



TILSATEC[®]

Arc Flash Hand Protection



Built for Confidence.
Engineered for Comfort.

Product Guide



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Professionals working with both low and high voltage systems and equipment encounter several challenges, none more so than the risk of an Arc flash. When an arc flash event occurs, the danger extends beyond the risk of direct electric shock; it also creates a sudden, explosive release of thermal energy (heat and light). The temperatures generated during an arc flash event can cause severe, life threatening/altering injuries.

Dangers to Hands

In an arc flash event, caused by electrical faults, contamination, accidental contact, equipment damage or failure, environmental factors, amongst others, the hands are at particular risk, as they are often the closest part of the body to the hazard.

Two types of injuries can occur:

Direct Thermal Injury: This happens instantaneously, when the energy delivered from an arc flash contacts the skin, causing potentially life-changing burns. Gloves must be able to withstand this energy long enough to prevent second-degree burns.

Secondary Injury: Post arc flash, a glove that ignites, melts or drips can become the second source of the injury resulting in significant burn injuries.



The European EN Box Test

The European benchmark, EN 61482-1-2 'box test' is a straightforward standard: material is exposed to a controlled arc inside a small metal chamber at two levels of intensities; arc currents 4kA and 7kA. If the material resists holes, burns or flames under those conditions, it passes. The material can then be designated with an arc Protection Class (APC): either APC 1 (4 kA) or APC 2 (7 kA).

The North American ASTM F2675 Open Arc Test

This standard, widely used in North America, was developed for hand protection and takes a dynamic, performance-based approach, exposing gloves to increasing arc energy and assessed for their ability to withstand ignition, melting, dripping, and thermal injury, up to the point at which a second-degree burn would be predicted.

Hand Protection Designed for Arc Flash Protection

Glove materials play a major role in how well a product withstands an arc flash event. The key is recognising that no single material excels in all conditions; the most effective glove designs integrate several materials to achieve both high arc ratings and long-term wearability. Ideal for workers who have a potential exposure to an Arc flash event or a working environment with a risk of spark and flames, few manufacturers understand this challenge better than Tilsatec, trusted across industries for our core product ranges and Pulse electrical insulating gloves, we don't just aim for compliance, we design for comfort.

23-6690 Medium weight cut level F arc flash glove



Gauge	13gg
Colour	Yellow liner / Black coating
Cuff Style	Knit wrist
Length	220-270
Sizes	7-12
Packaging	12 pairs/paper band, 72 pairs/carton



- Meets NFPA 70E requirements for arc flash PPE (Category 2)
- Achieves ATPV 11.7cal/cm² according to ASTM F2675/2675M
- Level F cut resistance to EN388:2016+A1:2018
- EN407:2020 Limited flame spread level 4
- EN407:2020 Contact heat level 1
- Neoprene foam palm coating provides excellent wet and dry grip
- Robust 13gg aramid liner for heavy duty handling applications
- WARNING: Gloves do not provide protection against electrical voltage or shock

20-7251 Leather arc flash ground glove



Gauge	n/a
Colour	Gold yellow
Cuff Style	Shirred wrist
Length	254mm / 10"
Sizes	7-11
Packaging	6 pairs/paper band, 36 pairs/carton



- Achieves ATPV 30cal/cm² according to ASTM F2675/2675M
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 Limited flame spread level 4 and contact heat level 1
- EN407: 2020 Small splashes of molten metal level 4
- Premium soft goatskin leather outer with ergonomic form fit
- Inner palm reinforcement for added durability and improved comfort
- Added reinforcement to thumb, index finger and back of knuckles for high wear areas
- WARNING: Gloves do not provide protection against electrical voltage or shock

20-7451 Leather arc flash cut level D ground glove



Gauge	n/a
Colour	Gold yellow
Cuff Style	Shirred wrist
Length	254mm / 10"
Sizes	7-11
Packaging	6 pairs/paper band, 36 pairs/carton



- Aramid liner provides EN388: 2016+A1: 2018 level D cut resistance
- Achieves ATPV 37cal/cm² according to ASTM F2675/2675M
- Meets NFPA 70E requirements for arc flash PPE (Category 3)
- EN407: 2020 Limited flame spread 4 and contact heat level 1
- EN407: 2020 Small splashes of molten metal level 4
- Premium soft goatskin leather outer with ergonomic form fit
- Inner palm reinforcement for added durability and improved comfort
- Added reinforcement to thumb, index finger and back of knuckles for high wear areas
- WARNING: Gloves do not provide protection against electrical voltage or shock



**High Performance Hand,
Arm and Body Protection**

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