STANDARD

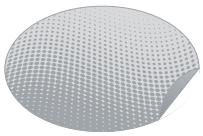
ANSI/ISEA 105-2016

American National Standard for Performance and Classification for Abrasion Resistant Gloves

ABRASION RESISTANT

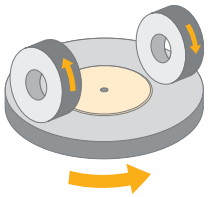
ANSI/ISEA 105-2016 establishes performance levels, testing and classification for gloves designed to provide abrasion resistance while performing occupational tasks.

The standard, based on ASTM D3389-10 (coated glove fabrics or unsupported gloves) and ASTM D3884-09 (uncoated glove fabrics), tests the glove's abrasion resistance by determining the number of revolutions (abrasion cycles) to failure. The test method uses a 4-inch circular sample (cut from the palm) mounted on a horizontal axis platform while being abraded to failure under a specified vertical weight load (500 or 1000 grams) by the sliding rotation of two vertically oriented H-18 abrading wheels comprised of vitrified clay and silicon carbide abrasive particles. The results, recorded in revolutions, are represented by levels 0 to 6, with the greater number being the higher level of abrasion resistance.



Glove Material Sample

A circular glove sample taken from the palm and placed on the machine.

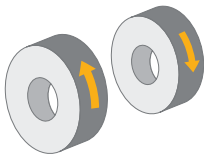


Test Machine

The material specimen is placed on the turntable of an abrader. As the specimen rotates, two grinding-like wheels roll on the specimen abrading its surface.

Weight (Grams)

A 500 gram load is used for levels 0 to 3 and a 1000 gram load for levels 4 to 6.

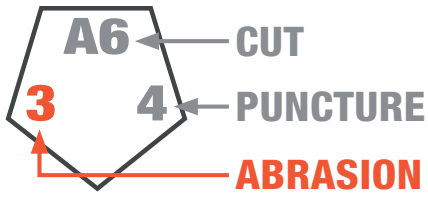


Abrasion Wheels

This test method uses H-18 abrasion wheels made of vitrified clay and silicon carbide abrasive particles.

500 GRAM LOAD	
0	< 100 Revolutions — N/A
1	≥ 100 Revolutions — LIGHT
2	≥ 500 Revolutions — LIGHT - MEDIUM
3	≥ 1000 Revolutions — MEDIUM
1000 GRAM LOAD	
4	≥ 3000 Revolutions — MEDIUM - HEAVY
5	≥ 10000 Revolutions — HEAVY
6	≥ 20000 Revolutions — EXTRA HEAVY

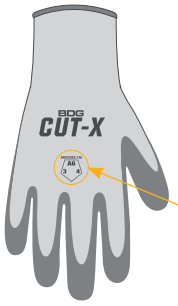
ANSI/ISEA 105



NEW Safety Icon

New pentagon-shaped icon combining ANSI/ISEA 105 Abrasion, Cut and Puncture resistance standards.

No changes to current testing methods.



Safety Icon

Test results are indicated by levels **0 to 6**, as depicted on the gloves.

Abrasion resistance testing measures how well the glove resists loss of material from rubbing on rough surfaces. The greater number of abrasion cycles (revolutions) until failure indicate a greater abrasion resistance.

Tests are verified by an accredited third party laboratory.

BDG® BOB DALE GLOVES