# **Customized Robot Protection**



Guyson engineered robot suits are designed to provide extensive blast protection without restricting the payload or movement of the robot. We achieve this by utilizing the following Guyson suit innovations:

## 35oz Hypalon fabric outer shell with minimal seams

Hypalon is a highly puncture and abrasion resistant fabric consisting of a synthetic rubber coated nylon. Our robot suits are patterned with minimal seams for greater blast protection.

### Abrasion resistant heavy duty thread

Our seams are designed to protect critical stitching and are sewn with abrasion resistant heavy duty thread to increase the useable life of the robot suit.

### **Fiberglass Support Rod**

For many applications we add a fiberglass support rod to remove the weight of the suit from the robot. The fiberglass rod acts as a spine giving the suit independent support. There are many advantages from eliminating the weight of the suit on the robot to driving movement of the suit during the rotation of the robot. This can be an advantage for both small robots with small payloads to large robots where suits can be cumbersome. The addition of the fiberglass rod also permits using heavy weight Hypalon even on small robots.

### Multiple layer nylon fabric inner core

Two inner layers of heavy duty 400 denier nylon fabric provide smooth robot suit motion and reduce the forces on joints from traditional robot suits. The smooth nylon

inner core frees the robot for faster joint movements to increase cycle time.

### Aluminum & nylon suit joint ring

Guyson has developed a robust joint ring specifically designed for applications with extensive arm movement. This extremely low friction ring is the union between 2 robot suit sections (Main Suit & Sleeve) allowing fast & extreme movements of the robot arm.

Guyson continues to innovate. Through research and extensive material testing our robot suits are constantly advancing. We are committed to providing our customers with the most recent developments for both standard and custom suit design.

