GUIDE TO UNDERSTANDING ABRASION RESISTANCE ACCORDING TO ANSI / ISEA 105:2016 STANDARDS

Abrasion resistance in occupational gloves is measured on a 7-level scale of 0-through-6 based on the ANSI/ISEA 105:2016 standard. It is important to understand protection levels associated with each standard as well as the most appropriate levels for specific applications.

ANSI ABRASION STANDARD

ANSI # ABR

Abrasion resistance standard from the American National Standards Institute (ANSI) and International Safety Equipment Association (ISEA) became effective in 2016.

ANSI / ISEA 105:2016 Abrasion Standard				
ABRASION LEVEL RATING	**GRAM LOAD**	**ABRASION CYCLES TO FAIL**	**PROTECTION LEVEL**	**APPLICATIONS**
0	500	<100	Very Low	–
1	500	≥100	Very Low	Inspection, selection, checking parts / press shop operations / seizing structural & body parts / touching up / processing sheets, coils, tubes
2	500	≥500	Low	Delivery of parts to production line / delivery of vehicles to expedition area / loading & unloading rough parts, boxes / handling parts with sharp, rough edges / seizing / assembly & inspection of components / final inspection / maintenance
3	500	≥1,000	Moderate	Picking, fastening components, parts / adjusting systems & screwing / loading & unloading trucks & vehicles / product shipping, transport, delivery / lock smith
4	1000	≥3,000	High	Assembly of small parts / general handling / picking, fastening components / adjusting systems and screwing
5	1000	≥10,000	High	Handling parts, materials with sharp, rough edges / handling rough machined metal parts / assembly & inspection of components / press injection modling / picking, fastening components / assembling & mounting components
6	1000	≥20,000	Extreme	Handling metal sheets & panels / handling parts & materials with sharp, rough edges / final assembly / assembly & inspection of components / applying finish to materials, products / lock smith / handling incoming goods / mounting & dismantling