

SUPERIOR PERFORMANCE & RELIABILITY

# HYDRO POWER

BRUSHES, HOLDERS,  
SEALS & RINGS



[helwigcarbon.com](http://helwigcarbon.com)





# HIGH QUALITY PRODUCTS FOR HYDRO POWER

Helwig Carbon brushes, brush holders and constant force springs are engineered for maximum reliability in hydro turbine generators.

## HEAVY-DUTY TURBINE BRUSH HOLDERS

- Direct retrofit and custom designs for upgrades are available
- Adjustable mounting bolts to increase installation flexibility for proper height above rings
- Constant force holder design with popular Wear Indicators for easy maintenance
- Replaceable spring clips provide less costly downtime



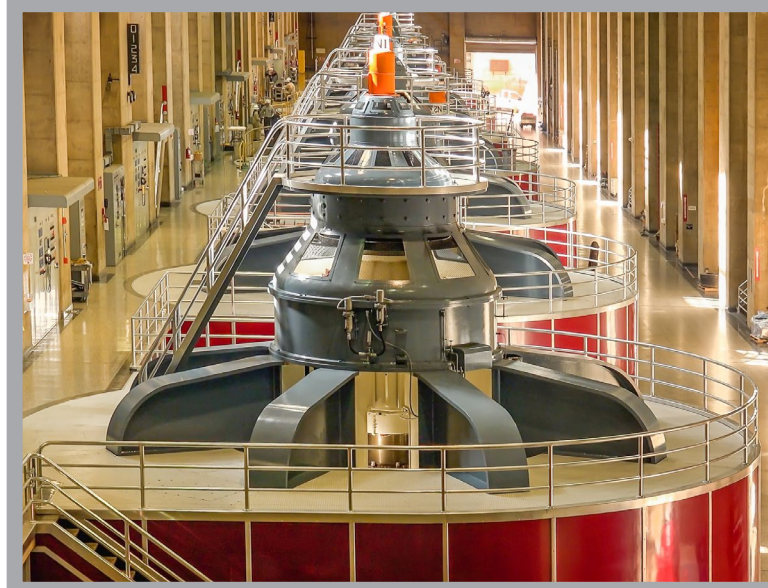
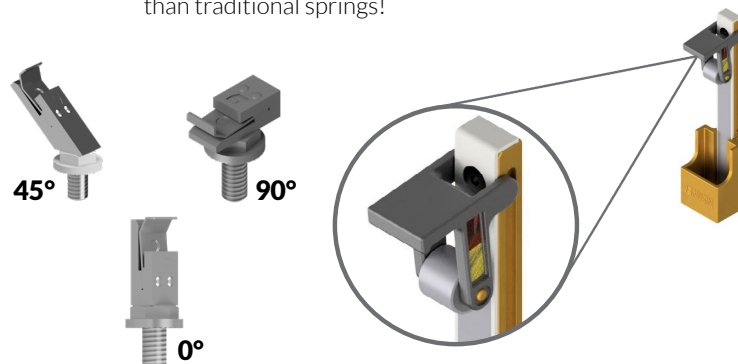
## ADJUSTABLE SLIP RING BRUSH HOLDERS

- Fully adjustable holder designed to fit a wide array of applications (Flexible ring diameters, post diameters, and positions)
- Replaces single holder and bank of two designs
- Constant force spring design



## HELWIG QUICK DISCONNECTS (HQDs) & BRUSH WEAR INDICATORS

- Brush wear indicators are the industry's most convenient way to monitor brush wear, using the red "danger strip" to inform you the brush should be replaced
- HQDs lock together with a tight, positive locking action even under rough condition, no screws to remove, lose or replace!



## CONSTANT FORCE SPRINGS

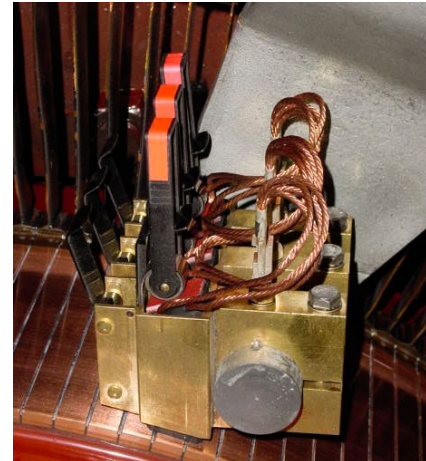
- Our pioneering research in the 1980's set the industry standard for spring pressure
- Increased spring force reduces electrical brush wear thus improves brush life and performance
- Spring life expectancy is 3-5 years on most applications – replacing springs is easier and safer than traditional springs!

## UPGRADES FOR HYDRO GENERATORS



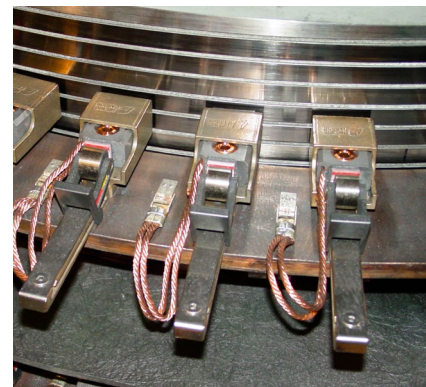
## EXCITER GENERATOR BRUSHES

- With extensive experience in Hydro Generation, we have designed grades that outperform the competition
- These grades offer superior longevity with low-friction, and low-dusting
- Extensively installed on Allis Chalmers, ABB, GE, and Westinghouse units



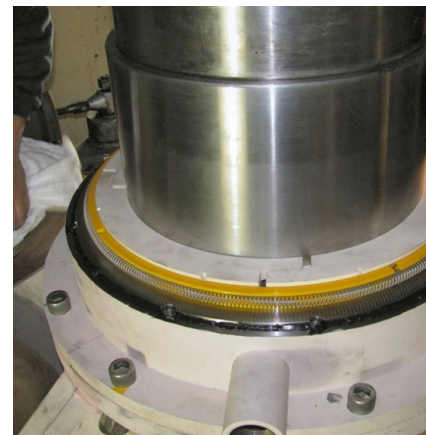
## FIELD or EXCITATION SLIP RING BRUSHES

- Along with our premier hydro generator grades, we have developed grades for hydro slip rings: HH & H552
- These grades provide excellent power transfer, low-friction, and low-dusting for a variety of seasonal loads during peak and dry periods
- Pair with our heavy-duty turbine brush holders for increased performance



## CARBON GRAPHITE SEALS & RINGS

- Pure precision carbon graphite components are self-lubricating, resistant to wear, resulting in optimal product efficiency
- Machined segmented rings can be produced up to 12 sections and 80" in diameter
- Ring tolerance as tight as +/- .025mm
- Seals provide dimensional stability under wide temperature variations
- Seals are compatible with a broad spectrum of materials



## HELWIG CARBON ADVANTAGES

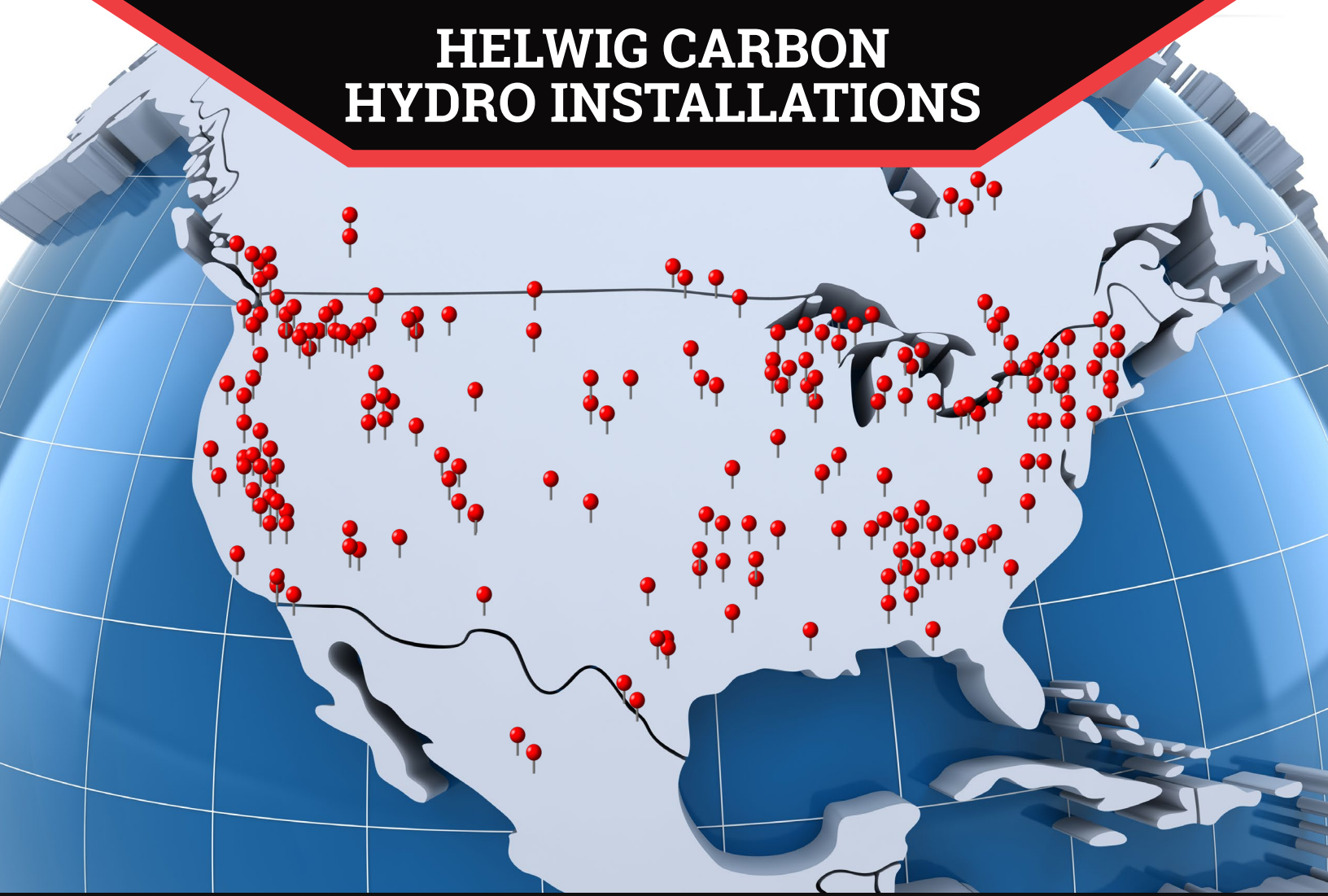
- North American leader in Hydro Generation applications
- Extensive experience with field service and support
- Custom engineered solutions for superior hydro performance
- Expert problem diagnosis and technical recommendations



- Dedicated & knowledgeable Customer Service team
- On-time delivery averaged better than 98%
- ISO 9001 Certified for accuracy and consistency
- Made In The USA



# HELWIG CARBON HYDRO INSTALLATIONS



HUNDREDS OF HYDRO INSTALLATIONS IN NORTH AMERICA



## NEED TECHNICAL SUPPORT?

With 30 Representatives all over the USA, Canada, & Mexico, we can provide on-site support for all of your Hydro needs.

## ABOUT HELWIG CARBON

Helwig Carbon Products, Inc. is the premier, family-owned, American manufacturer of carbon brushes, brush holders, spring assemblies, bearing protection kits, metal graphite brushes, and mechanical carbons. Since 1928, we have forged innovations that have since become industry standards and requirements. We pride ourselves on manufacturing all of our products to the highest standard and performance because we know your application depends on it!



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