

Traction Brush Gear Upgrades

Morgan Advanced Materials has for many years designed and manufactured replacement brush gear. We have the ability to redesign brush gear to replace obsolete or poor performing systems.

Typically our products will offer many of the features below:

- Increased brush length
- Ease of maintenance and reduced down time
- Weight Reduction
- Spring mechanism optimisation ie Clock Spring, Constant Force, Pressure finger
- Improved commutation
- Improved brush support and brush life
- Complete systems redesign, to offer the best solution catered specifically for the customer

Case Studies

Problem

- Obsolete brush gear
- No spares
- Fabricated brush box
- Oversize brush pockets



Solution

- Direct Acting clock springs
- Die cast brush box body
- Broached brush pockets
- Improved terminations
- Spring hold off position
- DMC Insulators



Problem

- Commutation issues
- Comm bar burning
- high volume of catastrophic flashovers
- Excessive brush wear



Solution - 90% reduction in flash overs

- Converted constant force to clock spring mechanism
- Reduced spring failures
- Individual brush pockets
- Improved brush support
- Plug and Play system



Traction Brush Gear Upgrades

Case Studies *continued*

Problem

- Poor commutation
- Limited/no spares
- No spring hold off
- Poor brush accessibility



Solution

- Significant improvement in commutation
- Individual brush pockets
- Improved brush support
- Improved brush life
- 50% reduction in weight
- Semi captive spring units
- Spring 'hold off' to ease maintenance

