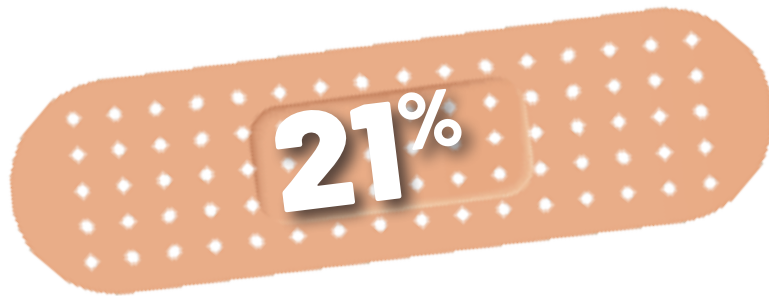


ANSI/ISEA 105-2023

# ABRASION LEVELS

ANSI/ISEA 105 Abrasion testing identifies the performance characteristics of hand and arm protection products against abrasive contact. The testing standards measure how quickly a hole is formed, in PPE products such as gloves and sleeves, after repetitive contact with abrasive material. Another important aspect of this testing is that it provides a way of measuring the length of wear or how long a glove will last before it wears out. An ANSI/ISEA 105 Abrasion Performance Level of 6 indicates that a glove would potentially last twice as long as an ANSI/ISEA 105 Abrasion Level 5 glove. The result is classified on levels 0-6.

## Overview of Hand and Arm Injuries



of all preventable work injuries  
are to the hands and arms



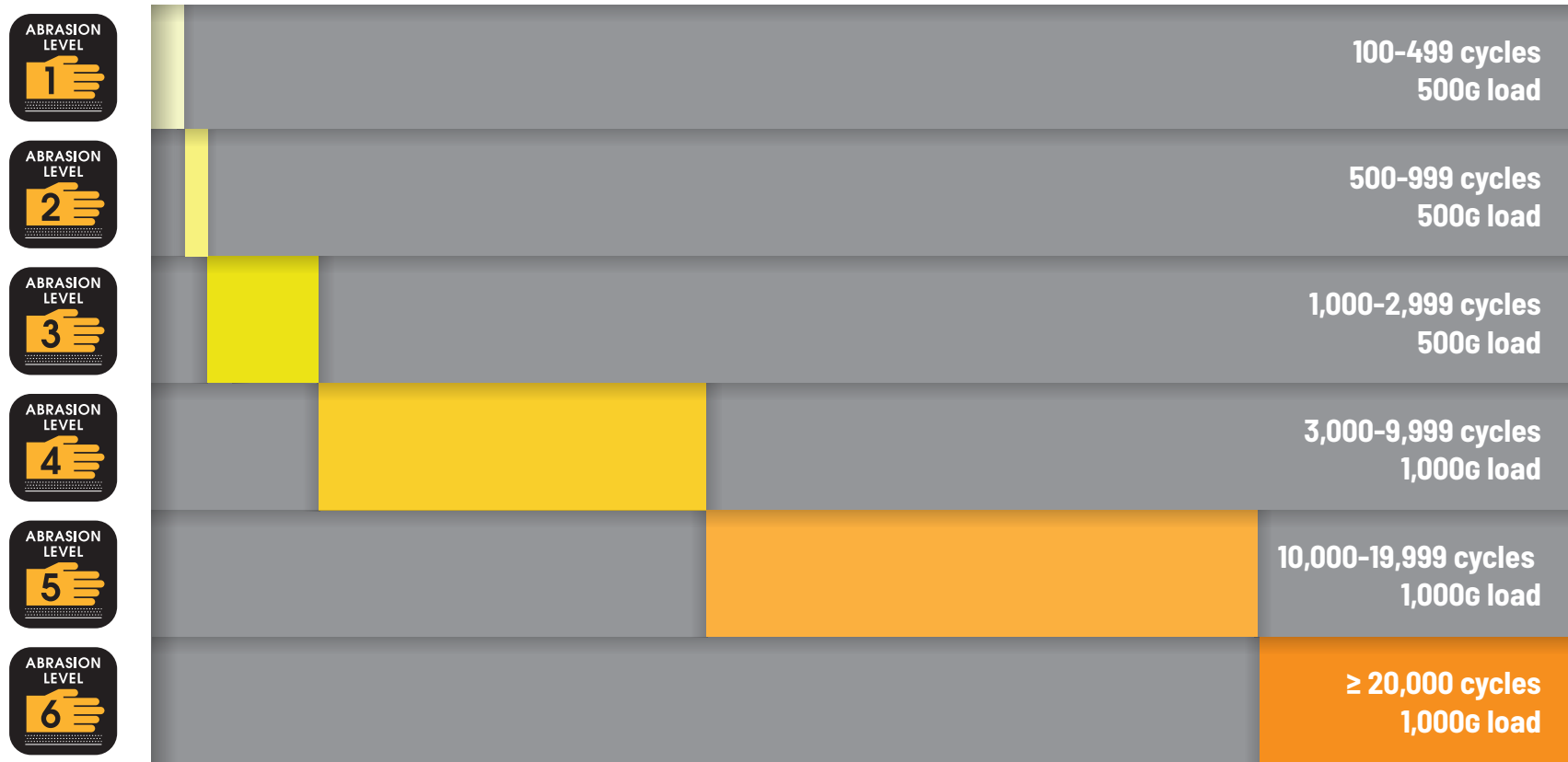
# Abrasion Testing Process



- 1** Material to be tested is placed on the rotating base.
- 2** Abrasive wheels are lowered to contact testing material.
- 3** Rotating base turns. The counter tracks how many times the base turns before contact is made through the material.
- 4** Test is performed with a silver 500 or 1000 gram weight load.

[Click to watch video](#)

# Abrasion Levels Testing Results



## Common Industries



Inspection, Painting, Food Processing



Electronic Assembly, Pharmaceutical Use



General Assembly, Small Parts Assembly, Automotive



Metal Fabrication, Carpentry, Construction



Landscaping, Brick, Stone Work, Warehouse, Mechanics



Oil and Gas, Heavy Equipment, Mining

# New Icon Designation

## ANSI/ISEA 105

**AX**

**X**

**X**

**Cut**

**Abrasion**

**Puncture**