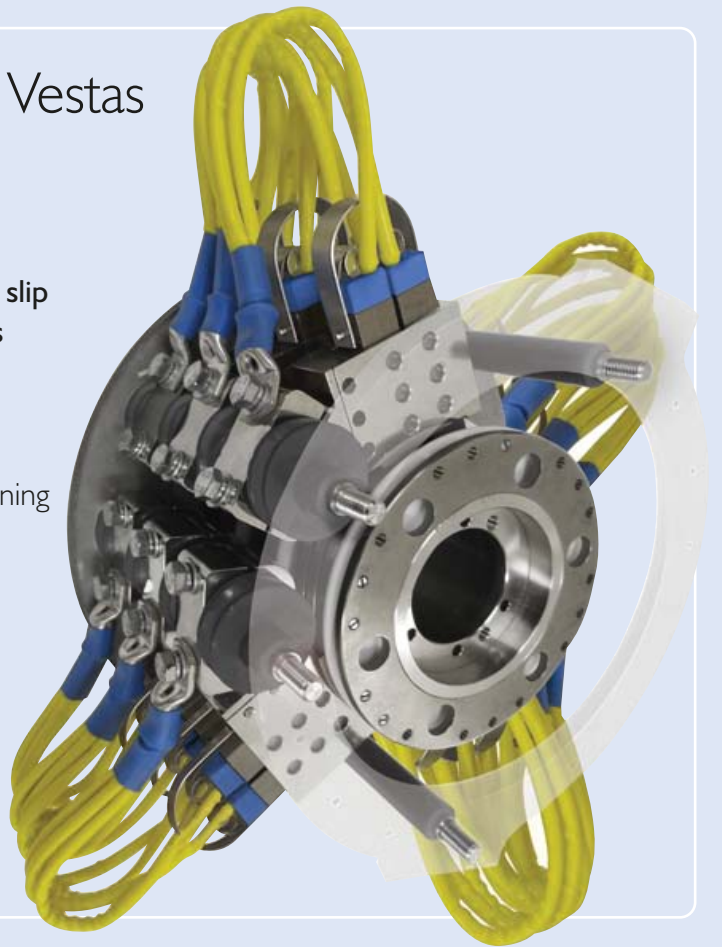


## Morgan Standard Parts for Vestas SiemensWind Turbines\*

### V90 3MW Morgan Upgrade

Morgan have optimised the brush, holder and slip ring system to reduce your maintenance costs providing -

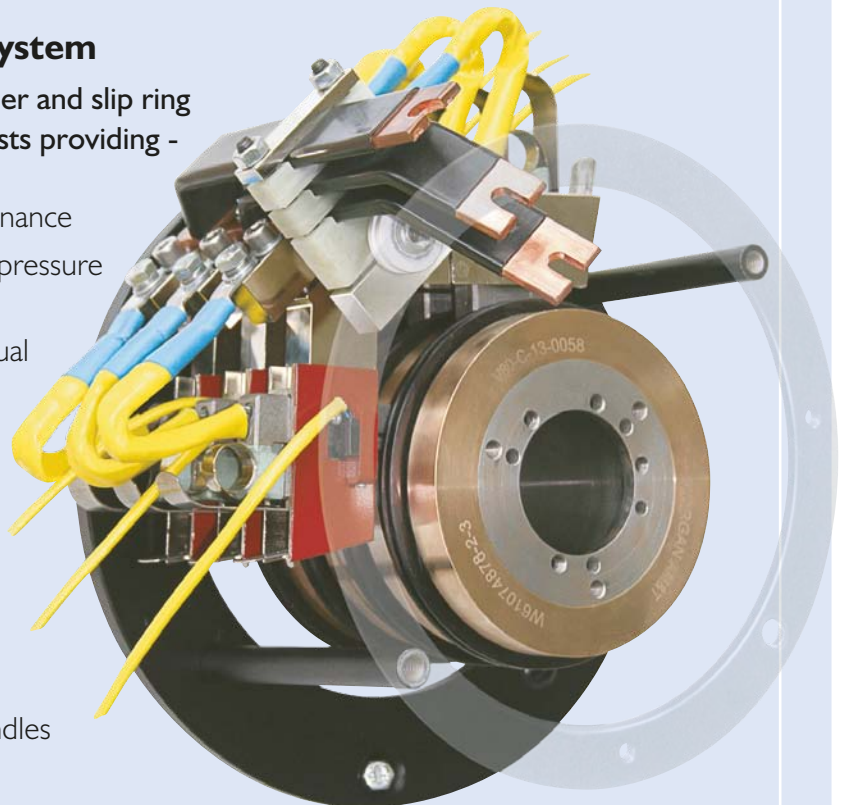
- Reduced slip ring wear and damage
- Optimised brush length for more efficient running
- Improved spring coil location
- Improved brush support an stability
- Unobstructed simple brush removal
- Ease of brush fitment
- Brush wear viewing
- Improved brush running conditions, brush life and slip ring life



### V52 - V80 Morgan upgraded system

Morgan have optimised the brush, holder and slip ring system to reduce your maintenance costs providing -

- Increased brush length reduces maintenance
- Constant force spring providing stable pressure over full length of brush life
- Brush wear alarm indication on individual pockets (optional)
- Nickel plated for off shore & coastal applications
- Improved brush running conditions, brush life and slip ring life
- Brush wear envelope on Morgan re-design is double that of the OEM caliper design
- System includes holders, bus bars, spindles
- Plug and play system easy to install



We offer complete solutions and in particular the following brush holders, springs, clips, earthing brush cartridges and terminal connectors.



**Morgan Vestas wind turbine holder range**

V52, V66 & V80 we offer caliper type holders and brushes to fit for a lightweight flexible fit and for the V90 a high end designed brush holder with constant force spring for optimum brush performance.



**Earthing brush cartridges and terminal connectors**

Morgan also offer range of Earthing brush cartridges and terminal connectors for the Vestas wind turbines.



**Morgan Siemens/Bonus wind turbine holder range**

Morgan offer a complete product portfolio for the Siemens/Bonus wind turbine comprising of power brush holder and lightning dissipation holders, hub control holders all with brushes to fit and we also include lightning coils in our range.

**V80 & V52 upgrade  
brush holder assembly  
designed for ease of fit  
and interchangeable  
between V80 and  
V52 turbines**

