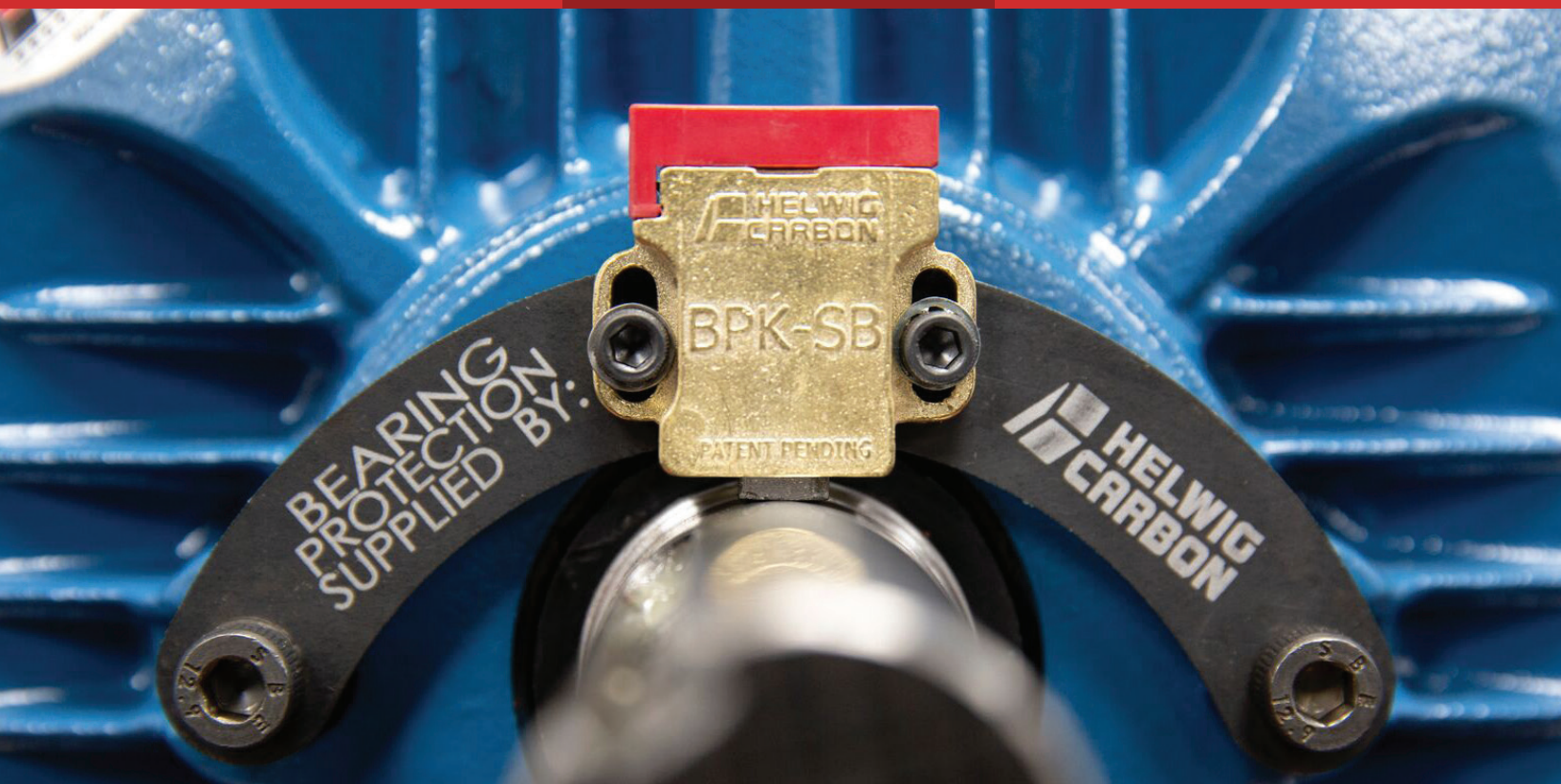


THE INDUSTRY'S BEST SHAFT GROUNDING SOLUTION

BEARINGTM PROTECTION KITS



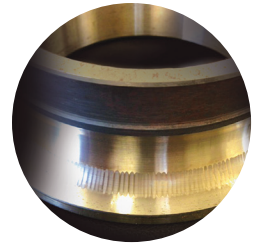
helwigcarbon.com



POWERFUL MOTORS

CAN BE TAKEN DOWN

BY IMPRESSIVELY SMALL THINGS!



Fluting damage
caused by currents
passing through
the bearing.

Need an easy way to minimize motor downtime and repairs?

Take a close look at your bearings. AC motors (with VFD) and DC motors (with PWM drives) produce induced electrical charges on the motor shaft. This current seeks the path of least resistance which is typically through the motor bearings. This leads to arcing, fluting, and pitting of the bearing race. The damaged surface causes noise, vibration, and eventual bearing failure that will require costly motor repair.

Fortunately, proven solutions can also save the day! For example:

THE HELWIG BPK (BEARING PROTECTION KIT)

It's small, but don't underestimate its ability to protect your motor from harmful induced currents. **Basically, the kit provides the least resistance path to ground, sparing your bearings and other components from electrical damage.**

Helwig's **proprietary silver graphite** solution brings advantages that everyone from small businesses, service companies, and large manufacturers can appreciate!

KEY ADVANTAGES:

- **Adaptable.** Fits most motors and multiple shaft sizes
- **User-friendly.** Easy to install and maintain
- **Tough.** Sealed and internal-mount options are available for challenging environments
- **Long-lasting. They will outlast the warranty of your motor!**
- Stock kits that are recognized and **UL Approved**



(See back of this brochure for more info)

PROTECTS:

HVAC UNITS

PUMP MOTORS

FANS

AIR HANDLING

WIND PITCH MOTORS

PROPULSION SYSTEMS

COMPRESSORS

ELEVATORS

DATA CENTERS

CHILLERS

CONVEYORS

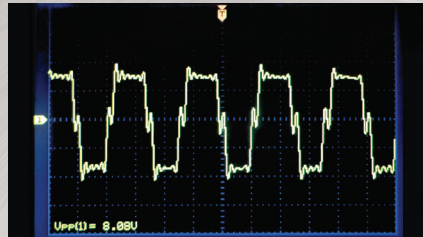


SHAFT GROUNDING TEST

Can the Helwig Bearing Protection Kit (BPK) effectively protect bearings from damaging electrical discharges? In this test, the “peak-to-peak voltage” was compared under 3 motor operating conditions: unprotected, outfitted with a carbon fiber ring shaft grounding device, and protected by the Helwig BPK.

TAKE A LOOK AT THE RESULTS:

UNPROTECTED



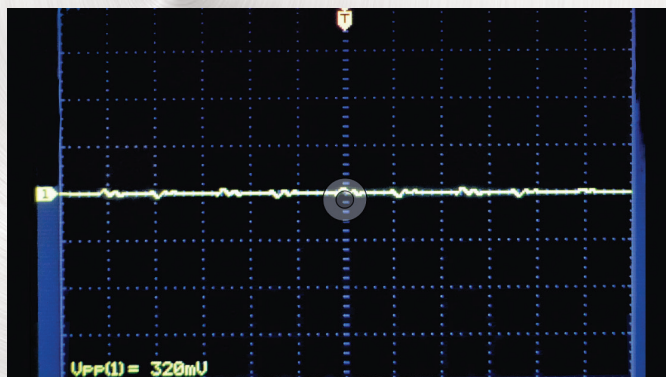
The unprotected motor experienced 8 V peak-to-peak discharges.

CARBON FIBER RING



The shaft with carbon fiber ring experience 5x more voltage peak-to-peak than one protected by a Helwig BPK!

PROTECTED BY THE HELWIG BPK



Peak-to-Peak Voltage <1V

92%
LESS

**PEAK-TO-PEAK
VOLTAGE**

When you compare oscilloscope images, it's easy to see the range of impact that electrical discharges can have on unprotected motor bearings. **Over time, it adds up!** Installing a Helwig BPK on your motor will mean longer motor life, less downtime, and more productivity with your equipment.

UL APPROVED BEARING PROTECTION KITS



**BPK
IM2**

SMALL MOTOR

.241" x .75" x .75" inch
6.1 x 19 x 19 mm



**BPK
4**

STANDARD

.5" x 1.5" x 1.38" inch
12.7 x 38 x 35 mm



**BPK
S**

SEALED

.45" x 1.63" x 1.50" inch
11.4 x 41.4 x 38 mm



**BPK
SB**

SEALED BRASS

.45" x 1.59" x 1.52" inch
11.4 X 41.3 X 38.1 mm



**BPK
AM**

LARGE MOTOR

.63" x 2.09" x 1.26" inch
16 x 53 x 32 mm

BPK KIT SELECTION GUIDE

Shaft Diameter	0" 0mm	1.25" 32mm	2" 50mm	3" 75mm	4" 100mm	5" 125mm	6" 150mm	7" 175mm	8" 200mm	9" 225mm
BPK-IM 2	Single Kit									
BPK-4/BPK-S/BPK-SB		Single Kit				2 Kits			3 Kits	
BPK-AM					Single Kit				2 Kits	

Mount 2 kits at 90° —or 3 kits at 120° —for reliable contact in the case of vibration.

For larger diameter shafts, the contact area can be increased with more kits or a larger kit.

More contact surfaces provide assurance of optimal grounding protection.

A 3M Dual-Lock option is available. It is included with most of the larger kits.

ABOUT HELWIG CARBON

Helwig Carbon Products, Inc. produces a full line of precision-made carbon brushes, brush holders and mechanical carbons. Proud to be American-owned for nearly 100 years.



8900 West Tower Avenue • Milwaukee, WI 53224-2849
Toll Free Phone: 800.962.4851 • helwigcarbon.com
Email: carboncrew@helwigcarbon.com

ISO Certified • MADE IN AMERICA



CS-100 1/2019