

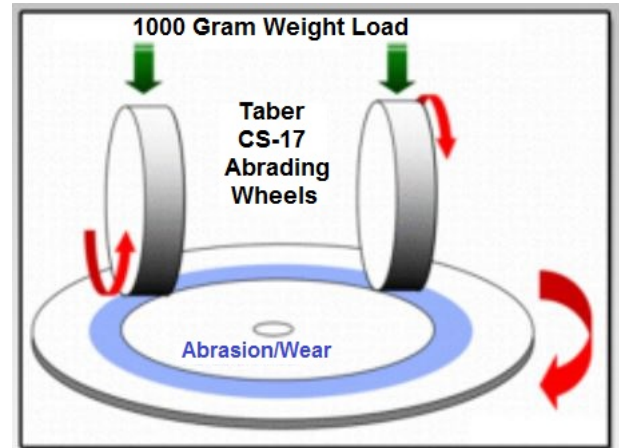
## CeraMax™ Durability Test Results

### Abrasion Test

- To Standard ASTM 4060
- Results: 6000+ Wear Cycle/Mil
- Compare to most coating, which fails between 250-800 cycles

ASTM 4060 Taber Abrasion Test using a weighted (1000 gram weight) placed on CS-17 Taber abrasion wheels that rotate at a constant speed over the coated test panels until the wheels wear through the finish to the steel substrate.

The number of cycles calculated per mil of the finish determine the resistance of finishes to abrasion and wear. This coating gave 6000+ wear cycle/mil, which is over 20 times more durability than most other coated finishes in the market.



### Adhesion Test

- To Standard ASTM D3359
- Results: 5B Adhesion rating
- Highest Adhesion rating possible

This is a test method to analyze how well the coating adheres to the metal substrate.

Crosshatch pattern cuts are applied to the surface of the coating, then a pressure-sensitive tape is applied over the crosshatch cut. Next, the tape is smoothed into place over the area of the incisions. The tape is removed by pulling it rapidly back over itself at close to an angle of 180 degrees; the adhesion of the coating to the metal is assessed on a 0B to 5B scale (see chart).



Classification of Adhesion Test Results		
Classification	Percent Area Removed	Surface of Cross-Cut Area From Which Flaking has Occurred for Six Parallel Cuts and Adhesion Edges by Percent
5B	0% None	
4B	Less Than 5%	
3B	4-5%	
2B	15-35%	
1B	35-65%	
0B	Greater Than 65%	

### Additional Test Results

- **ASTM D3363 Pencil Hardness Test:** 9H hardware rating, the highest hardware rating that can be achieved
- **ASTM B117 Salt Spray Corrosion Test:** 3500 Hours (BHMA requires only between 48-240 hours on standard hardware; PVD Lifetime finish goes up to 1000 hours)
- **ASTM D2794 Impact Resistance Test:** 160 inch-lbs. impact strength; this is the maximum impact that the tester can measure
- **UV/Condensation Tests** (on clear coating): Passed 5000 hours