

# Martindale Abrasion and Pilling Tester GT-C13B

## **Product** Presentation



## **Application**

Used to determine the abrasion and pilling resistance of all kinds of textile structures. Samples are rubbed against known abradents at low pressures and in continuously changing directions and the amount of abrasion or pilling is compared against standard parameters.



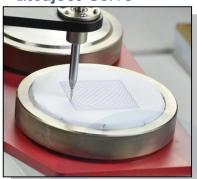
### Feature

- Standard: Lissajous figure.
- Working positions: 4, 6, 8, 9 optional.
- Counting Method: 1) count up. 2) count down.
- The unique design allows removal of individual sample holders for examination without lifting the top motion plate.
- Standard sample holders with 9 and 12kpa weights included.
- PLC, 7 inches color touch screen, Chinese and English operation interface.
- Weights and key components are made up by 316 stainless steel which is well-formed and durable in use.
- To prevent distortion, the top motion plate was special made up by 316 aluminum alloy.





### Lissajous Curve



Machine operation as Lissajous curve.

## Weights



9KP 12KP

#### **Fixtures**



Fixtures for pilling test.

### **Put Sample**



After put sample for abrasion test, put weights according to standards.

#### Neck



Install abrasion test sample, can put fixture here to make it closer.

## **Bearing**



From inside to outside, A, B, C places.
Abrasion test, put bearing to C.

Pilling test, put bearing to B

### Interface



Press "Enter".

### **Accessories box**



Weights 9Kpa
Weights 12Kpa
Pen 1pc
Pilling device
Abrasion device
(Others pls refer to fitting A)





# Key Specification

| Model                 |               | GT-C13B-4   | GT-C13B-6          | GT-C13B-8  | GT-C13B-9  |
|-----------------------|---------------|---|--------------------|------------|------------|
| Working positions     |               | 4   | 6                  | 8          | 9          |
| Control mode          |               | PLC control and touch screen display  |                    |            |            |
| Counter range         |               | 0~99999 times   |                    |            |            |
|                       | Abrasion test | <ul> <li>A) Specimen holder: (198 ±2)g</li> <li>B) Larger loading piece: (597±5)g</li> <li>C) The sum mass: (795± 7)g, for workwear, upholstery, bed linen and fabrics for technical use (nominal pressure of 12kpa)</li> </ul> |                    |            |            |
| Test pressure         |               | A) Specimen holder: (198 ±2)g B) Smaller loading piece: (397±5)g C) The sum mass: (595± 7)g, for apparel and household textiles, excluding upholstery and bed linen (nominal pressure of 9kpa)                                  |                    |            |            |
|                       | Pilling test  | A) Stainless steel loading piece: (155 $\pm$ 1) g<br>B) Specimen holder: (260 $\pm$ 1)g<br>C) The sum mass: (415 $\pm$ 2)g  |                    |            |            |
|                       |               | A) Abrasion Holder : Φ(28.65 ± 0.05)mm  |                    |            |            |
| Holder effective diar | neter         | B) Pilling Holde  | er: Φ(90 ± 0.10)mm |            |            |
| Rotational speed      |               | 50± 2r/min  |                    |            |            |
| Pressing weight       |               | Mass: (2.5 ± 0.5) kg  |                    |            |            |
|                       |               | Diameter: Φ(120 ± 10) mm  |                    |            |            |
| Power supply          |               | AC220V 50/60Hz  |                    |            |            |
| Dimensions(L x W x H) |               | 60×55×41cm  | 88×61×41cm         | 90×62×41cm | 90×62×41cm |
| Weight                |               | 75kg  | 130kg              | 145kg      | 150kg      |

## Standards

Abrasion: GB/T 21196.2, GB/T 13775, ISO 12947, ASTM D4966, IWS TM 112, M & S P19, Next 18, SN 198529, TWC 112, JIS L1096, (ISO17076-2 ball plate method ,optional)

Pilling: GB/T 4802.2, ISO12945-2, ASTM D4970, IWS TM 196, M & S P17, Next TM26, SN 198525



# **Product Details**



## Accessories A

| Abrasion weight and holder                     | 1set                |
|--|---------------------|
| Pilling weight and holder                      | 1set                |
| Standard abradents fabric                      | 2 pcs for each head |
| Standard backing foam 38mm                     | box of 60pcs        |
| Standard woven felt discs 140mm                | 2 pcs for each head |
| Standard woven felt discs 90mm                 | 2 pcs for each head |
| Photographs (copy one)                         | 1set                |
| Sample cutting template (Φ38m , Φ90mm, Φ140mm) | 1pc for each size   |
| Pressing weight                                | 1pc                 |
| Auxiliary device for specimen mounting         | 1pc                 |
| Steel ball                                     | 3pcs                |
| Power line                                     | 1pc                 |

## Accessories B

| EMPA Photographic standards for pilling test (3 x 4 knitted)                                 | Optional |
|--|----------|
| EMPA Photographic standards for pilling test (3 x 4 woven)                                   | Optional |
| SM 50 Photographs for pilling test IWS + ASTM. 4 Sets 1-5 (Plain, Twill A, Twill B, Blanket) | Optional |
| Standard abradents fabric  | Optional |
| Standard backing foam Φ38mm  | Optional |
| Standard woven felt Discs 140mm  | Optional |
| Standard woven felt Discs 90mm   | Optional |
| Sample cutter Ф38mm  | Optional |
| Sample cutter Φ90mm  | Optional |
| Sample cutter Ф140mm   | Optional |
| Ball plate for ISO17076-2  | Optional |

