



# **Comprehensive Abrasion Test**

TB5000 and TB5005



Protecting Product Integrity The Comprehensive Abrasion Test is a universal test machine to test the coating abrasion resistance on beverage cans or flat materials.

The reciprocating motion mimics in-the-field transportation abrasion damage of coatings equivalent to the Gavarti Associates "GV-CAT" system.

#### Application

The Comprehensive Abrasion Test is used in coating test laboratories for quality control work.

#### Standards:

- IEC 61326-1 EMC
- IEC 61340-5-1 ESD
- IEC 61010-1 Safety requirements for electrical equipment
- Directive 2011/65/EU, RoHS2

#### **Features:**

- Test abrasion resistance of coatings
- Reciprocating motion of beverage cans
- Mimics in-the-field transportation damage
- Menu-driven operation
- Spill drawer

#### **Ordering Information:**

#### Article No. Article Description

| TB5000 | Comprehensive Abrasion Test 230 VAC |
|--------|-------------------------------------|
| TB5005 | Comprehensive Abrasion Test 115 VAC |

#### Scope Of Supply:

- TQC Comprehensive Abrasion Test + Power cord + User and installation manual
- Laptop computer with Windows 10 + CAT control application + USB cable
- Three sets (60, 80 and 100mm) of two side plate assembly + top pressure plate assembly + bottom can carrier plate
- 5 m air tube Ø6mm + 4 mm hexagonal wrench
  + can positioning bar

#### Accessories:

### Article No. Article Description

| Alticic No. |   |
|-------------|---|
| TB5282      | Set of two side pressure plates *1assembly for small size cans (height: 60 mm/2.36 inch)  |
| TB5280      | Set of two side pressure plates *1assembly for medium size cans (height: 80mm/3.15 inch)  |
| TB5281      | Set of two side pressure plates *1assembly for large size cans (height: 100mm/3.94 inch)  |
| TB5285      | Top pressure plate *1assembly for all size cans   |
| TB5284      | Bottom can carrier plate *1assembly for all size cans                                     |
| TB5329      | Set of two foam rubber base sheets for use with TB5282 (height: 60mm/2.36inch)            |
| TB5325      | Set of two foam rubber base sheets for use with TB5280 (height: 80mm/3.15inch)            |
| TB5327      | Set of two foam rubber base sheets for use with TB5281 (height: 100mm/3.94inch)           |
| TB5337      | Set of two foam rubber base sheet for use with fabric woven top sheet on TB5284 or TB5285 |
| TB5330      | Set of two fabric woven top sheets for<br>use with TB5282 (height: 60mm/2.36inch)         |
| TB5326      | Set of two fabric woven top sheets for use with TB5280 (height: 80mm/3.15inch)            |
| TB5328      | Set of two fabric woven top sheets for<br>use with TB5281 (height: 100mm/3.94inch)        |
| TB5336      | Set of two fabric woven top sheets for use with TB5284 or TB5285                          |
| TB5334      | Set of two para rubber top sheets for use with TB5282 (height: 60mm/2.36inch)             |
| TB5332      | Set of two para rubber top sheets for<br>use with TB5280 (height: 80mm/3.15inch)          |
| TB5333      | Set of two para rubber top sheets for<br>use with TB5281 (height: 100mm/3.94inch)         |
| TB5331      | Set of two foam rubber base sheets for use with para rubber top sheet on TB5284 or TB5285 |
| TB5335      | Set of two para rubber top sheets for use with TB5284 or TB5285                           |
| TB5283      | Can positioning bar   |
| TB5117      | 5m air tube Ø6mm  |
| VF1811      | 4mm hexagonal wrench  |
| AB5500      | Set of four flat panel test blocks  |
| TB5270      | Set of six custom can inserts, please specify height and diameter                         |

<sup>\*1</sup>Plate assembly with foam rubber base and fabric woven top sheet





#### **Technical Specification:**

| Weight                     | 125kg/276lbs  |
|----------------------------|---|
| Dimensions                 | (WxHxD) 1050x790x760mm/<br>3.44x2.6x2.5ft                             |
| Stroke length              | 0.5 to 2inch  |
| Frequency                  | 0 to 2.5Hz  |
| Ramp up/down time          | 0.25Hz per cycle  |
| Test duration              | 0 to 24 hours   |
| Pressure top cylinder      | 0 to 6 bar/0 to 87 psi  |
| Pressure side<br>cylinders | 0 to 6 bar/0 to 87 psi  |
| Can size                   | 150 to 1000ml<br>5.07 to 33.8fl. oz. (US)<br>5.28 to 35.2fl. oz. (UK) |
| Min/max can height         | 88 to 205mm/3.5 to 8.1inch  |
| Min/max can diameter       | 53 to 84mm/2.1 to 3.3inch   |
| Operating<br>temperature   | 0 to 50°C/32 to 122°F   |
| Operating humidity         | 0 to 90% rH (non-condensing)  |
| Power supply               | 115 VAC o3 230 VAC  |
| Max. power<br>consumption  | 265 Watt  |
| Air supply                 | 8 bar ± 20%   |
| Noise Level                | < 70 dB   |

#### **Special Care:**

- Clean leakage and spill from beverages with hand warm water and if required use a mild soap
- Do not use solvents or chemicals to clean the machine and/or high-pressure wash
- Always clean the instrument after use. Sugar and other ingredients form a sticky or hard layer on the inner components of the machine, which eventually may lead to malfunctioning
- Clean the instrument using a soft dry cloth or moderate moistened towel. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This, like the use of aggressive cleaning agents may cause permanent damage
- Do not use compressed air to clean the instrument
- Make sure that no grinding, liquid or any other material is left behind in the test compartment

#### **Disclaimer:**

The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.





# Annex A – Side Pads Configuration:

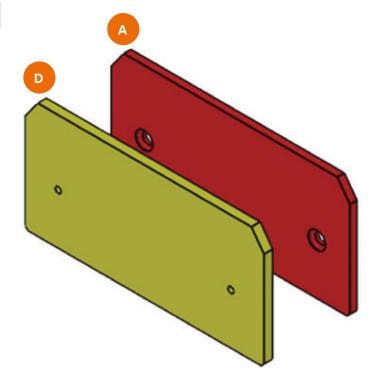
Foam rubber base and fabric woven top sheet:

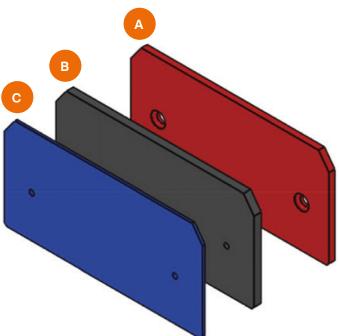
| Α | TB5290 | Height: 60mm/2.36inch  |
|---|--------|------------------------|
| Α | TB5288 | Height: 80mm/3.15inch  |
| Α | TB5289 | Height: 100mm/3.94inch |
| в | TB5329 | Height: 60mm/2.36inch  |
| В | TB5325 | Height: 80mm/3.15inch  |
| в | TB5327 | Height: 100mm/3.94inch |
| С | TB5330 | Height: 60mm/2.36inch  |
| С | TB5326 | Height: 80mm/3.15inch  |
| С | TB5328 | Height: 100mm/3.94inch |

# Annex B – Top And Bottom Pad Configuration:

Para rubber top sheet:

| Α | TB5290 | Height: 60mm/2.36inch  |
|---|--------|------------------------|
| Α | TB5288 | Height: 80mm/3.15inch  |
| Α | TB5289 | Height: 100mm/3.94inch |
| D | TB5334 | Height: 60mm/2.36inch  |
| D | TB5332 | Height: 80mm/3.15inch  |
| D | TB5333 | Height: 100mm/3.94inch |









#### Annex B – Top And Bottom Pad Configuration:

Foam rubber base and fabric woven top sheet:

| E | TB5336 | Set of two fabric woven top sheets for use with bottom-plate or top-plate |
|---|--------|---|
| F | TB5337 | Set of two foam rubber base sheet for use with bottom-plate or top-plate  |
| G | TB5299 | Bottom can carrier plate without sheets                                   |

Para rubber top sheet:

| н | TB5335 | Set of two para rubber top sheets for<br>use with TB5284 or TB5285                              |
|---|--------|---|
| J | TB5331 | Set of two foam rubber base sheets<br>for use with para rubber top sheet on<br>TB5284 or TB5285 |

G TB5299 Bottom can carrier plate without sheets

#### Annex C – Can Inserts:

As can dimensions vary, TQC supplies custom size can inserts for your cans.

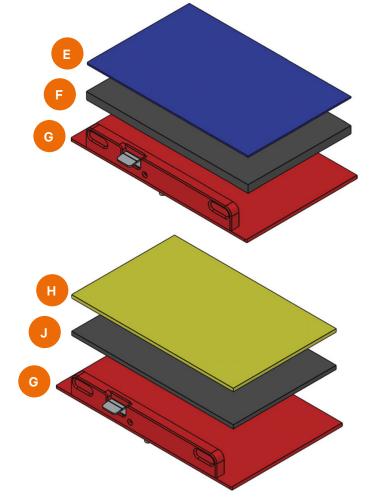
K TB5270 Set of six custom can inserts K

#### **Technical Specification:**

| Diameter: | Please specify |
|-----------|----------------|
| Height:   | Please specify |
| Material: | РОМ            |

To get an exact fit please send us an example of your cans.

This will allow TQC to produce a set of perfect sized can-inserts.







## **Contact Details**

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