

# VESTAS MARK 7 SLIP RING UPGRADE

Vestas V90-V126



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- > Approved and **Trusted Solutions**
- > Over **30 Years** in the Wind Industry
- > Development and Supply Partner for **Multiple OEM's**
- > Over **1,000,000** BGB Rotary Solutions Installed Globally

The Vestas V90 to V126 platform is a well-established platform with over 20,000 turbines installed worldwide, it continues to be a workhorse and best in class for the 2MW category. This is also the case for the associated 180mm diameter generator slip ring. Overall, this unit performs well within the field and it is not uncommon for us to get feedback that this unit lasts over 10 years from technicians.

To ensure optimum operation and component life:

- Ensure correct setup, holder and brush alignment
- Use OEM approved silver brushes
- Clean the silver dust away from the slip ring periodically (*and save it, send it to us with your used brushes, they're worth money!*)

Through working closely with wind farms we came to understand the maintenance challenges associated with this component and looked to improve it further.

The biggest improvement found was on the encoder mount, from speaking with wind turbine technicians, it was found that the encoders did not last as long as the slip rings:

*"The encoder would alarm the SCADA system and need to be replaced. The glue bonding the encoder to the shaft would melt under high temperatures and no longer remain true to the shaft."* Wind Turbine Technician

This would have to be removed with force (if removed at all). To overcome this issue, we developed an over-moulded shaft to serve as a new encoder drive which can easily be replaced and then re-machined as part of a refurb. This prevents damage of the slip ring during encoder removal and gives a greater chance of success when the slip ring eventually requires refurbishment saving more money

Other improvements were to reduce waste and cost through reduction in size of the terminal plates and a change of material in the hub to an aerospace grade aluminium.

This slip ring is supplied with canted coil spring electrical connectors and fasteners to always ensure you have the right kit available up tower.

### BGB Design Advantages:

Easy encoder separation without damaging the slip ring

Over-moulded shaft

Easily replaced and re-machined

Prevents damage

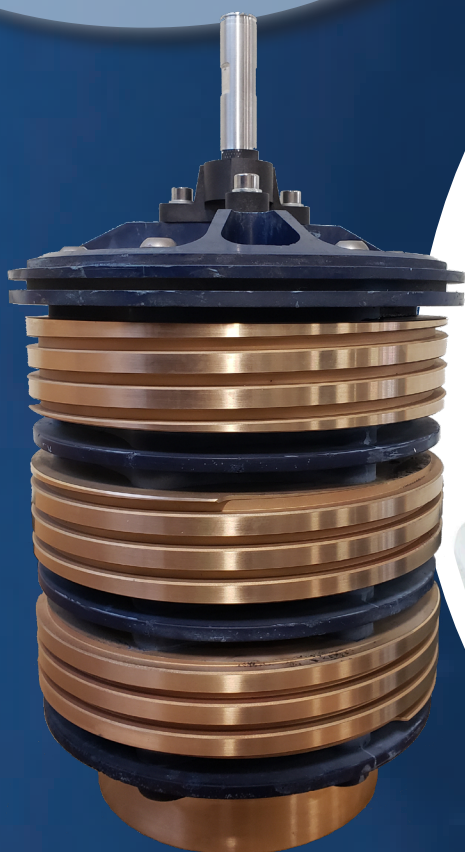
Saves money on refurbishing



Description	Vestas Part No	BGB Part No	Notes
MK7 (*180mm) Slip Ring with Bushings Machined and Fasteners	<b>753937</b>	GA100403	Fasteners inc ( <b>753917</b> is without fasteners)
Encoder with jaw clutch	<b>753824</b>	SPC5887-03	Remove insert before insertion

### Did You Know?

BGB's relationship with Vestas stems from the early 1990's when we entered into the wind industry for the first time



Simple  
Encoder Driver  
Separation...



...Without Damaging  
The Slip Ring



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