

## Needlestick Glove Solutions

Workers on recycle sorting lines are exposed to needles in waste streams every day, increasing the likelihood that a worker will come in contact with an exposed, contaminated needle. HexArmor® saw an opportunity to engineer a solution for these sorters using its advanced technology and worked with a material recovery facility to spearhead an anti-needle program that has virtually eliminated needle injuries to date.

### Rising Number of Needles in Recycle Streams Creates Need for Better PPE

A material recovery facility's increased recycling and sorting demands brought workers in contact with sharps and needles hidden in plastic bottles and containers. Each year recycling workers are exposed to approximately two-to-three billion improperly disposed needles. Exposure to contaminated needles created an unacceptable health risk for employees and the company.

### HexArmor® Collaborates with Material Recovery Facility to Develop Needle Protection Solutions

HexArmor® designers worked directly with the material recovery facility's safety team to create a series of protective gloves that had the capability to resist needle sticks and punctures, as well as cuts from broken glass shards, steel, wire, and wood splinters commonly encountered in recycling operations. The collaborative nature of the HexArmor®/material recovery facility relationship led to the development of a mandated hand and arm protection program for recycle sorters that requires operators and line workers to exclusively wear HexArmor® products while on the job.



SharpsMaster® II 9014

SuperFabric®\* technology was the key to preventing needle sticks and punctures from sharps, as well as offering optimal resistance to cuts in a wide range of recycling and sorting tasks. SuperFabric® stopped needle sticks at the point of attack to protect workers' health and safety. In addition to developing a complete line of recycling and sorting gloves, HexArmor® has developed needle-resistant Arm Guards, which are now also required in the material recovery facility's protection mandate.

HexArmor® continues to collaborate with the material recovery facility on improving current products, and engineering advanced solutions that offer superior protection and extended service in a wide range of waste handling and recycling applications.

- Needle exposures can cost anywhere from \$5,000 for initial evaluations to in excess of \$36,000 per year for ongoing treatment <sup>1-2</sup>
- 63% of injection drug users dispose of needles in their residential trash <sup>3-4</sup>
- HexArmor® developed over 14 generations of hand protection to solve the material recovery facility's needle injuries, and continues to collaborate on further R&D

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

## Product Solutions

HexArmor® was able to engineer 14 generations of hand and arm protection using feedback from the material recovery facility to eliminate needle injuries on recycle sorting lines across the U.S. The ongoing relationship between the companies is leading to breakthroughs in advanced technology hand and arm protection in other areas of the facility's core business like hauling operations.

### Sharpmaster II® 9014

The Sharpmaster® II is the result of the material recovery facility's request for a single glove solution for needle protection on the sorting lines. Many sites were using a dual glove system, which was costly and didn't give them the needed protection. The Sharpmaster® II is one of HexArmor's most popular needle resistant products, and comes from a long lineage of collaborative feedback from end users and safety professionals.



### PointGuard® X 6044

Many sorting facilities prefer a double glove system, where a user will wear the PointGuard® X underneath a latex coated over-glove. The advantage to the double glove system is that the liner does not wear out as fast as the cheaper over-glove, and protection is not sacrificed.



8" Needle Resistant Arm Guard AG8TW

### Needle Resistant Arm Guard

Sorting facilities mandated HexArmor® needle resistant arm protection after seeing how well the needle resistant glove program was adopted. The arm protection gives sorters an additional area of preventative protection from needles coming down the sorting line.

*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.*

<sup>1</sup> B R Schackman and others. The lifetime cost of HIV care in the United States in the current treatment era.

<sup>2</sup> Centers for Disease Control and Prevention.

<sup>3</sup> Sterile syringe access and disposal among injection drug users newly enrolled in methadone treatment: a cross-functional survey; McNeely, et. al. Department of Medicine, Brigham and Woman's Hospital, Boston MA. February 18, 2007.

<sup>4</sup> Abdala N, Stephens PC, Griffith BP, Heimer R. Survival of HIV-1 in Syringes. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology 1999; 20(1):73-80.

### Needle Puncture Protection

HexArmor® gloves and arm protection use SuperFabric®\* brand materials, and are extensively tested according to ASTM F2878 testing for needle resistance. HexArmor® needle products rate 2-3 times higher than competitors on this test, and have been a trusted leader in needle protection for over 10 years. SuperFabric® brand material is a HexArmor® exclusively licensed solution for the Industrial PPE Market.

### Cut Resistance

Needles aren't the only hazards that sorters need to watch out for. Metals, glass, and plastics can come down the line with razor-sharp edges, which call for PPE with high cut-resistance. All puncture-resistant HexArmor® gloves are put to the test in the lab and in the field.

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