





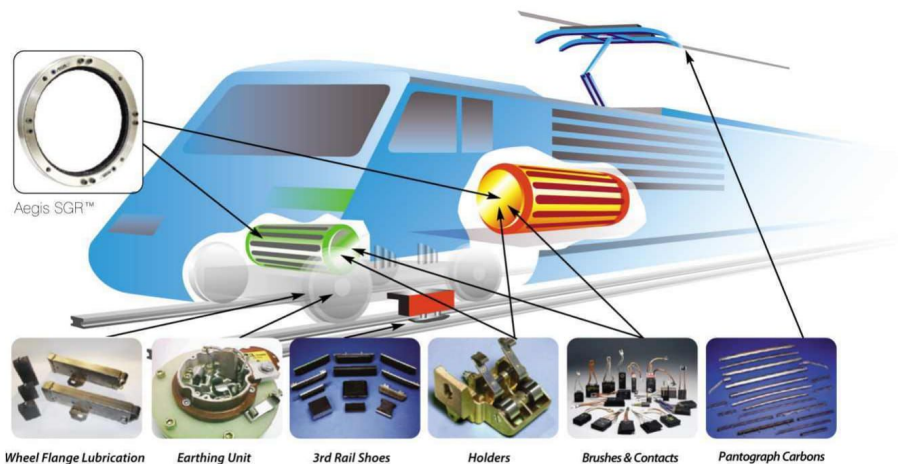
Morgan AM&T

Morgan AM&T is a leading global supplier in the railway industry, providing products, services and solutions for electrical motors and current collector systems.

We offer technical support and training to assist you in selecting the optimum solution with respect to performance and life of the motor and current collecting system for your transport vehicles.



Morgan AM&T Promotes innovative technology and a pioneering attitude towards research and development, constantly developing new materials and products. With over 150 years experience we have forged many technical relationships with major OEM's, railways and urban transport systems as well as participating in various Global project developments, this has established Morgan AM&T as the partner of choice.



Collectors

Morgan AM&T offer carbon and metalised carbon current collector strips and assemblies for pantograph and third rail applications. Morgan AM&T offer a collector solution for all application requirements, from 600v right through to 25KV on mainline rail, light rail systems or tramways, local speed through to highspeed we have the current collector solution for you.

Used to transfer current from the rail or overhead line we have optimised our materials, supported by our applications engineers with global expertise, ensuring long life and high performance of both the collector, overhead wire or rail.

Please see below the types of products we offer:

Pantographic Strips

- Metal impregnated and plain carbon – material grades for overhead current collection.
- Bonded design.
- Sheathed - soldered and non-soldered.
- Kasperowski.
- Integrated and fitted end horns.
- Auto drop – Auto drop impact detection system.
- Carbon section in a variety of sizes – examples of carbon sections.
- Metal sheaths designs adaptable for an easy refit – examples of available metal carrier profiles.

Third Rail Shoes

- Metalised Carbon and Plain Carbon – material grades for third rail shoes.
- Fitted and unfitted.
- T bolt.



Trolley Bus Inserts

- Metalised Carbon and plain-material grades for trolley bus systems.
- Plain Carbon.
- Fitted and unfitted.
- Tapered and double tapered design





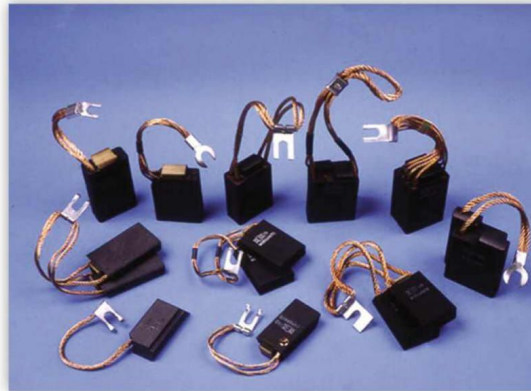
Carbon Brushes

Morgan AM&T is a high performance brush manufacturer with over 150 years of experience in serving the traction industry.

We offer National and Morganite products which have been developed over the years to ensure optimisation of brush – commutator performance.

Experience has ensured that we can advise the correct grade when considering the inherent differences in DC traction systems to the industrial counterparts with increased levels of vibration and thermal shock as a result of rapidly changing load currents as well as the increased harsh conditions experienced through thyristor control and regenerative braking.

Morgan AM&T the World's number 1 traction brush supplier offers a wide range of proven materials and design expertise to minimise these harsh effects.

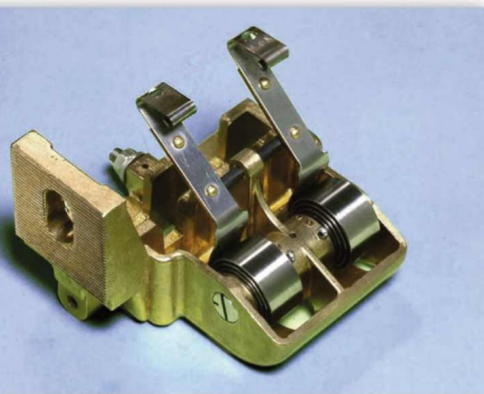


Brush Holders

The typical design features that Morgan AM&T offer are pressure systems employing clock springs for robust performance, constant force springs for compact designs, copper based alloys which have become an established optimum for brush holder bodies.

Broached brush pockets to the industry standard IEC 136, surface finishing with electroplating or painting as required.

Morgan AM&T also offer end mounted assemblies complete with support and terminal plates, double ended mounting pins, pillars and stand off insulators.



Insulators – In old negative type

We offer a range of double ended mounting pins, pillars and stand off insulators for rail traction and heavy duty applications, moulded in either high strength GRP with excellent electrical and mechanical properties or mica glass for special high temperature requirements.

Contacts and Contact Assemblies

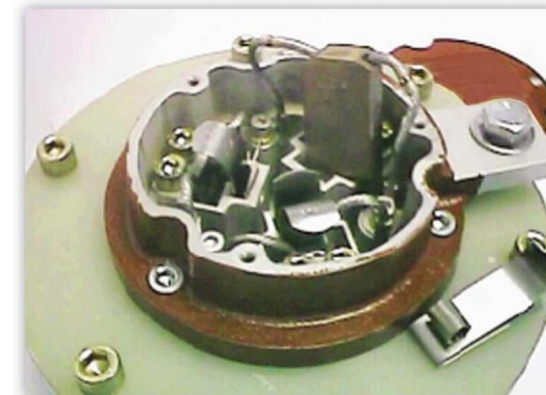
Morgan AM&T offer a complete in-house service from design through to tooling and manufacture to ensure that the standards of quality can be rigorously maintained. We are a leading supplier into original equipment manufacturers and major traction companies for both volume and small batch production of precious metal faced contacts.

Bi-metals, copper segments, tips and die cast high conductivity copper components.



Earth Return Units

Morgan AM&T have developed earth return units for a variety of applications including locomotives, Emu and Light Rail and these Earth Return units supports the prevention of current to flow to the bearings.





Aegis SGR™

Aegis SGR™ The World's Most Effective Shaft Grounding Brush

The new AEGIS SGR™ Conductive MicroFiber™ shaft grounding brush prevents electrical damage to motor bearings by safely channeling harmful shaft currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS SGR™ provide the path of least resistance for damaging shaft currents, preventing electrical damage to motor bearings and dramatically extending motor life.

Not only is the AEGIS SGR™ the world's most effective grounding brush, it offers the longest lasting protection available.

- Maintenance-free
- Unaffected by dirt, grease, or other contaminants
- Lasts for life of motor
- Easily installed in minutes — even in the field
- Mounts on either end of motor shaft
- Simple screw-on mounting brackets
- No machining require



Wheel Flange Lubrication

As an existing supplier of Rolling Stock components and following several requests from our existing customer base, Morgan AM&T has developed a range of solid lubrication products for Wheel Flange Lubrication. A number of materials have been developed to meet the varying requirements of different rolling stock types.

Wear at the wheel/rail interface affects all rolling stock. There are two main types of wear:

- Wheel rim on the rail head;
- Wheel flange on the rail edge.



Wheel Flange Lubrication Continued

Field trials backed up by testing at both our own and independent laboratories has shown our material to offer distinct advantages over our competitors.

Performance improvements have been witnessed in terms of lubrication properties, film retention and product life based on the arduous conditions seen in modern day service operation.

Diagnostics

Morgan Offer instruments and equipment to analyse and support diagnosis of the most common problems in rotating machines. Types of equipment;

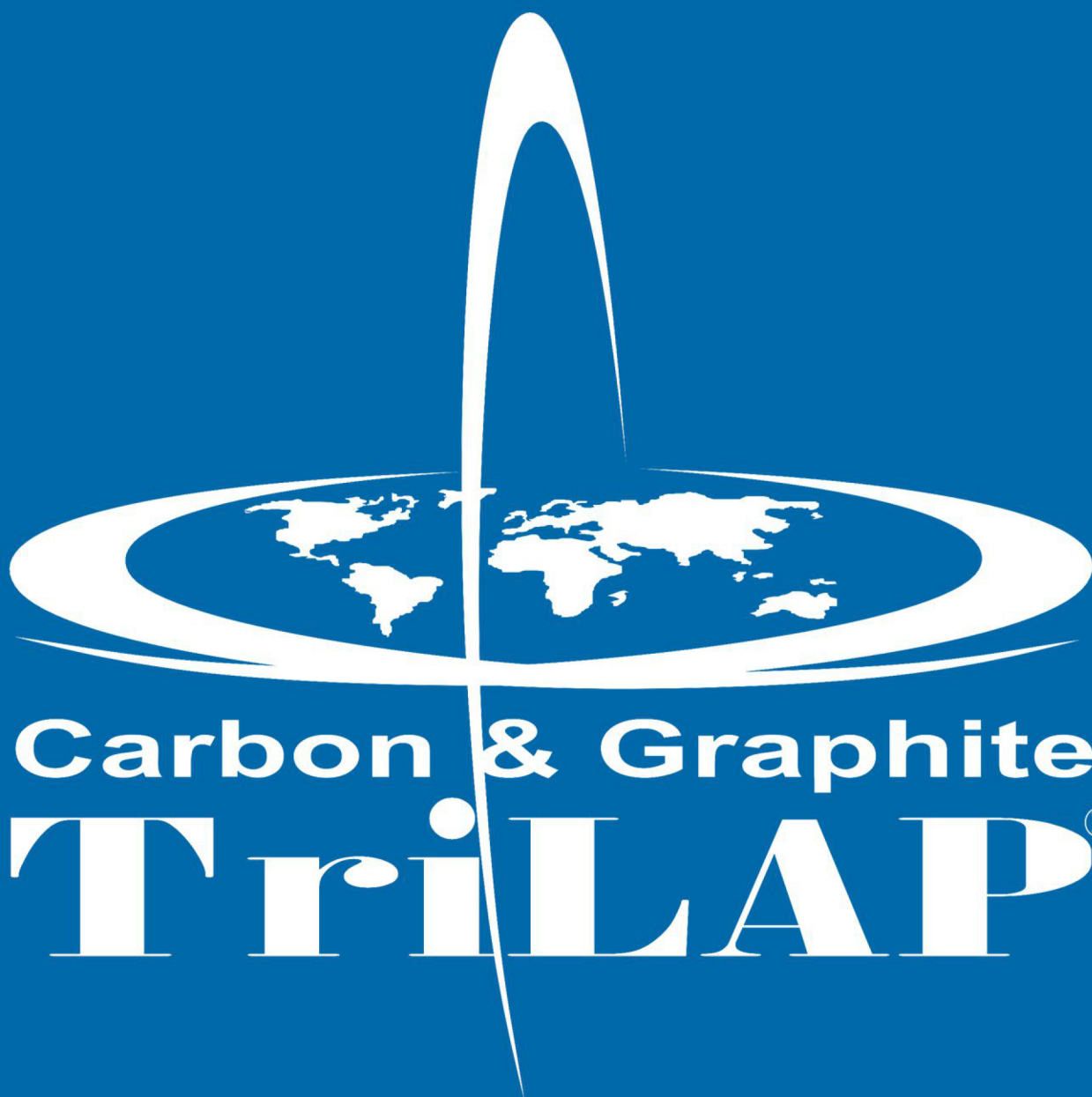
- Brush Pressure gauges.
 - Magnetic Field Testers.
 - Snake Eye inspection camera.
 - Insulation resistance meters.
 - Spark detection meters, and assemblies.
- Economic refurbishment and re-tipping is a further extension of our comprehensive package.

Technical Support

Morgan AM&T offer :

- Local Sales Engineering support
- Application engineering global technical expertise
- Redesign and innovative design capabilities
- Material expertise
- High performance materials
- Consistent customer service and reliability
- Research and development facilities
- Machine testing facilities
- Technical Training courses





Carbon & Graphite
TriLAP®

TriLAP Company Limited

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