Certified Robotic Protection

Stay protected, stay productive, with Pendant Armor®, The Ultimate Teach Pendant Protection

Using a blend of industry insight, advanced materials knowledge, and aviation manufacturing techniques, Pendant Armor® is the world's first mass produced, patented, energy-absorbing bumper to protect teach pendants.

Extend the life of your robot with Robosuit® Automation Covers

Grit, caustic chemicals, weld slag and sharp metal turnings can render your robot inoperative in short order. Keep these contaminants off your robot and make routine maintenance more efficient and effective. Protect and prolong the life of your industrial automation investment.

Durable and Disposable Robosuit® Covers for the UR3, UR5 and UR10 Collaborative Robots are **Universal Robots+ Certified**

UNIVERSAL ROBOTS+ Certified

PENDANT ARMOR® BY ROBOWORLD

ROBOSUIT® BY ROBOWORLD

Will *Your* Robotic Teach Pendant Pass the Drop Test?

There are different methods to program a robot. The most common is the initial setup with a computer module to upload a programming routine. As the market has introduced collaborative robots, they can be programmed via place-and-record programming, interpolating positions based on recorded location. The crucial thing to note is that, despite the programming method (or type of a robot), one can still find an attached teach pendant.

What are Teach Pendants?

A teach pendant (human machine interface, or HMI) is a critical component for any industrial robot. It allows users to perform several operations in the field and on site, such as program modifications, changes to tooling, defining weld tracking points, and facilitate modifications to production routines. A teach pendant is important as it allows operators to work with robots without the need for tethering to a fixed terminal. For robotic repair, technicians use the pendant to test equipment, making the device crucial not only for application uses, but also for repair and refurbishment.

Aside from programming, pendants perform other functions. The devices are typically equipped with an emergency stop button, to immediately shut down all operations if a safety issue or production problem arises. They also display real-time information and the keyboard offers the ability to edit commands in real-time.

Protecting Your Pendant

Considering how important pendants are to everyday use and maintenance, they need to be protected. Just like your smartphone or tablet devices – teach pendants are prone to damage from falls or mishandling. They can suffer cracked screens and internal damage, resulting in hours of production downtime. The devices are often operating in harsh environments, subjected to chemicals or heat like that from a welding torch.

Roboworld has designed solutions to protect pendants. We use CAD data and laser-scans to construct protective cases that fit devices precisely and have conducted testing with 3D printed replicas to determine the most vulnerable areas.

Our Pendant Armor® is made from Santoprene, a shock absorbing chemical resistant material. The material provides the right mix of shock mitigation, chemical compatibility, and ruggedness for modern manufacturing environments. Independent, third-party drop tests confirmed that our custom-molded bumpers mitigate the shock from impacts and falls. Pendant Armor® features an open-back design to minimize weight without sacrificing critical protection.

Pendant Armor® is textured for enhanced grip. Perforations wick fluid from the pendant's grip areas, helps lessen human fatigue during prolonged programming sessions, and touchscreen films can be employed to protect the display.

By using a Pendant Armor® case, one can reduce maintenance and repair costs. Repairs to broken pendants can cost upwards of $2500 per occurrence, and pendant replacements can exceed $7500. Considering how valuable and costly teach pendants are, investing upfront in a protective case is the best solution to ensure long-lasting productivity.