

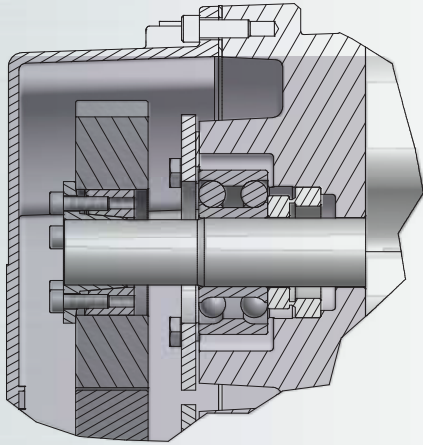
# Sutorbilt® Legend® Gas Application Industrial Blowers



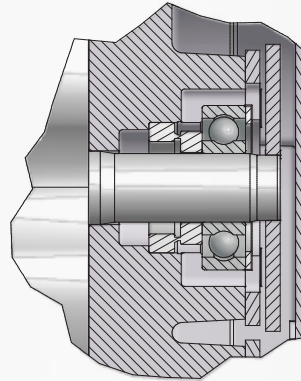
**C. Emery Nelson, Inc.**

INDUSTRIAL AND POWER PLANT EQUIPMENT

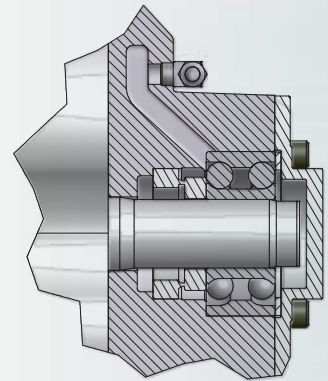
7631 Commerce Street, Hamel, MN 55340  
Ph: 763/ 420-3844 Fax: 763/420-2542



Gear End



Drive End  
Dual Splash Lube



Drive End  
Grease Lube

- Oil-Free
- Metered Quantity of Gas
- Constant Volume at Variable Pressure

The Legend design accommodates mechanical gas seals for critical gas applications with proven results based on a large installed base.

State-of-the-art carbon face mechanical gas seals are specifically engineered into the blower design, unlike other manufacturers who merely retrofit gas seals or use bypass purge tubing in their standard blower models. This field proven seal design allows trouble-free operation in critical gas applications.

Pressure	to 15 psig
Vacuum	to 16"Hg
Flows	from 25 to 3,015 cfm
Sizing	2" through 8"
Options	<ul style="list-style-type: none"> <li>• Q-Series on select models (provides up to 5 dBA noise reduction)</li> <li>• DSL on select models</li> </ul>

## New Applications Flexibility

Incorporated into the Sutorbilt Legend Series Mechanical Seal blower is Gardner Denver universal foot (3–6" R version blowers) or flex-mount design (2", 7" and 8" P version blowers) and a simple yet effective mechanical seal arrangement. The mechanical seal design allows the flexibility of mounting your gas pump in either the vertical or horizontal configuration for pressure or vacuum service.

**GD**  
**GARDNER DENVER™**

Experience Proven Results™

## Construction Feature

The mechanical seal Legend blower option has a carbon face type seal that replaces the formed-lip seals. Mechanical seals are used to prevent the bearing/gear lubricant from entering the air-seal vent system. This new seal consists of a mating ring that rotates with the shaft and is sealed by an O-ring. Sealing against the mating ring, the dynamic seal, is held against the mating ring by a wave spring. The carbon face is in a metal cup housing with an O-ring seal.

The vent cavity outlet is plugged so the gas is trapped inside the vent cavity. A sealant is also applied to the mating surfaces between the headplate and case to prevent leakage between the parts. The mating surface on the mechanical seal between the seat and the carbon face is lubricated by the blower lubricant. The metal cup housing is attached to the bearing housing to maintain position and prevent rotation of the carbon face and spring retainer.

## Materials of Construction

The mechanical seal consists of the following parts and materials:

Part	Material
Mating ring	Ni-Resist Material
Face	Carbon
Spring Holder	Stainless Steel
Springs	Stainless Steel
Retaining Ring	Stainless Steel
O-Rings	Viton

## Improved Performance

The Sutorbilt Legend blowers with mechanical seals can withstand a differential pressure, thereby permitting the seal vents in the headplates to be plugged, or vented. The most common use of this feature is with potentially flammable or expensive gasses, where it is either hazardous, or desired, to limit gas leakage through the vent system to atmosphere.

Because the bearings remain in the same location relative to the impellers and the vents are plugged, the performance is slightly enhanced. This is not true of competitive models.

## Why the Sutorbilt line of blowers & vacuum pumps earned the name “Legend”

- Backed by the most experienced and trusted distributor network in the industry
- Every Sutorbilt Legend blower/vacuum pump is built under rigid ISO 9001:2000 quality standards
- Each Legend is individually tested to meet rigorous performance specifications
- Requested by leading Original Equipment Manufacturers (OEMs) worldwide for a wide range of applications, due to the ability to customize the Legend to their specifications while meeting strict performance requirements
- A Legend is at the heart of an ever-expanding variety of air solutions working every minute of every day around the globe
- Dual Splash Lubricated and Quiet Series (for up to 5 dBA reduction) are available



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Denver®**

[www.GardnerDenverProducts.com](http://www.GardnerDenverProducts.com)

Gardner Denver, Inc. 1800 Gardner Expressway, Quincy, IL 62305  
Telephone: (800) 682-9868

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