# **Recommended Products**



## **Save Time**

### HQD

- Reduces maintenance time
- Faster brush changes
- Solid, field proven connection
- Handles up to 200 amps continuously



# Reduce Dusting

### **Red Top Pad**

- Absorbs vibration
- Insulates spring
- Reduces maintenance time
- Extends brush life



# Eliminate Commutator Wear

#### **Composite Grade Brush**

- Reduces dusting
- Extends brush life
- Reduces maintenance time



## **Extend Brush Life**

#### **Constant Force Spring**

• Directs replacement of originals



# **Carbon Brushes & Holders** for Elevator Applications

Helwig Carbon has been servicing the Elevator Industry for over 75 years. We are committed to provide quality products, quick delivery, excellent service and technical support. Our products and services help reduce maintenance time and improve equipment performance for our customers. Our ISO 9001 certification assures production of consistently high quality products.

### **Proven Performance**

Our composite grade brushes dramatically reduce dusting and maintenance time and improve brush and commutator life.

#### **Technical Support**

Our engineering staff has extensive experience with a wide variety of elevator applications. Over 25 field service reps are available for on-site inspections.

## **Service**

Over 60 popular brush sizes are in stock, ready for same day delivery. Quick turnaround is standard for custom items.

# Carbon Brushes & Holders for Elevator Applications

**Dusting** is the most common complaint for carbon brushes in elevator applications. Often, dusting results from low average current densities, which is common to elevator generators. Successful ways to reduce dusting are: removing a row of brushes to bring up current density; or changing to a brush made of composite grade, which is a combination of a strong, dense, low friction electrographite grade and a low friction graphite material. Graphite grades offer the longest brush life, but they can cause threading and commutator wear. For more details, call for a free consultation with our trained service professionals.

**Leveling/Compounding** problems are usually caused by inadequate spring pressure. The recommended spring pressure is between 3.5 and 4.0 PSI. Brushes should be at least 80% seated in and pre-radiused for the commutator diameter. Positioning of brushes must be accurately adjusted within the neutral zone. Always check for any high resistance connections.

**Magic Grades** are often recommended by manufacturers, contractors, and brush suppliers as the "magic dustless brush grade" or made of frictionless material. There is no magic brush grade. Brush life and equipment performance can be improved by maintaining the recommended spring pressure, current density, commutator, and changeover period for brushes. It is not uncommon to expand brush life to over 12 months by following proper maintenance procedures.



### **Recommended Range** of Spring Pressure

**Industrial D.C. Applications** 4 - 5 P.S.I.

WRIM & Sync. Rings  $3 \frac{1}{2} - 4 \frac{1}{2}$  P.S.I.

High Speed Turbine Rings Soft Graphite Grades  $2 \frac{1}{2} - 3 \frac{1}{2}$  P.S.I.

Metal Graphite Brushes 4  $^{1}/_{2}$ - 5  $^{1}/_{2}$  P.S.I.

**FHP Brushes** 5-8 P.S.I.

**Traction Brushes** 5-8 P.S.I.

\*For brushes with top and bottom angles greater than 25 degrees add an extra  $^{1}/_{2}$  - 1 P.S.I.

Spring (P.S.I.) = <u>Measured Force (Ibs.)</u> Pressure Brush Brush Thickness (in.) x Width (in.)



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