622-2012

Specifications:

Power	1 ∮ AC 220V 50Hz 3A
Open Angle	90-120degree
Counter	0-9,99999
Air supply	7kgf/cm^2or above stable air
Weight	≈85Kg
Dimension(W*D*H)	150x100x160cm
Test speed	10~18times/min adjustable
Cylinder stroke	800mm
Beam Max.height	1200mm

3)Technical specifications

ØThis machine use for open and close cabinet door and must to fulfill minimum needed as follow:

a.Power supply: single phase AC 220V.1KW

b.Compress air – 6 kg/cm²

c.AC motor – to control the height from 250- 1000mm

d.Pneumatic cylinder

-Double acting cylinder with magnetic switch

-Have a fixture to hold the door handle and open/close the door up to130˚

e.Control panel/ console consists of:

·ON/OFF switch button

·6-digits Electronic Predetermine Counter (EPC)

-The EPC will register every stroke of the cylinder up to six digits,

-Will stop the test operation to the preset stroke,

-The EPC will display the number of stroke achieved during the test,

-EPC also able to store the number of cycles when the power interruption take place and able to display the actual reading and continues counting when operation resumes

-The signal shall maintain until the counter is reset

Note: one stroke is counted as one cycle

Product Information

TNJ-031 Climate Formaldehyde for Wood-based Panel Test Chamber

Use : The formaldehyde test chamber for all kinds of weather board, composite wood flooring and carpet, carpet padding and carpet adhesives and other interior decoration materials, the determination of formaldehyde emission, wood or wood-based panel of constant temperature and humidity balanced.

Standard :
GB18580-2001 GB18587-2001

specifications

Box volume : 1 stere

Box temperature range: (℃) : 10~50, the error is smaller than in 0.5

Box the humidity scope : 30%~80%, accuracy: ±3%

Air interchange rate : (1/h) (1±0.05)

Air speed of flow (m/s) : 0.1 ~0.3 adjustable

Sampling instrument pumping capacity (L/min) : 0.8~2.5 adjustable, accuracy: ±1.5%

Product Information

TNJ-028 Foam Dynamic Repeated Indentation Fatigue Tester

Use: This instrument is used to test the loss in thickness and loss in hardness of flexible cellular materials intended for use in upholstery.

Standards:
ASTM D3574-Test I3 dynamic fatigue test by constant force pounding .
ISO 3385 (Flexible cellular polymeric materials — Determination of fatigue by constant-load pounding).

Specifications:
Test speed: 70±5 r/min
Test Cycles: 80 000
Upper Platen Dia:Φ250mm， Lower edge border-radius:R25mm
Lower plate 420mm*420mm,
Air hole diameter: 6.5mm; Hole center gap: 20mm;
Travel: 0~50mm
Sample load: 750±20N
Specimen size:
(380±20)mmx(380±20)mmx(50±2)mm
Timer: 0~999 999
Size(WxDxH):
64x52x70cm
Weight: approx 150Kg
Power: 1∮ AC 220V 50Hz 3Aa

Company Profile

Dongguan Hust Tony Instruments(HTI) is located in high & new tech development zone,Songshan Lake, Dongguan City.Also **Tony International (HK) Co.,Ltd** is our private-owned cooperation in HK.

By supporting from Mechanical CNC and Software R&D core team of DG-HUST Manufacturing engineering institute . HTI specializes in producing and R&D for furniture testing machine,textile testing machine,toys testing equipment, Vehicle Testing Equipment. Continue the advanced design technology and concept, excellent technology of producing and outstanding system of quality management, HTI aims at "manufacture carefully, service by heart" ,devoting the best products, counseling and service to schools, manufacturing enterprise,and third party testing industry.

Up to today HIT products spread to countrywide users.We take pride in having a long list of satisfied customers, who always look up to us for their various requirements. Most of our customers are satisfied from our products and services and as a result of which, we are getting repeat orders. Some of our important customers,

Include:
SGS in France,SGS in Vietnam, SGS in China,SGS in Korea,Intertek in China,SAT in China,BACL in Shenzhen, NSF in
Shanghai, ITS,BV,TUV etc
The quality proves value, the effort brings success
What you concerning is we are struggling all the time.....