



HexArmor®

PROJECT DETAILS

Customer: HexArmor®

Application: Personal Protective Equipment (PPE)

Technology: Quick Design Support, New Product Development, and Precision Converted Manufacturing

Industry: Medical & Industrial

Location: Grand Rapids, Michigan



INTRODUCTION

Learn how HexArmor® and Boyd Corporation partnered together to quickly design and manufacture Personal Protective Equipment (PPE) like Face Shields and disposable goggles to protect healthcare workers around the world.

THE CHALLENGE

The current COVID-19 pandemic has impacted lives across the globe and has caused shortages in critical medical devices and PPE needed to fight and prevent the spread of the disease. One of the most crucial pieces of equipment included in this shortage is face masks. The high demand has led to a PPE deficit, compelling front line workers to use their masks well beyond protocol or make their own supplies with little resources available.

THE SOLUTION

HexArmor®, a global leader in PPE, has recently released new disposable safety goggles and face shields to help overcome the supply shortage the world is currently facing. While companies shift from making their standard products to PPE, HexArmor® was uniquely positioned to pivot and immediately respond with an innovative solution.

Fluid-resistant face shields and disposable goggles help protect the face and eyes from harmful splashes, sprays, or airborne particulates while still maintaining functional optical clarity. This enables users enough visibility to complete essential tasks while preventing the spread of pathogens, in this case the COVID-19 virus. Each solution meets D3 liquid splash protection and ANSI/ISEA Z87.1-2015 standard for impact, optical clarity, and haze based on HexArmor's internal testing.

- Fluid-Resistant Face Shield: Fully assembled, developed to help conserve N95 face masks by providing a fluid-resistant first layer of defense to block liquid splash, dust, and more. Meets D3 liquid splash protection and ANSI/ISEA Z87.1-2015 standard for impact, optical clarity, and haze (internal testing).
- Fluid-Resistant Disposable Goggle: Fully assembled, developed to block liquid splash and dust. Meets D3 liquid splash protection and ANSI/ISEA Z87.1-2015 standard for impact, optical clarity, and haze (internal testing).



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Steve VanErmen, CEO of HexArmor®



For more case studies and information about Boyd's solutions, visit:
www.boydcorp.com

HexArmor® continues its dedication to the safety and health of the community. “Our focus is to protect people, and right now we’re doing everything we can to pivot our manpower and product development into helping the front-line responders fight this pandemic,” says Steve VanErmen, CEO of HexArmor®. “Through the talent and efficiency of our incredible team, we’ve been able to pull our resources together to create much needed products for our heroes on the frontlines.”

IMPLEMENTATION

Boyd Corporation assisted HexArmor® in the fabrication of these face shields and disposable goggles with expertise and experience in material science and precision converting for the medical industry. Boyd leveraged existing clean room capabilities to efficiently produce sterile solutions at the volumes necessary to meet global needs for critical PPE. Both the PET film and adhesive foam cushion are being converted by Boyd.

Boyd Corporation adjusted production priorities to address critical medical wearable, disposable, and PPE product needs. Face shields to protect frontline healthcare workers continue to be urgently needed and Boyd provided quick turnaround times to ensure millions of units were produced within the first two months of production ramp. Additionally, Boyd has helped to improve the functional design and manufacturing efficiency of face shield and goggle components, including optically clear adhesives to assure optimal visibility and clarity, anti-fogging film materials to combat moisture condensation from breathing or high humidity environments, malleable flex wire to support face masks above the nose, and elastic headbands and attachment systems for enhanced comfort that reduces fatigue. Boyd is committed to supporting the medical industry with tightly controlled engineered materials innovatively designed to exceed performance expectations for healthcare protection solutions, from PPE components to advanced wound care, medical wearables, and patient monitoring.

RESULTS

In these uncertain times, the one thing that remains unwavering is HexArmor®’s commitment to the health and safety of the community, a sentiment strongly shared with Boyd. Boyd was able to quickly procure materials, design production processes and manufacturing flow to mass produce and ship parts within a week of receiving HexArmor®’s initial outreach, helping HexArmor® to manufacture and supply approximately 10 million PPE units within 2 months to healthcare workers and frontline responders, with additional capacity to produce more as our communities need.