AUTOMOTIVE

Hazards & Solutions

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Ranging from parts production plants to assembly plants, automotive manufacturing consists of making the parts and bodies of cars, motorcycles, trucks and other motor vehicles used across the world. Automotive workers are often exposed to dangerous machinery, chemicals, equipment and an arduous work environment. They regularly use their hands and spend much of their time bending, lifting, and performing repetitive tasks. As a result, these workers are exposed to a multitude of hazards every day.

Did you know: The U.S. Bureau of Labor Statistics have determined workers in automobile and motor vehicle manufacturing environments experience higher rates of injury and illness than workers in most other industries. At Ansell, we are committed to protecting automotive workers. We go beyond regulatory compliance to ensure our product portfolio fully protects against the specific hazards these workers face.

At Ansell we strive to find a solution for any hazards that workers face throughout the day, creating a more productive and safe day at work. Our products are engineered to deliver the optimum balance of comfort, performance and protection. We provide customers in the automotive industry with tailored solutions to improve worker safety and productivity.

AUTOMOTIVE HAZARDS & SOLUTIONS

Workers in Automotive environments are exposed to an abundance of hazardous elements from harmful chemicals to handling sharp or abrasive materials. If the proper personal protective equipment (PPE) is not worn, injuries may occur which can lead to an exponential growth of lost or restricted work days. To ensure maximum level of safety, it is important to understand some of the common hazards workers face in this industry.

CUT PROTECTION

Automotive workers are at a high risk for experiencing cuts or lacerations while performing their daily activities. They are exposed to glass, dangerous machinery, and other sharp objects and edges where cut and puncture injuries are likely to occur. According to U.S. Bureau of Labor Statistics, roughly 30% of all workplace injuries every year are from cuts and lacerations, with 12% of those occurring on the hand. Selecting the right PPE with the appropriate cut level protection is extremely important.

Ansell’s cut resistant gloves are made with innovative technologies to provide outstanding cut protection with enhanced dexterity, grip and comfort. INTERCEPT™ Technology is a proprietary cut resistant yarn that provides a lighter weight and more comfortable alternative to other branded yarns.

**HyFlex® 11-644**
- Enhanced cut protection to provide confidence while working with sharp objects.
- Allows for longer wear due to low palm weight and excellent abrasion resistance.

**HyFlex® 11-541**
- With a form-fitting, ultra-lightweight feel, this glove is ideal for applications where workers have traditionally guarded against cut risks with heavier styles that limit their dexterity and breathability.

**HyFlex® 11-280/281**
- Excellent cut protection with a soft and cool feel and a seamless design, making it the best choice for all-day comfort. Engineered to perform in combination with any HyFlex® cut-resistant glove.

**HyFlex® 11-542**
- Provides high levels of protection against cuts and lacerations. Also provides high abrasion resistance and protection from intermittent heat contact.

**HyFlex® 11-518**

**HyFlex® 11-550**
- Protects against nuisance nicks and abrasion. Nitrile coating for grip in oily applications. Optimal comfort for enhanced productivity.

**HyFlex® 11-727**
- Excellent abrasion resistance and high-level cut protection with a flexible fit. Light, seamless liner keeps hands cool and dry.

**HyFlex® 11-738**
- Ultra-strong fibers provide extreme resistance against cuts and burrs. Reinforced thumb crotch increases protection and extended use life. Made with water-based polyurethane for enhanced comfort and dexterity.

**AlphaTec® 58-735**
- Provides protection against lacerations. Optimized fit that integrates the high-visibility cut liner into the nitrile shell, acting as an indicator when glove is cut and highlighting when chemical protection is compromised. Excellent dry and wet grip.


Note: Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment.
Vehicles have become more complex over the years and now involve more parts and electrical components than required in the past. The electric vehicle (EV) market has grown rapidly since 2017 with EVs becoming a more viable option for new car buyers. This has led to an increased need for protection from electric shock, arc flash and other heat-related injuries.

**OIL PROTECTION**

When working in a plant, automotive workers are regularly exposed to oil-related tasks and require strong grip. Workers need surface barrier protection to prevent oils and other lubricants from making contact with the skin as well as enhanced grip to mitigate muscle fatigue. Ansell offers ANSELL GRIP™ Technology, a coating treatment that minimizes the force required to grip dry, oily and wet tools or materials, reducing hand and arm fatigue while improving dexterity, safety and productivity.

**ELECTRICAL & HEAT PROTECTION**

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**Marigold Industrial™ Electrician Class 00 - 11 inch - Black**

Designed for ultimate comfort, performance and safety. Meets all applicable ASTM, NFPA, OSHA, CSA and EN standards and is ergonomically designed for less hand fatigue.

**ActivArmr® 43-216**

Durable and comfortable protection from heat and molten splash. Cotton lining provides thermal insulation and extended comfort.

**ActivArmr® 43-217**

Optimum protection from heat, flames, sparks and weld splatter with extended protection to the forearm.

**ActivArmr® 80-813**

Superior arc-flash and flame-resistant protection from extreme hazards. Proprietary coating ensures secure grip in wet, oily and dry environments.

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ABRASION PROTECTION

When working in automotive manufacturing, grip and abrasion resistance are essential to hand safety. A compromised grip increases hand fatigue as the muscle becomes overexerted. If a glove isn’t providing the necessary grip, workers may remove their gloves and expose their hands to significant hazards. According to OSHA, 70% of hand injuries in the United States occur when people are not wearing gloves.² That is why Ansell features ANSELL GRIP™ Technology; which is a coating treatment that minimizes the force required to grip dry, oily and wet tools or materials, relieving hand and arm strength caused by poor grip. FORTIX™ Technology applies a thin, resilient and breathable nitrile foam coating to knitted gloves - dramatically extending their working life and improving their comfort.

HyFlex® 11-618
Light duty/multipurpose glove for general maintenance purposes and low risk tasks. Very thin gloves offering outstanding comfort and fit. Excellent dexterity and tactility for handling small parts or tools. Excellent dry grip.

HyFlex® 11-840
Outstanding durability and unmatched comfort. Longer lasting handling in abrasive conditions. Offers Fortix™ Abrasion Resistant Technology for enhanced durability. Nylon and spandex liner improves breathability and range of movement.

HyFlex® 11-727
Excellent abrasion resistance and high-level cut protection with a flexible fit. Light, seamless liner keeps hands cool and dry.

AlphaTec® Solvex® 37-676
High comfort, fully reusable glove with an unequalled abrasion resistance. Reversed lo泽ge finish further enhances levels of grip.

EDGE® 48-126
Inexpensive light duty glove with ANSI Abrasion 4 and good tear resistance, good grip and improved productivity.

HyFlex® 11-818
The Ansell FORTIX™ foam coating lasts longer than comparable styles under abrasive conditions, reducing the total cost of ownership. Liner provides a comfortable “second skin” feel.

AlphaTec® Solvex® 37-175
High performance nitrile compound, offering far superior snag, puncture and abrasion protection when compared with rubber or neoprene gloves.

CHEMICAL PROTECTION

Throughout production, automotive workers are exposed to a variety of harsh chemicals including acids, bases, adhesives or solvents. Without proper PPE, workers may experience chemical burns or any other type of skin irritation. Repetitive and prolonged exposure to these chemicals can prove toxic to the worker and severely affect their skin or respiratory system. Thick, nonporous PPE is needed that will prevent liquids from leaking inside and touching the skin, with the durability to withstand scrubbing and sharp corners. Ansell’s industry-leading chemical protection portfolio includes solutions with varying levels of resistance against acids, organic and inorganic chemicals, and biological agents.

AlphaTec® 58-335
The AlphaTec® AQUADRI™ gloves address the most relevant need for workers’ sweat reduction. Less sweat equals greater comfort and performance. Shorter AlphaTec® 58-330 version available.

AlphaTec® 58-530B
Chemical protective and oil-resistant waterproof gauntlet glove offers a unique combination of liquid-proof chemical resistance and grip, together with flexibility and dexterity, making this glove the logical choice when working with chemicals.

AlphaTec® Solvex® 37-175
Provides an outstanding combination of chemical resistance and strength by combining ruggedness and chemical resistance through a high performance nitrile compound.

AlphaTec® 2000 Standard - Model 111
Superior protection from low hazard liquid spray and fine particulates.

MICROFLEX® 93-260
Three-layer design for superior protection against harsh chemicals. Nitrile and neoprene offer broad resistance to acids, bases and solvents. Disposable glove with 12” length.

MICROFLEX® NeoPro™ NPG-888
Excellent splash protection against a broad array of chemicals. Polymer coated for easy donning. Examination grade neoprene glove with 9.5” length.

MICROFLEX® MidKnight™ XTRA 93-862
Made of a soft yet strong nitrile, for comfortable, durable protection in the event of chemical splashes. Examination grade with 12” length.

TouchNTuff® 93-600
The world’s leading disposable glove for chemical splash protection. Renowned for superior comfort and durability with a smooth, comfortable feel.

Note: Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment. Or use our self-service AnsellGUARDIAN® Partner tool to search our extensive chemical permeation and degradation data to identify the appropriate hand and body protection for the chemicals you use.

ERGONOMIC PROTECTION

According to the Bureau of Labor Statistics (BLS), musculoskeletal disorders accounted for nearly half of the injuries within the Automotive manufacturing industry which resulted in time away from work in 2018. These disorders are often caused by repetitive movements, overexertion of the muscle, and improper positioning while working. Selecting the right ergonomic PPE can help reduce the risks of damage to bones and joints. Gloves designed with Ansell’s proprietary ERGOFORM™ Ergonomic Design Technology have been proven to effectively minimize discomfort from prolonged repetitive hand movements, enabling workers to work confidently and comfortably for longer.

**HyFlex® 11-816**
Ultra-thin ergonomic design improves fingertip sensitivity for extreme comfort and a barehand feel while performing precision tasks.

**HyFlex® 11-931**
Palm-coated cut resistance which repels oil and liquid combined. A reinforced thumb crotch extends glove life. Minimizes risk of hand fatigue and the development of cumulative trauma disorders.

**MICROFLEX® XCEED® XC-310**
Ansell’s most durable thin mil nitrile disposable glove designed to reduce hand fatigue and improve performance.

**MICROFLEX® Ultraform™ UF-524**
Comfortable, ultra-thin nitrile glove that offers affordable, tactile protection, reduces hand fatigue and improves performance.

**AlphaTec® 53-001**
Multi-barrier chemical protection thanks to an innovative multi-layer polymer design - nitrile/neoprene/nitrile layers. Features ANSELL GRIP™ Technology for the handling of wet or oily parts providing enhanced dexterity, grip and comfort.

**AlphaTec® 1800 Comfort - Model 195**
Lightweight and breathable coverall with optimized body fit, improving wearer comfort and safety.

**HyFlex® 11-812**
Patented knitted design allows the glove to easily tear at multiple high-risk areas to minimize the risk of entanglement in rotating tools. Provides excellent tactility to grab even the smallest parts.

**HyFlex® 11-937**
Enhanced durability with 18-gauge design for enhanced dexterity and high-level comfort.

**HyFlex® 11-939**
Our lightest weight durable solution with multi-risk cut, oil and liquid protection. 18-gauge design for enhanced dexterity and high-level comfort.

**HyFlex® 11-840**
Outstanding durability and unmatched comfort. Longer lasting handling in abrasive conditions. Proprietary ANSELL GRIP™ Technology enhances flexibility and grip. Nylon and spandex liner improves breathability and range of movement.

**AlphaTec® 58-128**
Provides quantifiable ergonomic benefits to the wearer and delivers high-performance musculoskeletal support. Conforms to the shape of the wearer’s hand enabling natural movement.

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IMPACT PROTECTION

When maintaining and operating machinery with rotating and pneumatic parts, such as forklifts and conveyors, workers are faced with the risk of crush and pinch injuries to their hands. Even easy tasks such as shutting a truck door can end up in a pinch point injury. Ensuring workers consistently wear the proper hand protection throughout the day can reduce the risk of accidents and incidents. Ansell’s Ringers Impact Protection System protects workers against the risk of impact while providing superior comfort and dexterity.

Ringers R-161
High visibility impact protection with synthetic red leather padded palm and touchscreen compatibility for comfort and ease-of-use. Excellent for all-day automotive tasks.

Ringers R-162
High visibility orange impact protection with synthetic red leather padded palm and touchscreen compatibility for comfort and ease-of-use. Excellent for all-day automotive tasks.

Ringers R-163
Impact protection for general use or maintenance of automotive machinery. Synthetic leather padded palm and touchscreen compatibility for comfort and ease-of-use.

Ringers R-167
Certified impact protection with A3 cut resistance, for versatile and complete protection for general tasks in any automotive environment. Features comfortable padded synthetic leather palm and touchscreen compatibility for technology interaction.

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VIRAL PROTECTION

As a result of COVID-19, workplaces must consider the need to protect against the spread of illness and viral infection. Ansell offers a wide range of solutions that comply with the World Health Organization’s guidance regarding infection prevention and control. In order to make an informed decision, product purchasers and users should stay abreast of the latest and most complete information regarding appropriate PPE to protect against COVID-19 and other viruses in their specific environments and applications.

Microflex® Xceed® XC-310
Ansell’s most durable thin mil nitrile disposable glove. Featuring ERGOFORM™ Technology to reduce hand fatigue and improve performance. Examination grade.

Microflex® E-Grip® L97
With a micro-textured satin finish, this glove provides enhanced gripping power and excellent tactile sensitivity. Beaded cuff for easy donning. Examination grade.

Hyflex® 11-100
The only industrial glove designed with Iona+™, an EPA-registered antimicrobial technology. The gloves include self-cleaning 360° antimicrobial protection of both the liner and coating, and is also touchscreen compatible for use with a wide range of devices.

Alphatec® Solvex® 37-175
Offers versatile chemical protection and is certified for protection against viruses according to the EN ISO 374-5 VIRUS standard.

AlphaTec® 2000 Ts PLUS - Model 111
Guards against liquids and particulate biological hazards. Certified according to the EN 14126 standard to protect against infective agents such as bacteria, fungi and viruses and ASTM F 1671.

AlphaTec® 2300 PLUS - Model 132
Protective barrier to numerous inorganic liquid chemicals including acids and bases. Certified according to the EN 14126 standard to protect against infective agents such as bacteria, fungi and viruses and ASTM F 1671.

Note: Product availability may vary. These styles serve as examples only. For tailored recommendations for your unique needs and applications, please request an AnsellGUARDIAN® assessment. Gloves not labeled “examination grade” are not designed for use in medical or patient care settings. Hyflex® 11-100 will not protect against liquids or other substances that will cross a permeable membrane.
AnsellGUARDIAN® is our consultative service to help companies select and implement the right personal protective equipment solutions to improve safety, increase productivity and reduce costs. Using our 125 years of experience, proprietary software system and database of over 30,000 chemicals, we analyze PPE needs and identify the solutions that will work best for each company’s unique risks and applications. As an industry pioneer with the most advanced technology and analytics, we have evaluated and implemented best business practices in over 15,000 facilities worldwide, reducing injuries and saving companies a total of $165M. AnsellGUARDIAN® assessments address 7 functional areas:

1. **Injury Prevention**
   - Identify hazards to reduce the risk of injury and lower the direct and indirect costs of injuries

2. **Cost Reduction**
   - Make performance improvements to lower direct and indirect PPE costs

3. **Standardization**
   - Ensure optimum product selection across similar jobs

4. **SKU Reduction**
   - Minimize SKUs to improve working capital

5. **Controls**
   - Optimize dispensing, usage and disposal procedures

6. **Training**
   - Educate workers on the proper selection and effective use of PPE

7. **Waste Reduction**
   - Improve output through waste elimination

**Get Started Today**
There’s no cost for an AnsellGUARDIAN® assessment. Learn how we can help you reduce injuries, improve productivity and lower costs. Contact your local Ansell Sales Representative or Customer Service Representative today.

**ABOUT ANSELL**
As a global leader in personal protective solutions with over 125 years of experience in keeping people safe, Ansell’s mission is to provide innovative and reliable solutions for safety, well-being and peace of mind to workers around the world. Our global team of more than 12,000 people in 55 countries design, manufacture and market cutting edge PPE that millions of workers in industrial and healthcare settings rely upon every day. We offer a comprehensive portfolio of hand and body protection products and provide customers with tailored solutions to meet their unique needs across a wide range of industries and applications.

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**WARNING:** Products that provide “cut resistance” and “cut protection” or “puncture resistance” and “puncture protection” do not completely prevent or eliminate the potential for cuts or punctures, and are not intended or tested to provide protection against powered blades, serrated or other sharp or rotating equipment. Products offering “viral protection” do not completely prevent the transmission of disease. Products that provide “chemical resistance” or “chemical protection” do not completely prevent or eliminate the potential for injury due to chemical exposure. Products that provide “resistance” to oil or grease or which are “oil repellent” do not completely prevent or eliminate the potential for oil or liquid penetration or absorption. Products that provide “snag resistance” or “snag protection” do not completely prevent or eliminate the potential for snags or friction-related injuries. Products that provide protection against sparks or flames are not “fireproof” and do not completely prevent or eliminate the potential for burns or associated injuries. Products that provide protection or resistance against heat or cold are not intended for use in extreme temperatures – use only as specified. Products containing natural rubber latex may cause allergic reactions in some individuals. Products that provide “impact, crush and pinch protection” do not completely eliminate the potential for impact or crush related injuries. Users are encouraged to always use caution and care when handling sharp or abrasive materials, chemicals, or other hazardous or dangerous substances. Any information or data provided is based upon Ansell’s current knowledge and understanding of the subject matter, and is offered solely as a possible suggestion for use in making your own decisions or product choices. Product users should conduct all appropriate testing or other evaluations to determine the suitability of Ansell products for a particular purpose or use within a particular environment. It is the responsibility of a product user to assess the level of risk and to determine the protective equipment required or appropriate for the user’s particular purpose. Ansell may revise this information as new information, knowledge or experience becomes available. Ansell DISCLAIMS ALL WARRANTIES OTHER THAN AS EXPRESSLY PROVIDED.