

Thickness of Gloves May Not Determine True Levels of Protection

Usually, customers' first criteria and feature when choosing gloves is glove thickness. This trend is led by manufacturers' and distributors' lack of efforts to provide science-based testing.

Customers often believe that glove thickness and hand safety are correlated. While glove thickness can offer hand protection, it does not always offer better hand protection. Gloves made with defective formers will cause pinholes. Often, when thicker gloves are made on production lines designed for thinner gloves, they undergo inadequate curing or excessive heating for a faster cure.

Thicker gloves can be just as susceptible to perforation and glove failure as thinner gloves. Thickness is only an illusion for hand protection and glove manufacturers now have more modern technology to offer lighter weight gloves with greater protective qualities. Customers should select credible suppliers that can back up their claims and provide testing reports.

How to determine better hand protection?

There are a couple qualities to determine the quality of a glove's protective abilities and that includes a glove's: elongation, tensile strength, ANSI abrasion and cut levels, as well as their chemical permeation specifications.

Elongation is applying tensile force, stretching the material and determining the length difference from the original.

Tensile strength is measured in the amount of force in pounds per square inch (psi or MPa) required to pull apart a product until material failure.

Abrasion simply means the potential of being scrapped or worn away due to friction, and ANSI is the metric that abrasion levels are denoted.

Measured in ANSI ratings, cut resistance determines the ability for a glove to withstand the weight or force on the glove material before it is cut through by a blade

Chemical permeation is the amount of time until a chemical passes through the glove material.



ANSI

ANSI levels are defined by the amount of weight, in grams, a glove can withstand. This is determined by using the TDM-100 machine test.

