

Schunk. Pioneering Carbon Technology.

Polar regions. The most powerful electric locomotive in the world. Schunk is on board.



For extreme requirements in space: Schunk materials with silicon carbide coating SIC.

Schunk developed CVD coatings for use in an environment with extremely high requirements. Due to the non-porous deposition of the CVD-SiC and the adjusted expansion coefficient, Schunk coats satellite dish structures for all European market leaders.



For difficult deployment on Mars: Schunk carbon brushes in the Mars rover Spirit.

Thanks to continuous optimisation of their material properties, Schunk carbon brushes are used under the harshest conditions in 39 electric motors of the Mars rovers Spirit and Opportunity.



With earthing contacts for the electric locomotive under the harshest conditions.

IORE, the most powerful electric locomotive in the world, has a power of 10,800 kW and pulls heavy 8,000 t ore trains under the harshest climatic conditions. It travels safely with Schunk earthing contacts.



Everyday life. High-tech makes our lives easier. On all levels, with Schunk.



Photo: SNCF-CAV

Carbon brushes and brush systems for electric motors supplied for vehicle electrical systems.

Comfort and safety of automobiles are being continuously developed further. This requires innovative materials and optimum designs for carbon brushes and fixture systems in electric motors. Schunk products fulfil this task in virtually all models of the leading automobile manufacturers worldwide.



Carbon brushes and brush systems for vacuum cleaners and household appliances.

Special requirements material and design for costs reasons. Modern motors have an increasingly smaller power/weight ratio, with speeds increasing up to 60,000 rpm. Despite this they must also achieve a long service life.



Special current transfer components for high-speed trains.

ICE and TGV high-speed trains do not allow any material compromises. The safety of the whole system depends on the reliability of the carbon collector shoe. Schunk collector shoes achieve this even under the most extreme operating conditions.

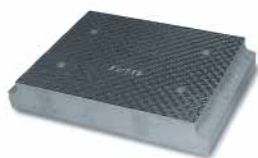


Shanghai. Over 400 km/h in the Transrapid. With safety from Schunk.



For safe sliding at top speed: Schunk sliding segments.

Increased operating safety with economic efficiency in high-performance applications. In the Transrapid, Schunk sliding segments made from C/C-SiC materials ensure safe sliding if there is local impairment to the levitation function during operation. Even at speeds of more than 400 km/h.



Fibre bushings from Schunk used in turbo molecular pumps.

Fibre composites are suitable for components in which the highest material strengths are required. E.g. in components for turbo molecular pumps, in reinforcement for highly-stressed sealing rings and plain bearings made from carbon and silicon composites.



Friesland. The power of the wind. The efficiency of Schunk.

Minimum wear, high efficiency and maximum economic realisation with Schunk.

These are the reasons why our carbon brushes and carbon brush holders are used in the most powerful wind-driven generators with over 5 MW power.



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For years, Schunk has been supplying components to:

- Siemens
- Bosch
- Bombardier
- Alstom
- Pfeiffer Vacuum
- Siltronic
- Valeo
- Visteon
- Miele
- Temic
- Faurecia
- Burgmann
- Hella
- LG
- Hyundai
- Hilti
- Metabo
- Atlas Copco
- Johnson Controls
- Flowserve
- Makita
- John Crane
- Black & Decker
- DB
- SBB
- SNCF
- Aixtron
- ASM
- IBM

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