

## Perfect Current Transmission in Industry



**Schunk Kohlenstofftechnik GmbH**  
**Schunk Bahn- und Industrietechnik GmbH**



# Carbon Brushes – Built for Tough Duty

## Member of the Schunk Global Technology Group

Schunk Industry and Mass Transit Technology is part of the international Schunk Group. The Schunk Group employs more than 7,500 people worldwide and achieves annual sales of more than 700 million Euro. Our customers profit from the group's know-how, for example in materials development. Schunk Industry and Mass Transit Technology consists of the following companies:

- Schunk Kohlenstofftechnik GmbH
- Schunk Bahn- und Industrietechnik GmbH
- Hoffmann Elektrokohle AG

## Top Quality Products for the Manufacturing Industry – the Highest Market Acceptance

Schunk has been developing and manufacturing top quality products in the areas of motor and contact technology for industrial applications for almost 100 years. Many kinds of carbon brush holders, brush rockers, small current collector strips and current transmission elements can be found, for example, in:

- Metallurgical plants and rolling mills
- Power plants
- Ship and port facilities
- Handling and conveying engineering
- Measuring technology
- Electroplating equipment
- Wind power generators
- Plastics industry
- Wire industry
- Paper industry



### Research in Our Own Chemistry and Physics Laboratory

In order to guarantee the highest possible degree of efficiency in the transmission of current, Schunk has been working on the optimization of materials and their properties in our own chemistry and physics laboratory for decades. Here we have at our disposal high-tech analysis equipment, such as scanning electron microscopes, 3-D measuring devices as well as vibration measuring instruments for use in fatigue tests. In our electrotechnical lab we conduct efficiency measurements, commutation and endurance tests. All operating parameters are processed and managed in extensive data bases.

### Perfect Current Transmission through Flexible Current Connections

Schunk flexible current connectors and power feeds are used to electrically connect mechanically separated components. They can be found in switch gears, in electric powered machines, in welding robots and in galvanic equipment.



*Flexible current connector made of braided round and flat wires*

### Brush Holders and Brush Rockers

Schunk has developed several hundred different models of brush holders and rockers for use in generators and motors. Schunk is one of the only suppliers in the world that can deliver nearly all kinds of holders or manufacture them at short notice.

Customized and specialized products are no problem for us either. Operators and manufacturers of electrical machines know that they can count on Schunk, and that they will also be able to continue doing so in future.



*Schunk brush rockers ensure good contact of the brushes to the collector*

### Schunk – Your Global Partner

If you plan projects in the areas of motor technology or current transmission, where carbon brushes, carbon brush holders, or current transmission elements are required, then you should contact us by all means.

We're there for you – worldwide with the know-how of almost 100 years with experience from researching, developing and manufacturing products for power and current transmission and with the expertise of an international technology group. Welcome to Schunk.



*Laminated band with a high current transmission capacity*

**Schunk**  
**Quality**



*Small current collector by Schunk: Precision in current transmission to mobile power consumers*



*Industrial carbon brushes: Top quality and long life*



*Tandem brush holders guarantee excellent commutation*

# Schunk – Top Quality Products for Current Transmission

## **Schunk Carbon Brushes – Products for any Application**

Schunk contact products enjoy a distinguished reputation among industrial manufacturers around the world. Our materials for carbon brushes, carbon, graphite and various metals, combine excellent electrical and heat conductivity with a high level of temperature resistance.

For extreme conditions such as large power surges, idle speed and low load operation, aggressive gases and vapors, ambient temperature, oil mist, high concentrations of dust or ashes and high humidity Schunk offers adapted components.



Carbon brushes with high percentages of metal provide perfect current transmission, even under the toughest operating conditions, for example in metal refinement processes. This perfection, together with our friendly customer service, are the reasons that many leading industrial manufacturers rely on Schunk products for their electrical contact needs.

**Reliability, even under Extreme Condition**

When designing our products, Schunk researchers and engineers keep the customers on site operating conditions in mind right from the start. Carbon brushes, of course, can only function as well as the overall systems to which they belong. Therefore the effects of all environmental influences are taken into consideration and are factored into the grade selection.

**Consistent TQM**

As an industrial supplier, we actively live out the quality philosophy embodied in QA 9000 and ISO 9001. Among our particular strengths are rapid goal and application oriented development in our own application lab, development joint ventures, ultra modern production technology and sample production under serial production conditions.

**Active Development Partner – High Customer Satisfaction**

In the field of current transmission, we work as active development partners. In many projects we are able to implement our special materials know-how at an early stage, to the benefit of our customers.

By working intensively together with our customers, we ensure a high degree of efficiency and customer satisfaction.

We constantly strive to lengthen the usable lifetime of our products, as well as to minimize machine down time and reduce operating costs.



*Carbon brush with a diagonal running surface slot and outstanding current transmission properties*

Schunk

Know-how



*Coating companies rely on high quality Schunk products for aluminum anodizing*



*Schunk carbon brushes provide a current transmission of more than 40,000 amperes*



*Schunk's acid resistant insulation achieves a significantly longer product life than ordinary solutions*

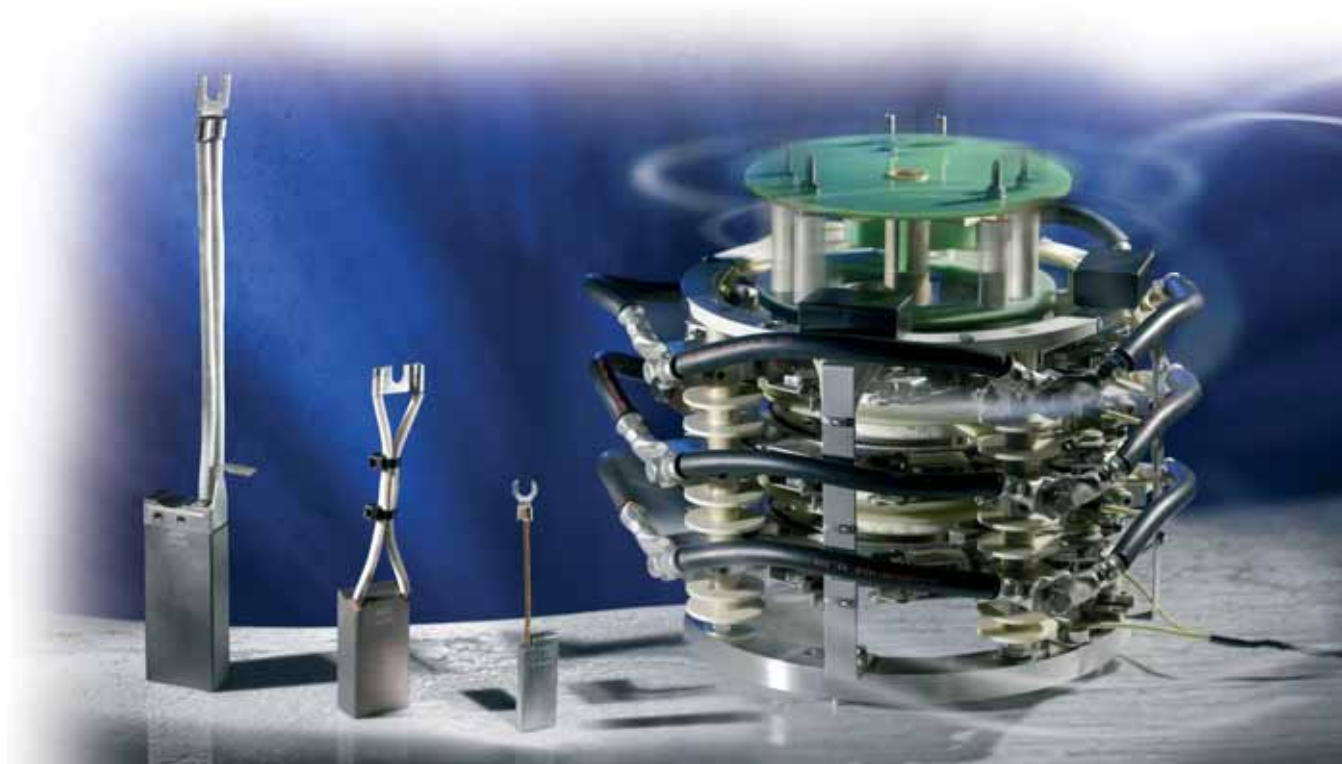
## **Special slip ring systems for increased efficiency and improved performance of wind turbines**

Wind power generators up to 6 Megawatt power use Schunk technology. Schunk sets standards with regard to efficiency, capacity and reliability by using special sliding contact devices for safe electrical contact.



Schunk develops and manufactures customized slip ring units for double fed asynchronous generators, lightning protection and grounding systems as well as carbon brush materials especially developed with regard to environmental conditions.

They guarantee less maintenance efforts, low costs and therefore increased operating efficiency.



*Slip ring unit and brushes for wind power generators*



*Power Brushes*



*Grounding Brushes*



*Lightning Protection Brushes*

**Schunk**

**Innovation**

## Germany

- Schunk Kohlenstofftechnik GmbH  
Germany/Heuchelheim  
Telephone: +49 (641) 60 80  
E-Mail: infobox@schunk-group.com
- Schunk Bahn- und Industrietechnik GmbH  
Germany/Wettenberg  
Telephone: +49 (641) 80 30  
E-Mail: sales.sbi@schunk-group.com
- Schunk Kohlenstofftechnik  
Dresden GmbH  
Germany/Dresden  
Telephone: +49 (351) 2 70 90 07  
E-Mail: viola.puls@schunk-group.com

## Europe

- Schunk Nordiska AB  
Sweden/Lenhovda  
Telephone: +46 (474) 2 95 00  
E-Mail: info@schunk.se
- Schunk UK Ltd.  
Great Britain/Pudsey  
Telephone: +44 (113) 2 56 72 38  
E-Mail: schunk.uk.sales@schunk-group.com
- Schunk Benelux B. V.  
Netherlands/Rotterdam  
Telephone: +31 (10) 4 14 47 66  
E-Mail: info@schunk-rotterdam.nl
- Schunk Electrographite S.A.S.  
France/Nanterre Cedex  
Telephone: +33 (141) 19 52 52  
E-Mail: schunk-electrographite@schunk-group.com
- Schunk Ibérica S.A.  
Spain/Pinto  
Telephone: +34 (91) 6 91 25 11  
E-Mail: mail@schunk.es

- Schunk Portugal Lda.  
Portugal/Marinha Grande  
Telephone: +351 (244) 57 24 80  
E-Mail: sede@schunk.pt
- Schunk AG  
Switzerland/Adliswil  
Telephone: +41 (44) 7 16 46 46  
E-Mail: info@schunk.ch
- Schunk Wien Gesellschaft m. b. H.  
Austria/Vienna  
Telephone: +43 (0) 1 61 66 80 70  
E-Mail: swa.office@schunk-group.com
- Schunk Bahn- und Industrietechnik GmbH  
Austria/Bergheim  
Telephone: +43 (662) 45 92 00  
E-Mail: office@schunk-group.at
- Hoffmann & Co. Elektrokohle AG  
Austria/Bad Goisern  
Telephone: +43 (6135) 40 00  
E-Mail: office@hoffmann.at
- Schunk Italia S. r. l.  
Italy/Magenta  
Telephone: +39 (02) 9 72 19 01  
E-Mail: info@schunkitalia.it
- Schunk Bahntechnik Polska Sp. z. o. o.  
Poland/Warszawa  
Telephone: +48 (22) 8 24 04 11  
E-Mail: biuro@wktpp.pl
- Schunk Praha s. r. o.  
Czech Republic/Plzen  
Telephone: +420 (377) 454 121  
E-Mail: milan.kroc@schunk-group.com
- Schunk Carbon Technology SRL  
Romania/Bucharest  
Telephone: +40 (21) 3 37 28 59  
E-Mail: office@schunk.ro
- SIRMA Elektrik Kömürleri SAN TIC AS  
Turkey/Istanbul  
Telephone: +90 (212) 2 70 35 65  
E-Mail: info@schunkturkey.com

## America

- Schunk Graphite Technology LLC  
USA/Menomonee Falls  
Telephone: +1 (262) 2 53 87 20  
E-Mail: info@schunkgraphite.com
- Schunk Electro Carbón, S. A. de C.V.  
Mexico/Ocoyoacac  
Telephone: +52 (728) 2 82 78 90  
E-Mail: informacion@schunk.com.mx
- Schunk do Brasil Ltda.  
Brazil/São Paulo  
Telephone: +55 (11) 46 13 32 02  
E-Mail: schunk@schunk.com.br

## Australia

- Schunk (Aust) Pty., Ltd.  
Australia/Rowville  
Telephone: +61 (3) 97 53 35 88  
E-Mail: admin@schunk.com.au

## Asia

- Schunk General Carbon  
(Guangzhou) Co., Ltd.  
China/Guangzhou  
Telephone: +86 (20) 34 63 48 88  
E-Mail: scc@schunkchina.com
- Schunk General Carbon Ltd.  
China/Hong Kong  
Telephone: +852 (2) 4 08 66 88  
E-Mail: sgc@schunkhk.com
- Seung Lim Carbon Metal Co., Ltd.  
South Korea/Ansan City  
Telephone: +82 (31) 4 91 27 22  
E-Mail: shcho@seunglim.co.kr
- Schunk Metal & Carbon (I) PVT. Ltd.  
India/Bangalore  
Telephone: +91 (80) 28 51 85 07  
E-Mail: schunk@schunk-india.com

## Schunk Kohlenstofftechnik GmbH

Business unit current transmission  
in industry and traction

Rodheimer Strasse 59  
35452 Heuchelheim  
Germany

Tel.: +49 (641) 608-0  
Fax: +49 (641) 608-1223

www.schunk-group.com  
E-Mail: infobox@schunk-group.com

## Schunk Bahn- und Industrietechnik GmbH

Hauptstrasse 97  
35435 Wettenberg  
Germany

Tel.: +49 (641) 803-0  
Fax: +49 (641) 803-139

www.schunk-sbi.com  
E-Mail: sales.sbi@schunk-group.com