

# DIAMONDBACK PRO

## WHITE PAPER

- ✓ Reduce sleeve installation times by up to 80%
- ✓ Eliminate need for multiple assemblers
- ✓ Reduce install costs and increase profits

### TARGET MARKET

- Production Manager
- Process Engineer
- Hose Assembler
- Purchasing Manager
- Product Manager

## FULL-SPECTRUM APPLICATION PROTECTION

### PURPOSE

The design and construction of Diamondback is the foundation of the new “Pro” series, a finishing process that offers high-volume hose production facilities the opportunity to reduce sleeve installation by 80%. Diamondback Pro allows a single assembler to easily install long lengths of sleeve in a fraction of the time it currently takes, greatly reducing or eliminating the fatigue that assemblers experience and allowing for far more consistent production throughout an eight-hour shift. The Pro series not only increases production, but also increases the profitability of the assembly operation by reducing the labor involved in sleeve assembly.

### CHALLENGE

Suburban Manufacturing Group (SMG) has found that the Fluid Power industry struggles with installing tubular sleeves onto hydraulic hoses, especially on lengths over 8 ft. Typically, a sleeve being installed is sized slightly larger than the outside diameter of the hose, causing the assembler to struggle. Install usually requires a needle nose pliers to hold the sleeve and push the hose through or to bunch the sleeve and try to walk it down over the hose. This process can take multiple people a lot of time, plus create assembler fatigue.

### PRODUCT MEETS THE CHALLENGE

SMG has surveyed multiple users and found that they have saved up to and over 80% on many hose assemblies. One user said that on a 200” (16 ft.) hose, it would take two assemblers up to 10 minutes to add on the traditional sleeve. With the Diamondback PRO series, they reduced the time for a complete hose assembly to only two minutes per one assembler.

### PRODUCT DESIGN

Series II Diamondback allows OEMs, distributors or assembly facilities to have a single inventory to meet two different protection requirements of today’s market – pinhole leaks and abrasion protection. Sizing requirements for pinhole leaks is important for optimum performance for close-proximity operator protection. When used in abrasion protection, the sizing can be fitted for the space requirements of the application. This unique product reduces inventory, part numbers, and costs while giving the end user the most advanced protection product in its class on the market today.

### SPECS

Diamondback now offers UV resistance that rivals automotive seat belt specs which are considered to be the best on the market. The updated performance in pinhole protection (4000 PSI for four minutes) reduces any vented fluid to a vapor mist and the abrasion resistance has increased tremendously. The domestic sleeves currently on the market test at about 363,000 cycles, while the Diamondback has shown abrasion cycles (ISO 6945 and ASTM D6770) of over 2.6 million. Our fiber, process, and weaving method tightens the weave into a very dense weave which makes it the best single protective product on the market today.

Having tested the vast majority of the sleeve products on the global market, it is safe to say that Diamondback Pro series installs faster and easier than any other product on the market.



FOR MORE INFORMATION  
Call **1.800.782.5752** or Visit **GOSUBURBAN.COM**

