



CARBON BRUSH

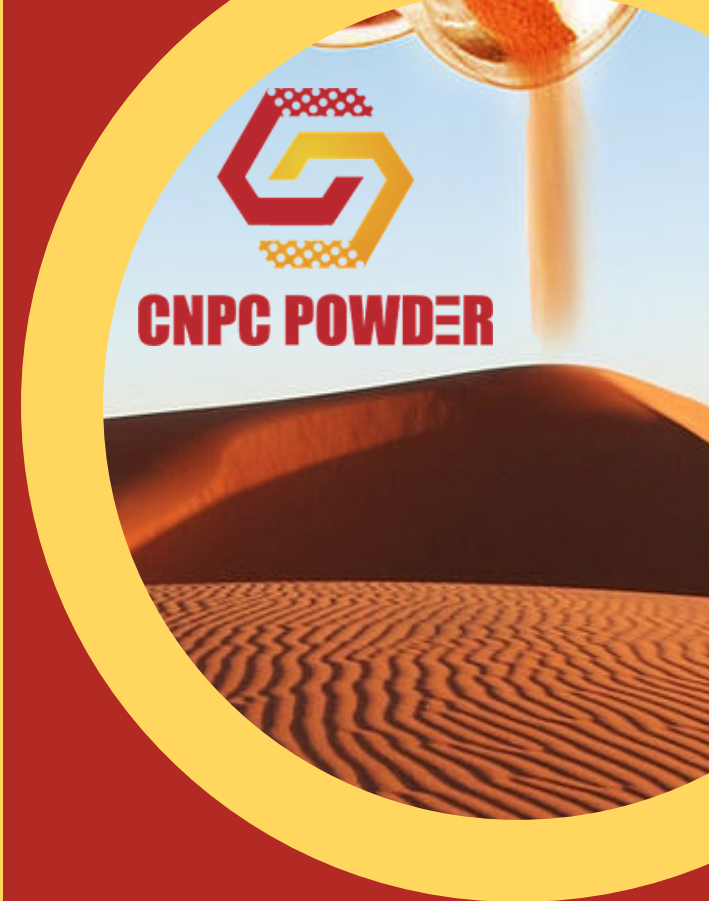
A carbon brush is a device which conducts current between stationary wires and moving parts. The carbon brush plays an important role in sending electrical current between non-moving and rotating parts by sliding contact.

The performance of the brush has a significant impact on the performance of the rotating device, hence the selection of the brush is a critical factor.

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THE POWDER
REQUIRED FOR

CARBON BRUSH

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CARBON BRUSH PROPERTIES



Self-lubrication and wear resistance

Carbon/graphite's lamellar crystal structure gives good self-lubricating property and low coefficient of friction make it ideal to produce brushes for the electrical industry.

Conductivity

Because of its excellent electrical conductivity, carbon can offer a steady, most favorable level of electrical resistivity, which can be enhanced by suitable selection of materials and production processes.

Durability

Carbon has a low coefficient of thermal expansion, meaning it can withstand or retain its shape or quality even at high temperatures. It is also resistant to the softening and melt-down that can occur due to sparking.

Rid ability during sliding contact

In comparison with other conductive metals in general, carbon has superior rideability during sliding contact owing to density and low coefficient of friction.

APPLICATIONS

- Electric Motors
- Alternators
- Electric Generators
- Wind-power
- Automotive applications

ELECTROLYTIC COPPER POWDER

The exact composition of the brush depends on the application. Graphite/carbon powder is commonly used.

- **Copper and copper alloys are used for better conductance.**
- **In order to maximize electrical conductivity and green strength, highly dendritic (electrolytic) copper powder is the best choice.**

CNPC's electrolytic copper powder is produced by placing a pure Copper cathode in an chemical bath and the application of electricity in the right ratios to produce a light dendritic copper particle. The particles are then washed and classified to a given specification.

The dendritic shape of electrolytic copper powder makes it ideal for carbon brushes.

