

## Laceration Injuries Reduced to Zero

Maintenance workers in refineries regularly use stainless steel slotted shims to level and maintain pumps, motors, and machines. While steel shims provide optimal efficiency in maintaining equipment, they also create a dangerous hazard for hands at work. Since pump and machine maintenance is an ongoing process, workers are constantly handling shims, which increases the potential for injury.

### Maintenance Worker has Multiple Injuries Working with Shims

While a slotted shim is a common, helpful tool for maintenance workers in oil refineries, the shim's handy tab and corners can become sharp hazards that can cause serious injury. The often paper thin stainless steel shims can be razor sharp, and are easily capable of slicing through ordinary leather maintenance gloves, Kevlar®, or cotton work gloves.

HexArmor® had interviewed a refinery maintenance worker who received several recordable lacerations to his thumb and index finger, as well as smash injuries to his knuckles while working with steel shims. One recent injury required stitches, and due to the location of the wound, the worker was off the job for two weeks. After these costly incidents, the safety team began looking for a better hand protection solution.

### HexArmor® Provides Needed Protection from Razor Sharp Shim Edges

Before returning to work after the injury, HexArmor® provided the same worker with a pair of Chrome Series® 4026 mechanics' gloves. While performing routine maintenance using a metal shim,



HexArmor® prevents injury with SuperFabric® brand material

the worker received an almost identical type of cut from the shim. This time, however, his hand was not cut and he did not have to leave work that day.

While the sharp edge of the shim slashed the exterior synthetic leather covering the finger and palm of the glove, it had no effect on the SuperFabric®\* underneath. HexArmor® is an exclusive licensee of SuperFabric® brand material. SuperFabric® technology provides industry leading cut protection, which played a huge role in saving this worker's finger.

This worker continued to use the same HexArmor® gloves for weeks after the incident, claiming that: "They were just as good as ever." In order to create this case study, we had to bargain with the worker to give up his HexArmor® gloves for a new pair – a small price for progress in designing the best PPE in the business.

- Stainless steel metal shims are used to level machinery and pump systems during maintenance, they can be paper thin and razor sharp.
- A maintenance worker at an oil refinery had several cut injuries while working with shims, and was off work for over two weeks for a severe laceration.
- HexArmor's Chrome Series® was able to save the worker from another trip to the hospital, and keep him on the job.

\*SuperFabric® is a registered Trademark of HDM, Inc.

### Chrome Series® 4026

The HexArmor Chrome Series® 4026 mechanics glove was made to handle the sharp edges of steel shims and other laceration hazards. These gloves provide industry leading cut and puncture protection, and a superior back-of-hand impact protection system utilizes an advanced design to dissipate forceful blows over a large area.

*HexArmor® is an industry leading manufacturer of high performance personal protective equipment (PPE) made with technologies that push the limits of cut, puncture, needle, and abrasion resistance. Our mission is simple: give you better products with better technology designed with end user needs and collaboration. HexArmor® works with industries from oil and gas, to mining, food processing and waste recycling to design the best working and most protective glove available today.*



Chrome Series® 4026

#### Cut Resistance

SuperFabric® brand material is a HexArmor® exclusively licensed solution for the Industrial PPE Market that provides industry leading protection against lacerations, punctures and slashes like no other material in the industry today.

#### Smash Protection

It's hard to predict when a tool is going to slip, or a piece of equipment will shift and smash or pinch your hand. That is why HexArmor® engineered its smash guards to deflect impact away from the hand better than competitive impact protection.

#### Puncture Protection

HexArmor® gloves were laboratory and field tested to validate industry standards for puncture-resistance, and prevent sharp tools, blades and protruding hazards from penetrating the glove.

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