SAFETY + REDEFINED
We started this journey more than a decade ago. A group of hardworking people with a new technology that no one had ever seen. One that had the potential to change the cut and puncture safety market. One that could save the lives and livelihood of workers across the world. So we started with one industry. And one glove.

We changed and altered and tested and trialed until we successfully eliminated all hand injuries for a large waste and recycling company. Eliminated – as in zero – none. That’s when we knew we had something.

Our thought was: If we stopped dictating the safety products people used, and started working one-on-one with people to develop the safety product they actually need...well, we’d have something pretty unique for this industry. Not to mention, we’d be able to change the conversation from price and product to “is this the right PPE to effectively reduce injuries and protect our people?”

It was possible, but it wasn’t simple. We set off to work with people, side-by-side, day after day to experience the kind of dangers and hazards they encountered.

From there we grew and expanded our hand safety line one industry at a time – with our team of safety advisors hitting worksites and manufacturing floors, working hand-in-hand with their workers, listening to their input, and giving them the protection they deserve. And that’s what’s most important to us. Because, in the end, we aren’t just gloves and PPE. We’re the confidence, safety, and livelihood of those we protect.

HexArmor. We’re Safety, Redefined.
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The High Cost of Low Quality PPE

Beyond the medical expenses and worker’s compensation, safety managers must calculate the total cost of a workplace injury. There are numerous indirect costs of injuries that can have ten times the economic impact of the direct costs.

TIME-RELATED COSTS

• Overtime costs necessitated by the injury
• Additional administrative time for supervisors, safety personnel and clerical workers
• Time spent investigating and reporting the accident
• Time spent addressing process challenges and training replacement workers

PRODUCTIVITY COSTS

• Production output lost by the worker, those assisting, and onlookers
• Reduced productivity from the injured worker upon return
• Training time for the replacement worker
• Reduced productivity by the replacement worker

MORALE/REPUTATION

• Intangible, unquantifiable costs that must be taken into account
• Poor worker morale leads to decreased production and increased turnover rates
• Damage to your reputation with customers can lead to business losses
• Loss of public goodwill from bad publicity
“Our industry can be extremely hazardous. HexArmor® helped us equip our workers with the products that would maximize our worker’s safety in every phase of our production process.”

John C., Facility Safety Director
"We've been using HexArmor body protection at our shop for about two years now. Still using my first set of armguards. Talk about durable!"

Keith S., Manufacturing
Protection Comes In Many Forms

HexArmor® has worked with some of the largest wood products and paper manufacturers in the world to custom engineer safety solutions that address the various hazards present. Our hand and arm/body products provide industry-leading protection against punctures, cuts and abrasions, while maintaining the essential grip and dexterity required to work safely and efficiently.

SuperFabric® is a Cut Above

SuperFabric® brand material is a proprietary technology designed to prevent lacerations and slashes from reaching the skin. SuperFabric® provides ANSI/ISEA level 5 cut protection from jagged product edges and the sharpest saw blades. The addition of SuperFabric® into a glove design is the reason HexArmor offers the lumber & paper industries more options for ANSI/ISEA Cut Level 5 gloves than everyone else in the industry combined. When you want superior cut protection, you need HexArmor gloves with SuperFabric®.

The Puncture Stops Here

Punctures from saw blade teeth or wooden splinters vary greatly in size and shape, and often enter the hand and arm at angles that make it difficult to prevent injury. Common glove materials such as Dyneema or Kevlar can be easily pierced because of the knit properties of the material, which is why HexArmor relies on advanced fabric technology to stop puncture hazards and prevent injuries.
Arm Guard Cost Savings

Knit sleeve technologies, such as Kevlar, have been around for years in steel plants. Problem is, they offer little to no puncture protection and get hot and sweaty. They also end up falling down like a tube sock, exposing workers’ arms to hazards on the jobsite.

Most Lacerations Begin with a Puncture

The fact is, a lot of industrial injuries occur with an initial puncture and lead to a cut or laceration injury. With knit (Kevlar) arm guards, hazards can actually poke through the open knit and cut the skin without cutting the arm guard. How does this happen?

Depending on the density of the knit, the gauge (the measure of the number of knitting needles per inch), and the thickness of the fibers, a guard may “window” and allow the knit to spread apart. This “windowing” can allow a sharp point or blade to penetrate the arm guard and cut the forearm. Plating with small guard plates, such as in HexArmor products, reduces this effect as the plates shield the knit structure from the hazards. The plates also lock in the knit and don’t allow the knit to window as in traditional arm guards.

60% Cost Savings by Switching to HexArmor

In addition to the greater degree of cut and puncture protection, implementing HexArmor arm protection can create a cost savings of up to 60%. HexArmor conducted a study based on a metal fabrication plant with 200 employees. This plant was averaging 6 lacerations per year with an associated cost of $11,000. By implementing HexArmor they eliminated these injuries for an annual savings of $66,000. Additionally, the extended wear life of the HexArmor arm guards reduced their monthly average cost per employee from $9.85 to $4.09.

<table>
<thead>
<tr>
<th></th>
<th>HexArmor® AG10009S</th>
<th>Kevlar® Arm Sleeve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut Resistance</td>
<td>Exceeds ASTM Level 5</td>
<td>600 Grams</td>
</tr>
<tr>
<td>Puncture Resistance</td>
<td>100x more than Kevlar®</td>
<td>none</td>
</tr>
<tr>
<td>Usage per Employee</td>
<td>1 pair/6-12mo</td>
<td>1 pair/week</td>
</tr>
<tr>
<td>Total Yearly Cost</td>
<td>$24,792</td>
<td>$48,000*</td>
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</tbody>
</table>

*Study based on metal fabrication plant with 200 employees. Switching from Kevlar to HexArmor arm protection saved them 60% on product cost due to longevity of the HexArmor arm protection.
“We were constantly having to pull our Kevlar® sleeves back up our forearms. The HexArmor arm guards always stay in place AND offer better protection.”

Skip R., Plant Foreman
## ARM & BODY

<table>
<thead>
<tr>
<th></th>
<th>Cut Resistance (ISEA)</th>
<th>360° Cut Resistance</th>
<th>Multi-Layer SuperFabric® Protection Zone</th>
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<tbody>
<tr>
<td><strong>HAJO1</strong></td>
<td>5</td>
<td></td>
<td>SuperFabric® Protection Zone</td>
</tr>
<tr>
<td><strong>HAJO2</strong></td>
<td>5</td>
<td></td>
<td>Layers SuperFabric® Protection Zone</td>
</tr>
<tr>
<td><strong>HEXMAT 9905/9907</strong></td>
<td>5</td>
<td>(9905) 20&quot; x 45&quot;</td>
<td>ISEA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(9907) 50&quot; x 30&quot;</td>
<td>Cut: 5</td>
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# Arm Guards

<table>
<thead>
<tr>
<th>Model</th>
<th>Cut Resistance (ISEA)</th>
<th>Puncture Resistance (ISEA)</th>
<th>Thumb Loop</th>
<th>Needlestick Resistant</th>
<th>Protection Zone</th>
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<td>AG10009S</td>
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<td>AG10009V</td>
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<td>AG8TW</td>
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<tr>
<td>AS019S</td>
<td>5</td>
<td>3</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- **AG9X**: 2 Layers SuperFabric® Protection
- **AS019S**: 2 Layers SuperFabric® Protection

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## CHAPS & GAITERS

<table>
<thead>
<tr>
<th>CHAPS &amp; GAITERS</th>
<th>Cut-Resistance (ISEA)</th>
<th>Puncture Resistance (ISEA)</th>
<th>360° Cut-Resistance</th>
<th>Reflective Strip</th>
<th>Multi-Layer SuperFabric® Protection Zone</th>
<th>Protection Zone</th>
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<tr>
<td><strong>GAITERS 9921</strong></td>
<td>5 3</td>
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<td><strong>CHAPS 9911</strong></td>
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<tr>
<td><strong>CHAPS 9915</strong></td>
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<td><strong>CHAPS 9919</strong></td>
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<td></td>
<td>ISEA CUT: 5</td>
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</tbody>
</table>

- SuperFabric® Protection Zone
- ISEA CUT: 5
- 3 Layers SuperFabric® Protection
- CE 4532
- 2 Layers SuperFabric® Protection
- CE 4534
APRON & BODY

<table>
<thead>
<tr>
<th>Style</th>
<th>Image</th>
<th>Cut Resistance (ISEA)</th>
<th>Puncture Resistance (ISEA)</th>
<th>Multi-Layer SuperFabric® Protection Zone</th>
<th>Protection Zone</th>
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</thead>
<tbody>
<tr>
<td>20”x 30” AP229</td>
<td><img src="20x30AP229.jpg" alt="Image" /></td>
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<td>2 Layers SuperFabric® Protection</td>
<td>SuperFabric® Protection Zone</td>
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<td>SuperFabric® Protection Zone</td>
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<tr>
<td>24”x 30” AP321</td>
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<td>SuperFabric® Protection Zone</td>
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<tr>
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<td>20”x 22” AP102222</td>
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<td>36” AP361</td>
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<tr>
<td>24”x 38” AP382</td>
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<td>SuperFabric® Protection Zone</td>
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</table>
A glove trial is the process of field-testing different models of safety gloves, either from a single source or several manufacturers, in order to identify the best glove for a particular job. When done correctly, the benefits of a glove trial include:

- Improved hand safety program and equipment, and reduced rate of hand injuries
- Increased awareness of hand safety issues among workers
- Higher rates of compliance with hand safety PPE requirements
- Reduction in costs related to hand protection, through increased efficiency and durability of work gloves, or reduced insurance rates, medical costs, and worker’s comp claims

Because work conditions vary from one job to another, there is no way to tell how effective a particular safety glove will be without testing it in the field to see how it holds up, and protects against the actual hazards encountered in the workplace. Although a glove may have tested well in laboratory settings and been granted a high cut rating, it may lack abrasion resistance and break down quickly in the field. If a glove doesn’t offer the same level of protection at the end of the work day as it does at the beginning, then you need to consider another option.

To ensure you avoid wasting time and energy on a poorly-run glove trial, we have outlined a set of proven steps you can take in the glove trial process. These tips and recommendations come from over a decade of experience working with large industrial companies.

For the full white paper, please contact your HexArmor® rep, or visit http://hexarmor.com/glovetrial
Proper Glove Care

Improper glove care can shorten the life of your PPE. It can also lead to dermatitis, decreased dexterity, loss of protective abilities, and odor. Glove care refers not only to laundering, but also proper storage, routine glove checks, and knowledge of materials and their particular strengths and weaknesses.

Because there are so many different work gloves on the market, experienced safety managers should be aware of what workers’ gloves are made of and how they will stand up to the applications they’re being used for. Common glove materials include nylon, spandex, leather, cotton, SuperFabric®, Kevlar®, and knit fibers. Each of these materials need to be cared for in a particular way, and often there is a blending of the materials, making proper care even more crucial.

Proper storage

Gloves should be ideally stored in clean, dry conditions, away from direct sunlight and extreme temperatures.

Routine glove checks

Glove life varies depending on the application, environment, and amount of use. Because of this, it is vital that you perform routine glove checks before beginning work every day. Take note of areas that have begun to wear down, such as loose Velcro® or a worn-down name tag. If you see holes in the synthetic leather or TP-X® material on the palm or fingertips of your glove, this is an indication that its protective qualities may be compromised, putting you at risk of injury. Lingering moisture or a strong odor are also signs that your gloves may need to be replaced.

Keeping an eye out for these issues and others keeps you one step further from a worksite hand injury, which is the ultimate goal of hand protection in the first place.

Care and content

Our C&C tag, which indicates washing instructions and fiber content, is located on the inside cuff of all our gloves.

- Gloves marked “wash with care” are machine washable. The number inside the symbol denotes what temperature to wash the gloves at (e.g., machine wash with care at 30 degrees Celsius). Washing with care can be done by changing the machine cycle, using a different preset wash program (gentle/delicate), and being sure not to overload the washing machine.

- When washing by hand it is important to use a soap and/or detergent that won’t irritate your skin. Also, be sure to wash gloves over a sink or outside, and rinse thoroughly.

Companies who properly launder their gloves can increase lifespan by up to 300%

Laundering removes harmful chemicals, perspiration, and everyday grit and grime that can weaken protective fibers and seams. Our team of HexArmor® solutions specialists are here to help you with this process, and they are more than happy to provide you with all the information you need.
HexArmor® products are cut and puncture resistant, NOT CUT AND PUNCTURE PROOF. Do not use with moving or serrated blades or tools. User shall be exclusively responsible to assess the suitability of the product as specified for any individual application or use. Protection zones are to be used as a general guide. Actual product protection zones may differ.

Protected by patents and patents pending.
SuperFabric® is a registered trademark of HDM, Inc.

All products, product descriptions, and performance scores are current as of April 2016. For current product information, please visit hexarmor.com, or call 1-877-MY ARMOR

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