

COMPREHENSIVE ABRASION TEST

TB5000 and TB5005

DATASHEET

PRODUCT DESCRIPTION

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

Description
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 100 mm) of two side plate assembly + top pressure plate assembly + bottom can carrier plate
5 m air tube Ø6 mm + 4 mm hexagonal wrench + can positioning bar

ACCESSORIES

Article No.	Article Description
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: 80 mm / 3.15 inch)
TB5281	Set of two side pressure plates *1assembly for large size cans (height: 100 mm / 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: 60 mm / 2.36 inch)
TB5325	Set of two foam rubber base sheets for use with TB5280 (height: 80 mm / 3.15 inch)
TB5327	Set of two foam rubber base sheets for use with TB5281 (height: 100 mm / 3.94 inch)
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 use with TB5282 (height: 60 mm / 2.36 inch)
TB5326	Set of two fabric woven top sheets for use with TB5280 (height: 80 mm / 3.15 inch)
TB5328	Set of two fabric woven top sheets for use with TB5281 (height: 100 mm / 3.94 inch)
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: 60 mm / 2.36 inch)
TB5332	Set of two para rubber top sheets for use with TB5280 (height: 80 mm / 3.15 inch)
TB5333	Set of two para rubber top sheets for use with TB5281 (height: 100 mm / 3.94 inch)
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	5 m air tube Ø6 mm
VF1811	4 mm hexagonal wrench
AB5500	Set of four flat panel test blocks
TB5270	Set of six custom can inserts, please specify height and diameter

*1Plate assembly with foam rubber base and fabric woven top sheet

SPECIFICATIONS

Weight	125 kg / 276 lbs
Dimensions (w x h x d)	1050 x 790 x 760 mm / 3.44 x 2.6 x 2.5 ft
Stroke length	0.5 to 2 inch
Frequency	0 to 2.5 Hz
Ramp up/down time	0.25 Hz per cycle
Test duration	0 to 24 hours
Pressure top cylinder	0 to 6 bar / 0 to 87 psi
Pressure side cylinders	0 to 6 bar / 0 to 87 psi
Can size	150 to 1000 ml / 5.07 to 33.8 fl. oz. (US) / 5.28 to 35.2 fl. oz. (UK)
Min / max can height	88 to 205 mm / 3.5 to 8.1 inch
Min / max can diameter	53 to 84 mm / 2.1 to 3.3 inch
Operating temperature	0 to 50 °C / 32 to 122 °F
Operating humidity	0 to 90% rH (non-condensing)
Power supply	100 to 240 VAC, 50 to 60 Hz
Max. power 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.

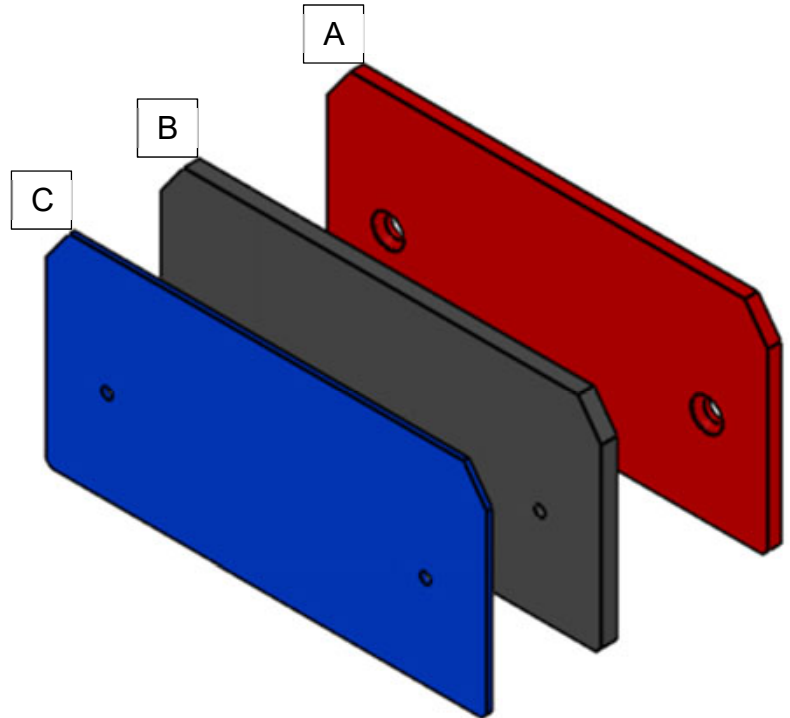
ANNEX A – SIDE PADS CONFIGURATION

Foam rubber base and fabric woven top sheet:

A	TB5290	height: 60 mm / 2.36 inch
A	TB5288	height: 80 mm / 3.15 inch
A	TB5289	height: 100 mm / 3.94 inch

B	TB5329	height: 60 mm / 2.36 inch
B	TB5325	height: 80 mm / 3.15 inch
B	TB5327	height: 100 mm / 3.94 inch

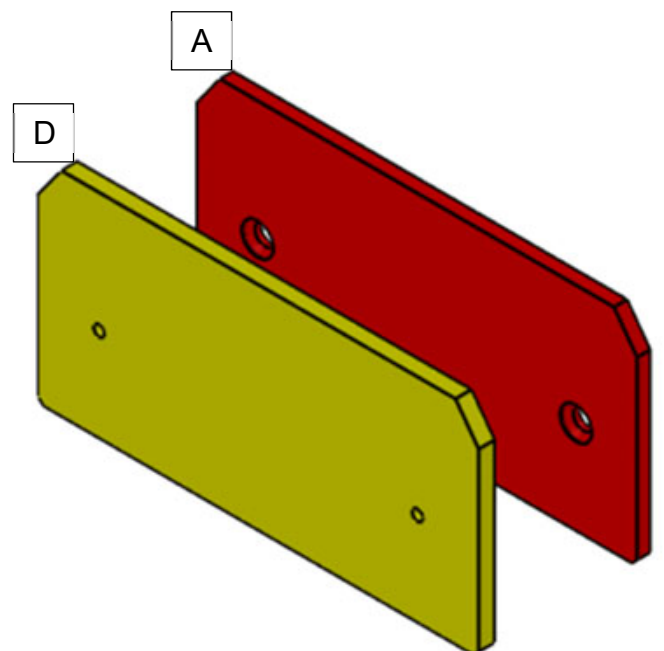
C	TB5330	height: 60 mm / 2.36 inch
C	TB5326	height: 80 mm / 3.15 inch
C	TB5328	height: 100 mm / 3.94 inch



A	TB5290	height: 60 mm / 2.36 inch
A	TB5288	height: 80 mm / 3.15 inch
A	TB5289	height: 100 mm / 3.94 inch

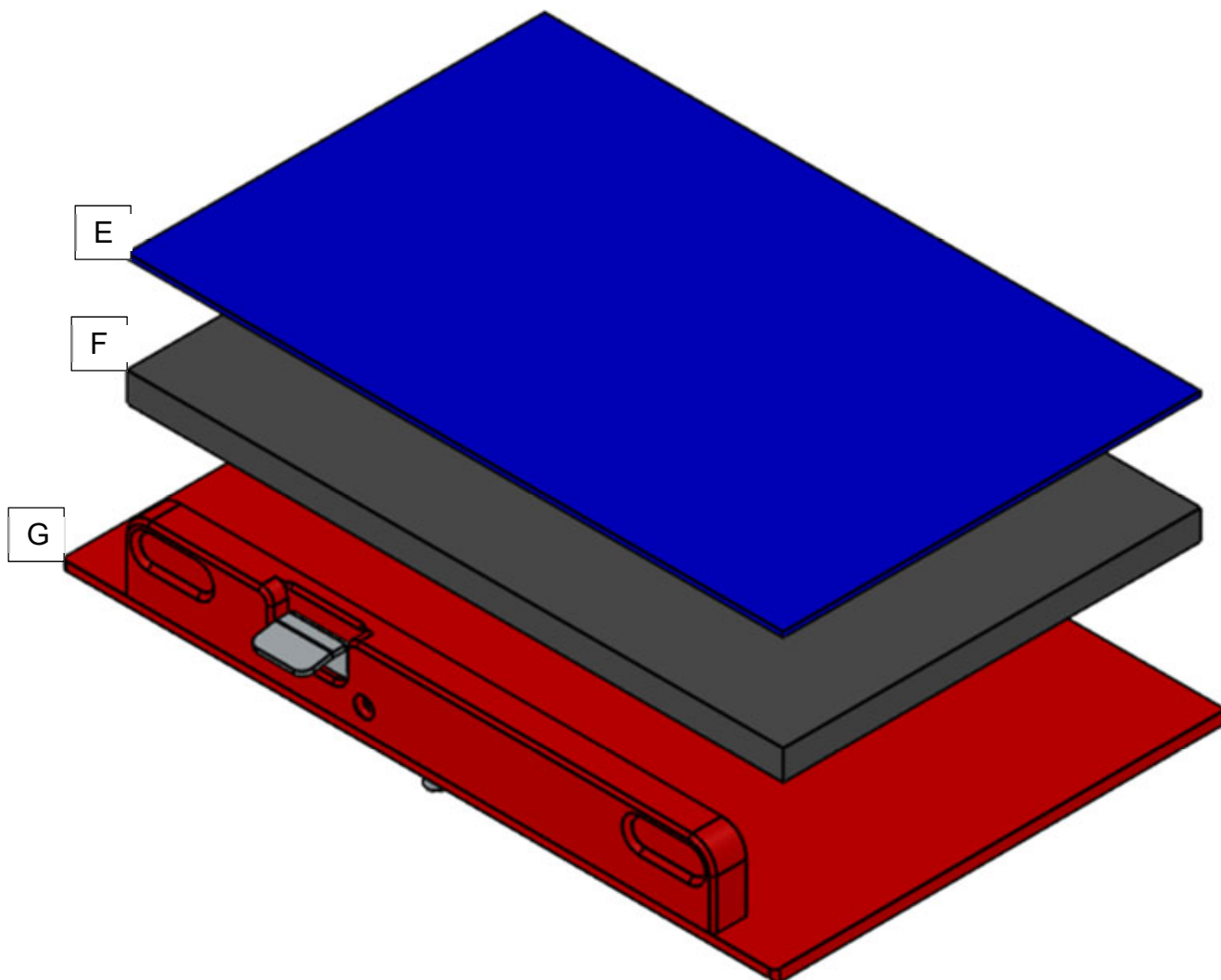
D	TB5334	height: 60 mm / 2.36 inch
D	TB5332	height: 80 mm / 3.15 inch
D	TB5333	height: 100 mm / 3.94 inch

Para rubber top sheet:



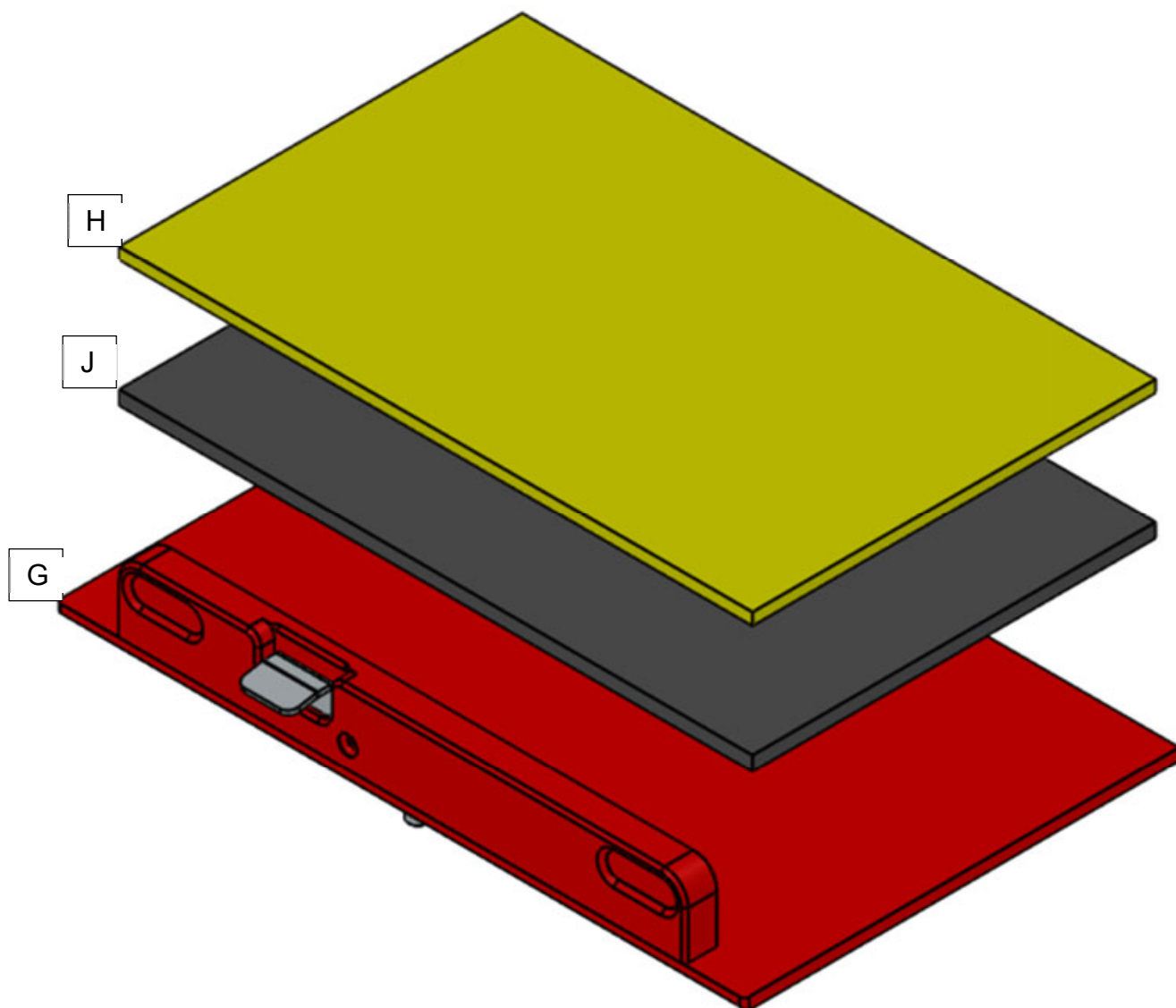
ANNEX B | TOP AND BOTTOM PAD CONFIGURATION

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:



H	TB5335	Set of two para rubber top sheets for use with TB5284 or TB5285
J	TB5331	Set of two foam rubber base sheets for use with para rubber top sheet on 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
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Specifications:

Diameter: Please specify
Height: Please specify
Material: POM

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.

