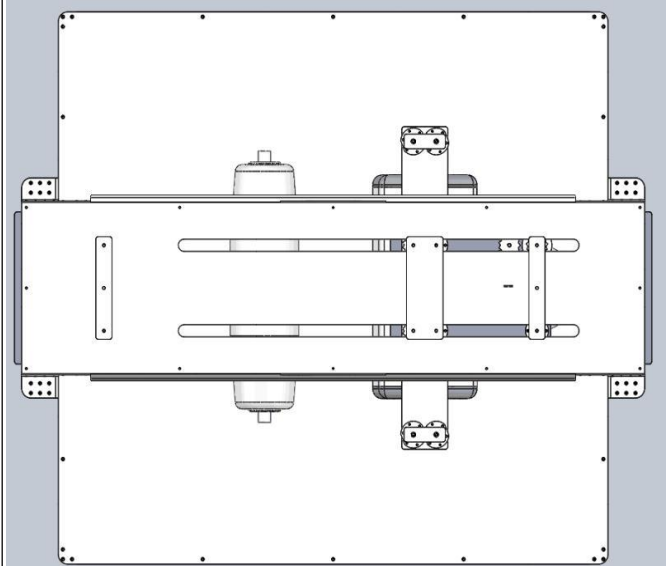
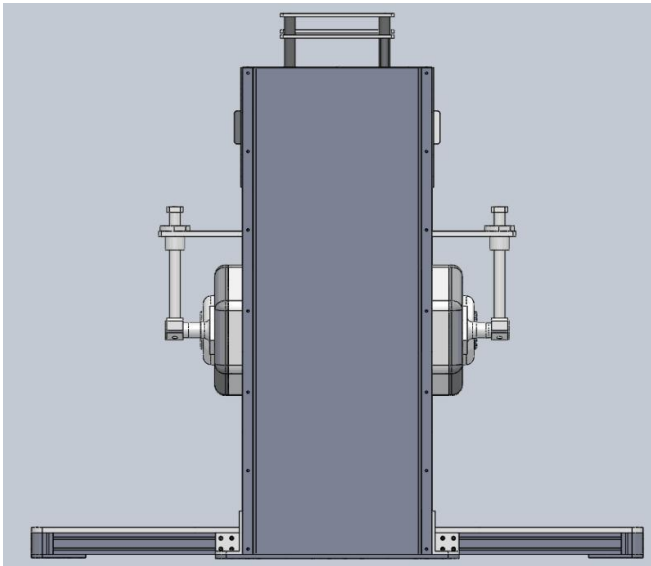
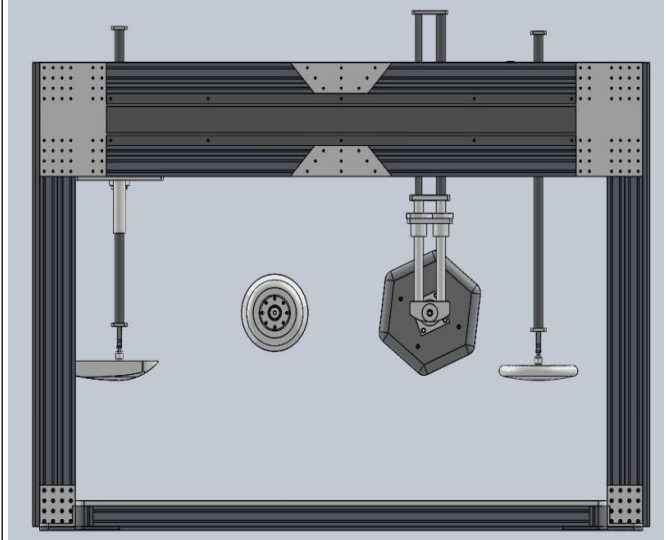
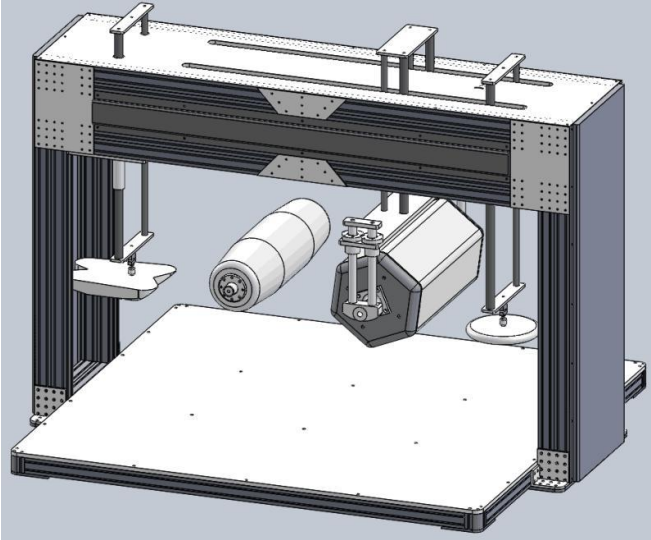


Product Model: ZL-2017

Mattress Comprehensive Testing Machine



(3D model)





1. Product description: Suitable for a variety of mattress durability test test, vertical downward force test test, height measurement test, mattress comprehensive tester.

2. Meet the standards: QB/T 1952.2-2011, ASTM F 1566 and EN 1957 requirements.

3. Product use: The mattress rolling durability test is a machine designed to simulate the constant rolling of human sleep, and the durability of the mattress edge. Mainly to test the durability of the edges of the mattress to meet the requirements of various mattress manufacturers and standards. It is used to determine the quality and service life of the mattress, and strictly abide by the requirements of the national standard for mechanical testing. Suitable for strong spring mattresses, ordinary spring mattresses, foam mattresses, palm fiber elastic mattresses, etc.

4. Loading test: Use the rolling durability tester to test. Before the test, adjust the roller device to be at the center line of the loading area, and the drive device to apply force in the horizontal direction. The roller is within 250mm from the center line of the mattress on both sides of the area. Perform reciprocating motion along the vertical direction of the central axis, each load including one reciprocation. During the test, proper methods should be used to fix the mattress to prevent the mattress from moving.

5. Technical parameters:

- ◆1) Controller: Fully computerized control
- ◆2) Length of round drum: 1000mm
- ◆3) Weight of round drum: 1400N
- ◆4) Diameter of round drum: 300mm
- ◆5) Scrolling speed: 20±2 times/min
- ◆6) The accuracy of the force measuring device is not less than 1%, the accuracy of the size device is not less than 1mm, and the position deviation of the loading block is ±5mm
- ◆7) Control method: full computer control
- ◆8) Monitoring mode: buzzer alarm, indicator light flashes
- ◆9) Operating accuracy: ±0.2mm
- ◆10) Drum material: electrical wood material
- ◆11) Motor: Japan Panasonic servo motor
- ◆12) Appearance: paint treatment and aluminum alloy structure anode treatment
- ◆13) Test table material: stainless steel
- ◆14) The height of the test table from the ground: 500mm
- ◆15) Tested mattress size: 2200*2000mm (length * width)
- ◆16) Height test: Place the mattress horizontally on the flat board, pass the circular pad at the measuring position, and apply a force of 4N vertically downward at a speed of (100±20) mm/min. At this time, the circular pad Measure the distance between the bottom surface and the plate as the height of the mattress storefront HD
- ◆17) Power supply and power: AC220V 50HZ single phase. About 2.2KW

6. Test device:

The rolling durability test is mainly composed of a roller and a driving device. The roller can be opposed to the surface of the mattress.

When moving horizontally, the surface of the cylinder should be hard, smooth, free from scratches and other surface defects. The durability testing machine should be in static

In this state, the roller can exert a force of 1400±7N on the surface of the mattress, and the roller can rotate freely around its central axis and maintain balance. During the rotation, the roller sticks to the surface of the mattress, and cyclically rolls and applies force in the specified area.

It can float up and down on the surface of the mattress and the rolling deformation of the

mattress, and its loading frequency should be 16 ± 2 times/min.

7. The main technical specifications for testing the height of the cushion surface:

- 1) Measuring pad: the measuring surface is a flat and smooth rigid cylinder.
- 2) Measure the diameter of the cushion block: 100mm, and the chamfer is R10.
- 3) The speed of applying force to the pad: 100 ± 20 mm/min.
- 4) Vertical downward force: Apply 4N force, at this time, the distance between the bottom surface of the circular cushion and the flat plate is the height of the cushion surface of the mattress.
- 5) Measuring height: the initial cushion surface height of the mattress is tested for 100 times. After 29,900 endurance tests, the cushion surface height is measured separately.

8. Instrument features:

- 1) Data protection: automatically save when power off (data can be saved automatically after power off).
- 2) Touch screen control: data display, powerful and intelligent.
- 3) The edge durability test part adopts a cantilever mechanical structure and uses pneumatic loading transmission parts to improve the machine
The mechanical strength and rigidity increase the service life and the accuracy of the detection data, and effectively reduce the operating noise.
- 4) Perfect structure design, low energy and low noise.

Parts List:

- 1、 Control method: PLC programmable control(7 Inch)
- 2、 Test itinerary: ASTM 1566 Max mattress width, Min 70% of the width of the mattress or 38in (965mm), whichever is smaller value; BS EN 1957 , mattresses around the middle of each 250mm;
- 3、 Left and right rolling distance: 1000mm(Can set the distance)
- 4、 Can test the height of the mattress:50mm---600mm ,adjustable.
- 5、 Test speed: less than 20r / min (adjustable)
- 6、 Voltage: 1 ϕ , AC220V, 3kW

Machine main components:

1. A set of Delta PLC touch screen system
2. Servo motor
3. T-screw
4. Prowe reducer
5. Working indicator
6. Emergency stop switch
7. Push button switch
8. Limit switch
9. Sprockets and chains
10. Other accessories

Packing list

Test host	1 set
Instrument operation manual in Chinese	1 copy
Instrument warranty card	1 copy