Morgan Advanced Materials supply mainline railway systems with self-supporting carbon collector strips including epoxy bonding of carbon to aluminium providing:

- Reduction in pan head mass
- Improved dynamic response
- Reduction in maintenance and service costs

Morgan Advanced Materials has a unique method of achieving high mechanical strength whilst maintaining low resistance between carbon and metal carrier. Morgan Advanced Materials have also developed a unique method of transferring high currents to give a low resistance current path in bonded collectors, resulting in an innovative lightweight solution for DC applications.

Please contact us for a complete 3rd party reference list.

Credited with DIN 6701-2

Morgan Advanced Materials offer a variety of designs to suit your applications including arc protection alternatives.

Morgan is an approved supplier to many systems worldwide including:

- Deutsche Bahn AG
- MAV Hungary
- PKP
- New Jersey Transit USA
- Guangzhou China
- NEDTRAIN Trenitalia
- Austrian Rail
- SNCF
- Amtrak USA
- Shanghai China
- MTRC
- UK Rail

Many high speed systems incorporate an impact detection system within the collector strip. This device enables the pantograph to be lowered if an impact was to occur severe enough to damage the pantograph head. The sensitivity of these systems varies according to the design, however the principle of all Auto-drop detection systems is the same.

The pantograph head is kept in place against the overhead wire by pneumatic pressure. When the carbon strip wears down to a particular level or is severely damaged, the air pressure is lost and the panhead drops away from the wire, preventing further damage. Morgan Advanced Materials have various designs which are running on many systems worldwide including UK railway systems, Deutsche Bahn AG, Le Shuttle, Eurostar, Austrian Rail, Amtrack USA, Dehli Metro India, and MTRC.