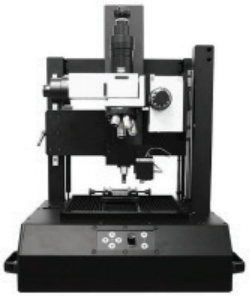
LABORATORY TESTS

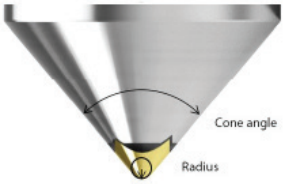
iTEKT has conducted several laboratory tests to confirm the ITEKT Windshield product's durability and resistance towards scratches, shattering, and UV light.

Scratch test - ASTM international (E2546/ISO 14577)

	Detail results- Scratch Region 1 (mN)	
	Untreated sample	ITEKT treated sample
1	90.48	115.4
2	90.61	115.6
3	94.75	115.5
Average	91.95	115.5

In-sum, by comparing the average of millinewton (mN) of both samples required for the scratch at Region 1, there is an increase in resistance of the ITEKT treated sample by **25.61%.**





71N pressure with a point of a diamond

Accelerated UV Light Aging test - ASTM international (D523- D2244)

ASTM D523 - Specular Gloss
ASTM D2244 - Calculation of Color Tolerances and Color Differences

Sample	Initials values		ASTM G155	
	L*	a*	b*	Gloss 60°
Untreated sample	82.9	-2.3	0.8	99.9
ITEKT treated sample	81.7	-2.3	0.7	96.5
White reference plate	93.0	-0.2	1.0	NA

Xenon Arc emission lamp equipment used

Sample	2,000 hours		ASTM G155		L*	a*	b*	Gloss %
	L*	a*	b*	Gloss 60°				
Untreated sample	86.8	-2.4	1.1	104.4	3.9	-0.1	0.2	4
ITEKT treated sample	86.8	-2.4	1.0	104.9	4.9	-0.1	0.2	7

After 2,000 hours of UV exposure, the ITEKT treated sample:

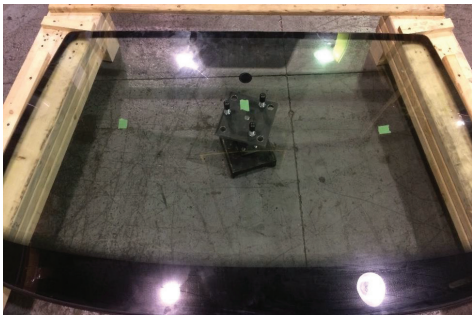
- Did not show yellowing or color change since the measurements on the a* axis and b* axis did not change significantly.
- Its transparency got better since the L* axis measurements got closer to the white reference plate (93.0).
- The gloss measurements increased more than the untreated sample by 4%

LABORATORY TESTS

Impact test - Laboratory certification

POLYTESTS
UN SERVICE ADAPTÉ À VOTRE RÉALITÉ

Report No. 1373



The intent of the program is to compare the amount of energy required for a given impactor to break a typical windshield, in both untreated and treated versions.

- Support the impact surface area with a 3 arms support
- Impactor: steel ball, 1 ¼ diameter, 4.6 ounces

Results of the impact test

			Impact test height					
Condition	**Sample**	**Location**	**15 ft**	**16 ft**	**17 ft**	**18 ft**	**19 ft**	**20 ft**
Untreated sample	1	Left	X					
		Center		X				
		Right		X				
	2	Left	X					
		Center						
		Right	X					
ITEKT treated sample	3	Left				X_S		
		Center					X	
		Right						X_S
	4	Left				X_S		
		Center						X
		Right						Ø
	5	Left						X
		Center	N/a	N/a	N/a	N/a	N/a	N/a
		Right				X		
	6	Left						Ø
		Center						Ø
		Right						Ø
	7	Left						Ø
		Center						Ø
		Right						X_S

LEGEND: X Failure at the impact location Ø No failure X_S Failure at the support area (underneath the treated surface)
Location: Location of the impact

The energy levels represented by the height of the impactor at which no failure of the samples occurred, were as follows:

1. Bare windshield: Hb = 14 feet;
2. Treated windshield: Ht = 17 feet

In terms of energy gain to break the windshield with the impactor, we can calculate the increase in resistance (Ri) as follows:
Ri (%) = (Ht – Hb) / Hb x 100 = **21%**

Note: At the maximum tested height (20 feet), 6 samples out of 15 remained intact (unknown breaking point).