

## Hand Protection: Consumers Opting for Safety, Comfort or Price?



*A Frost & Sullivan Whitepaper*

## **Impact of the Economic Downturn**

Among multiple markets that have felt the impact of a slowing economy, the hand protection industry is one of many sectors to experience a decrease in revenue.

Due to this economic crisis, many manufacturing facilities have started to move away to other regions where manufacturing and labor costs are low. The severity of the situation is compounded by the fact that many industries experience closures and reduced demand for their products or services, consequently reducing the number of employees. As a result there are fewer workers to protect and fewer opportunities for glove manufacturers to sell their products. Under these circumstances, it is difficult to convince end users to upgrade protective equipment for the task they are performing because, in almost all cases, an upgrade means spending more for hand protection.

The metal fabrication and automotive industries have been severely affected by the economic downturn. These are traditional applications for gloves. The construction industry has also witnessed slowdown in commercial and residential demands, impacting employment in this segment. Despite this slowdown, the recent stimulus bill expects to boost the construction industry with support for highway construction, energy efficiency and green buildings. Glove manufacturers and distributors must continue looking for other non-traditional industries to sell their products.

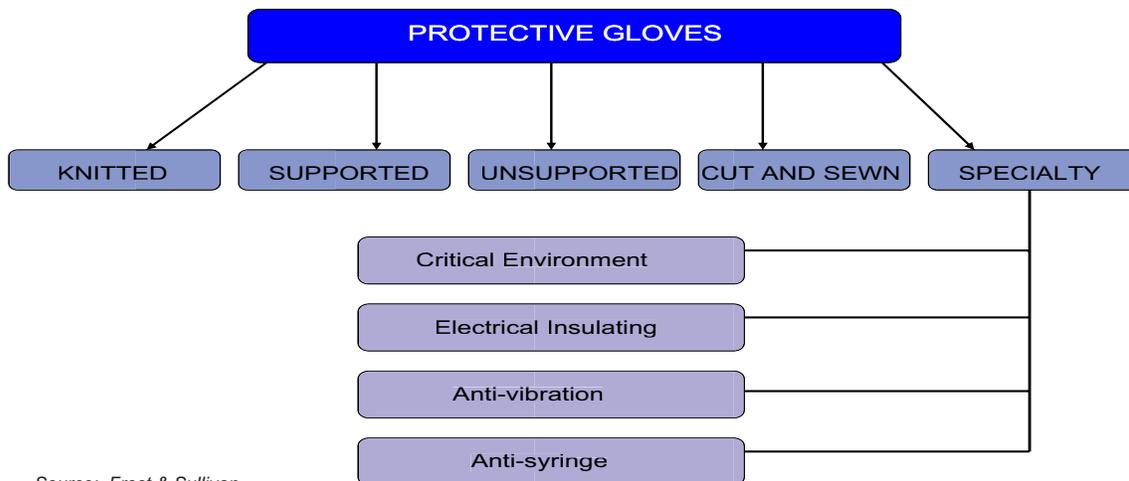
Even though hand protection is mandatory in all manufacturing facilities, some employers may try to cut costs by purchasing cheaper and lower quality products, or by enhancing the lifespan of the products and reducing replacement rates due to economic challenges.

## **Scope**

This section discusses industrial protective gloves used to protect industrial workers from many different hazards such as tear, cuts, snags, abrasion, chemical hazards, mechanical hazards, electrical hazards and thermal hazards.

The most remarkable trend in the hand protection market is offering the highest levels of protection without sacrificing dexterity. Ergonomic designs are also a major trend in this market.

Chart I.1 shows the segmentation of the hand protection market.



Source: Frost & Sullivan

The market is divided according to the manufacturing technique. This avoids duplication when trying to assess the overall market size. If segmentation is completed based on the hazard for which it protects the wearer, then there may be double counting since many gloves offer combined protection against two or more hazards. For example, Kevlar gloves offer cut and thermal protection.

### Choosing the Appropriate Glove

The Occupational Safety & Health Administration (OSHA) issued a hand protection standard, the 29 CFR 1910.138 (1998), which outlines the requirements for the use of hand protection and provides certain guidelines for the right use and maintenance of the gloves.

The first step in choosing the appropriate glove is to identify the specific workplace hazard and assess the right glove to be used for that hazard; this assessment should take into consideration comfort and dexterity. It is also essential to consider the weight of the object the employee will be working with, along with object thickness, that object will be utilized. Oil and water that may be on the object's surface must also be taken into account in the selection process.

The selection of the appropriate glove material is also imperative in preventing injuries.

Natural fabric gloves provide basic protection against dirt and abrasion but are not recommended to protect the wearer against more dangerous hazards. Leather gloves protect against heat and rough objects. Coated gloves (generally coated with polymers) are very useful to handle chemicals. Latex and nitrile can be used to handle grease, oil and other

chemicals. Finally, aramids provide heat and cold resistance, as well as cut and abrasion resistance.

OSHA has not been very specific in its guidelines for hand protection. It has recommended the use of hand protection under certain circumstances, but it does not specify the type of glove to be used. Therefore, North American companies that do not have safety managers must rely on their distributors to choose the right glove for the task they are performing.

### **Current Status of the Market**

The North American hand protection market is driven by several factors such as increased awareness on safety issues, increased price of raw materials, transportation costs, and continued innovation from glove manufacturers. There are, however, other factors that restrain market growth. These factors include the decline in manufacturing facilities caused by economic downturn, the pressure for lower prices, and the large influx of imported products.

The market generated revenues of \$2.6 billion in 2008. The overall market is growing at a compound annual growth rate of 0.9 percent and the expected revenue for 2015 is \$3 billion.

The key competitive factors in this market are price, quality and innovation. Hand protection is used in a wide range of industries such as automotive, metal fabrication, law enforcement, waste management, food handling, glass manufacturing and critical environment.

Niche applications such as critical environment and cut resistant gloves are becoming more important in the market and are growing in spite of the economic downturn. In these applications, there is less competition and manufacturers can charge higher prices for high quality products. The main competitive factor is quality and dexterity since end users who purchase these products are subject to dangerous hazards and must wear the gloves for long periods of time. They also want products with longer life spans.

Knitted gloves represent 14 percent of the overall market size in terms of revenues; supported gloves represent 19 percent and unsupported 31 percent. Cut and sewn account for 30 percent of the overall revenues, whereas special protection represents six percent. The market is likely to witness a trend in favor of supported and unsupported gloves which offer high levels of protection at relatively good prices and in detriment of cut and sewn gloves.

### **Product Trends**

The most important trend in the hand protection market is the offer of the highest level of protection and the highest level of comfort and dexterity. End users, who are susceptible to hazards and must wear gloves for long periods of time, do not want bulky products. They want ergonomic products that allow them to work and have the required dexterity to perform their tasks.

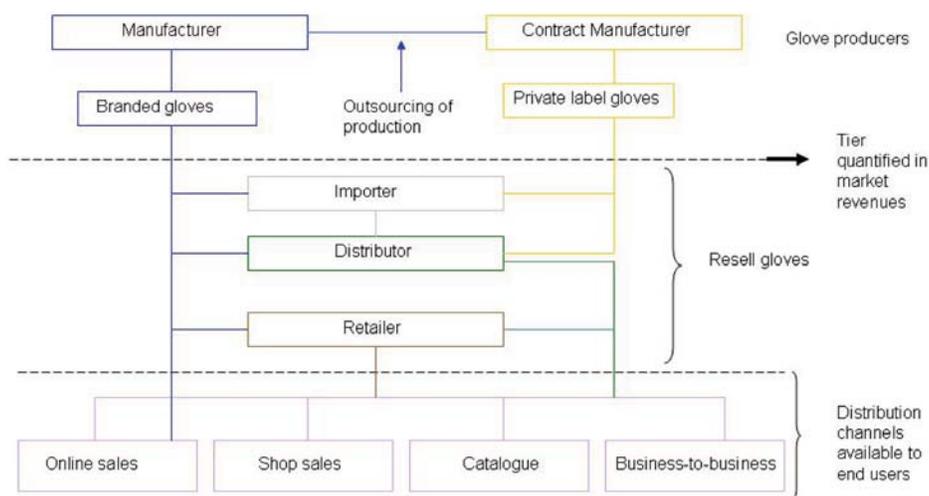
End users are more attentive to the appropriate grip on their gloves, especially the ones who deal with oily or wet surfaces.

In 2008, there was a massive shift from leather products due to the high prices this material was registering. The same was happening with oil, but it was difficult to stay away from oil by-products. Now that both prices have stabilized, leather is regaining its popularity.

Several end users are still not getting the right protection for the task they are performing. Manufacturers and distributors are trying to solve this problem by creating specific products to satisfy these needs and create more awareness through education.

### Distribution Chain

Chart 1.2 shows the distribution chain for hand protection in North America



Manufacturers and contract manufacturers are responsible for glove production. Contract manufacturers sell their products to distributors and glove brands that do not have manufacturing facilities. Importers, distributors and retailers resell the gloves. End users primarily obtain gloves from distributors; however, there are alternative distribution channels such as online sales and business-to-business.

### Competitive Landscape

The hand protection market is composed of different market participants. There are some glove manufacturers (some of which only manufacture gloves, and others that are manufacture different types of personal protective equipment) that produce only for North America, such as Impacto. Other manufacturers sell their products in additional regions, such as Kimberly-Clark and Ansell. Glove brands generally have their manufacturing facilities in countries where labor costs are lower, but some of them have their manufacturing facilities

in North America. The second type of market participants are importers. They buy inexpensive products, generally of low quality, from countries in Asia-Pacific and sell them in the region. Finally, distributors also participate in the hand protection market. Almost 85 percent of sales are conducted through distributors in North America. This said, they have permanent contact with end users and are very aware of their needs. They generally play a critical role in the glove markets and often have their own private label.

The top three market participants are Ansell, Best Gloves and MCR Safety. These companies account for almost 58 percent of the overall North American glove market. There are also other important companies such as Kimberly-Clark, Protective Industrial Products, and some niche players such as HexArmor, which specialize in puncture and cut-resistant gloves. Importers have a big share of the overall market size and still gain more space in the marketplace.

### **Challenges**

The hand protection market faces several challenges that are likely to impact its growth. Leading glove manufacturers face the challenge of private label competition placing products into the market by distributors. These products are generally imported from Asia Pacific, or bought from contract manufacturers. The biggest challenge for leading glove manufacturers is the direct contact between distributors and end users. The relationship between the two can sometimes make it difficult for branded manufacturers to introduce their brands and educate end users on the importance of using high-end products.

Another important challenge faced by manufacturers and distributors is the tendency to view gloves as consumable products rather than an investment for safety and comfort. If the wrong perception of gloves spreads among end users, it will be difficult to sell high-end products that target specific hazards. This is a challenge that can be overcome with education.

Use of incorrect gloves for protection against hazards is another challenge that deeply concerns both manufacturers and distributors. This is the most common problem faced by all suppliers of gloves in the marketplace. For cut-resistant gloves, for example, there are two different standards that can be used to label products, the European Standards and the ANSI Standards. They are not easily comparable, so end users can easily be confused and many times buy gloves that do not offer the required cut protection level.

Finally, the increased demand for innovative products is a major challenge for glove manufacturers due to cost and R&D investment. When new products are launched, they are replicated in a very short time period, leading to even more confusion among end users.

## Strategic Recommendations

The hand protection market has many active participants. These range from big and consolidated glove brands, such as Ansell, to smaller and niche-focused brands such as HexArmor. The market is supported by national distributors, such as Airgas and Hagemeyer, or smaller regional ones like Chagrin Safety.

Some market segments, such as cut-and-sewn and knitted glove segments, witness intense competition. Several market participants believe that a process of consolidation will start where big companies are likely to acquire smaller ones. For the remaining participants, competition is likely to be more aggressive, and many think that smaller glove brands will end up supplying the lower end of the market.

Big glove brands will have to conduct strategic acquisitions in order to supply as many market segments as possible. Smaller participants, on the other hand, will need to cater to specific end-user segments and provide the appropriate gloves for their needs in order to remain competitive. The lower end of the market is likely to be very competitive as imports expect to remain in the market due to low prices and high demand.

Quality, good prices, and innovative products aimed to satisfy unmet needs, are the key to success. And the final question for all market players is: What do consumers prefer - safety, comfort or price? The jury is still out.

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