

DG-2000
DYNA-GRIP®
METAL AIR SHAFTS

Cost Effective
Easy to Maintain



Long-lasting Bladder
Comprehensive Warranty



DOUBLE E COMPANY, LLC

Excellence in Engineering

Dyna-Grip® metal bladder shafts are designed and manufactured to be durable, easy to use, and simple to maintain.

DYNA-GRIP® AIR SHAFTS

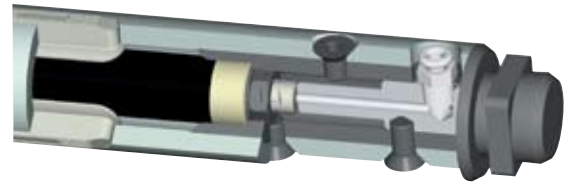
For over thirty-five years, the Double E Company has been engineering and manufacturing innovative web handling equipment for the paper, film, and foil converting and packaging industries. Dyna-Grip air shafts combine advanced design, high performance materials, and the latest in manufacturing technology to perfect an industry standard – the metal bladder shaft.

ADVANCED DESIGN AND MATERIALS

Until now, all shaft bladders have been made from a common form of neoprene rubber. This material, originally developed decades ago, requires frequent replacement due to stretching and abrasion. When the lugs come in contact with this material during rotation, rapid wear results. In addition, the permanent stretching of the bladder often requires springs to force the lugs down after the air has been released. These springs are necessary to allow

for easy removal and insertion of the shaft into the core. Over time, the springs fatigue, break, puncture the bladder, and lead to shaft failure.

Double E uses a unique polyprene bladder material with a proprietary corded design. This special bladder is much more resistant to puncture than common rubber, significantly reducing the major cause of shaft failure and bladder replacement.



The DG-2000 bladder shaft's journal connection allows easy maintenance.

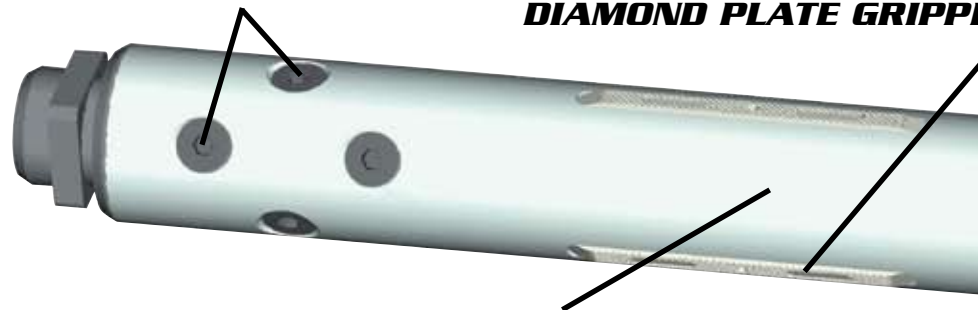
The Double E bladder is more resistant to stretching and abrasion as well. This material allows Double E, in most cases, to eliminate lug springs, ending the risk of puncture altogether.

Double E lugs, also unique, feature a “diamond-grip” surface in steel, aluminum, or hard rubber. This field-proven technology maximizes gripping performance.

COMPONENTS

RUGGED PROPRIETARY FASTENING SYSTEM

DIE-CAST ALUMINUM LUGS MANUFACTURED WITH A DIAMOND PLATE GRIPPER



ABUSE RESISTANT ALL-METAL HOUSING, AVAILABLE IN AIRCRAFT QUALITY ALUMINUM OR HIGH STRENGTH STEEL

EASY MAINTENANCE

With Dyna-Grip air shafts, bladder replacement is quick and easy. Unlike competing designs, the journal connection on DG-2000 lug shafts and DG-3000 leaf shafts is secured with flathead screws, a close tolerance fit, and deep insertion. Journals can be removed easily with a hex wrench. Competing shafts often use a tapered press fit, requiring a hydraulic press and heat to remove the journals. Bladder replacement on these designs can take several hours while **the bladder of a Dyna-Grip shaft can be changed in just a few minutes.**

PARTS AND SERVICE

The Double E Company is proud to offer top quality customer and product support for the Dyna-Grip line. **Spare parts, as well as accessories (such as safety air-guns), are always available for immediate delivery.**

Double E supplies a complete line of core shafts for all converting, printing, and packaging applications. Models include lug and strip type bladder shafts, mechanical and pneumatic/mechanical shafts (for high speeds and/or heavy roll

UNIQUE FEATURES OF DYNA-GRIP® SHAFTS

Easy to maintain.

Ultra-durable polyurethane bladder.

Rugged proprietary journal fastening system; not a "press fit."

Die-cast lugs with diamond plate gripping surface for less slippage.

Strong, all-metal housing of aircraft-grade aluminum or steel.

Stainless steel air valve.

weights), and the world's best selling lightweight carbon fiber shafts, the

Dura-Light® line. All come with comprehensive warranties.



**ONE-PIECE
DIAMOND
PLATE LUGS**



**STAINLESS
STEEL
AIR VALVES**



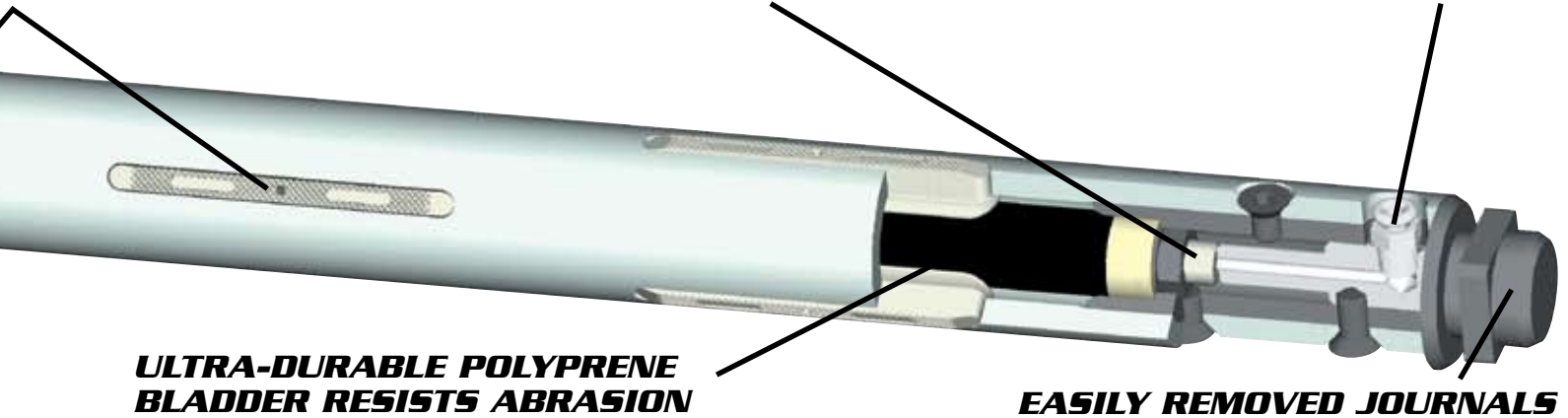
**SAFETY
AIR GUNS**

OF THE DG-2000 LUG SHAFT

**LUGS,
AN EXCLUSIVE
GRIPPING SURFACE**

**UNIQUE BLADDER ASSEMBLY
ALLOWS FOR QUICK AND EASY
BLADDER REPLACEMENT**

**RUST-RESISTANT
STAINLESS STEEL
AIR VALVE**



**ULTRA-DURABLE POLYURETHANE
BLADDER RESISTS ABRASION**

EASILY REMOVED JOURNALS

DYNA-GRIP® METAL BLADDER SHAFT

DYNA-GRIP® METAL SHAFT SPECIFICATIONS

Company Name: _____ Date: _____
Name: _____ Title: _____
Address: _____
City, State, Postal Code, Country: _____
Telephone: _____ Fax: _____ e-mail: _____

GENERAL SPECIFICATIONS

Actual Shaft Diameter: _____
Nominal Core I.D.: _____
Core Material: _____
Steel-Capped Cores: All None Some
Shaft Overall Length: _____
Support Separation: _____
Bearing Material / Type: _____
Max. Roll Weight: _____
Max. Roll Width: _____ Diameter: _____
Other Roll Weight(s): _____
Other Roll Width(s): _____
Other Roll Diameter(s): _____
Min. Roll Weight: _____
Min. Roll Width: _____ Diameter: _____
Roll Position on Shaft: Left Right Center
Web Speed: _____ Tension (P.L.I.): _____

PRESENT APPLICATION

Equipment Manufacturer: _____
Machine Type: _____
Web Material: _____
Used On:
Unwind Rewind
Center Brake or Drive Surface Brake or Drive
Drum Supported Hoisted Slit Rewind
Max. # of Slit Rolls: _____ Min. Slit Width: _____
Min. Air Line Pressure Available: _____

PRESENT SHAFT

Manufacturer: _____
Material: _____ Wall Thickness: _____
Weight: _____ Quantity Required: _____

PROBLEMS W/ PRESENT SHAFTS:

Weight Deflection Maintenance
Other _____

Sketch shaft details (include all envelope dimensions). Please send shaft drawing if available.

Please fax this completed sheet to (508)580-2915 for a formal quotation.



DOUBLE E COMPANY, LLC

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www.doubleeusa.com

Double E is the pioneer and leader in composite shaftmaking technology. Ask about our Lightweight Carbon Fiber Air Shafts.