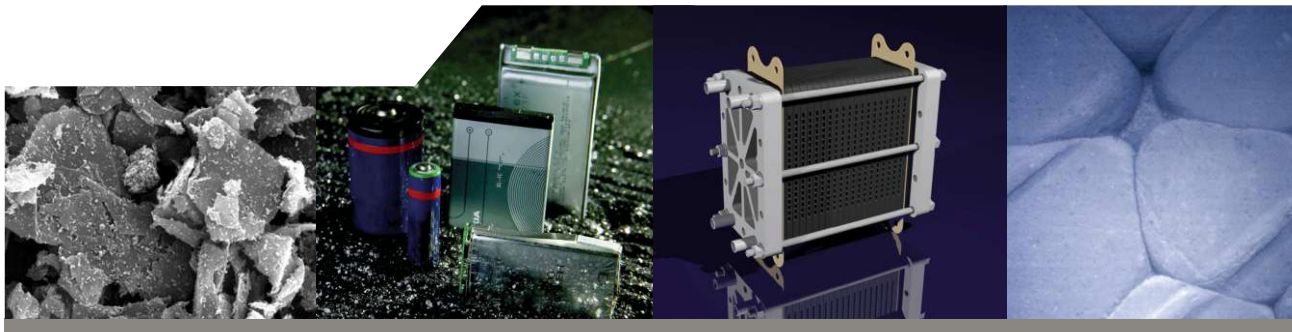




Graphit Kropfmühl



Conductivity Additive Cond

Natural graphite is a versatile material with a unique structure and many different properties. Therefore, it is not only an essential component in applications such as pencils and refractory products but it is also a high-performance raw material for the plastics industry.

Being a natural crystalline graphite grade, “Cond” still exceeds the conventional graphite grades in terms of electrical conductivity about 10 times. Nevertheless, the Cond grades possess other typical quality characteristics of natural graphite like lubrication, thermal conductivity and chemical stability.

Cond in powder metallurgy

- ▀ Combines high electrical and thermal conductivity
- ▀ Low resistance in kOhm
- ▀ Easy to disperse
- ▀ Chemically inert and resistant to oxidation
- ▀ Environmentally friendly

An enormous advantage of the Cond grades is that both thermal conductivity and especially high electrical conductivity are combined in this product.

Range of applications

- ▀ Conductivity additive for anodes of lithium ion batteries
- ▀ Bi-polar plates for fuel cells
- ▀ Plastic compounds
- ▀ Coatings for plastic products which require antistatic or dischargeable properties
- ▀ Shielding (e.g. electromagnetic radiation)

Contact:

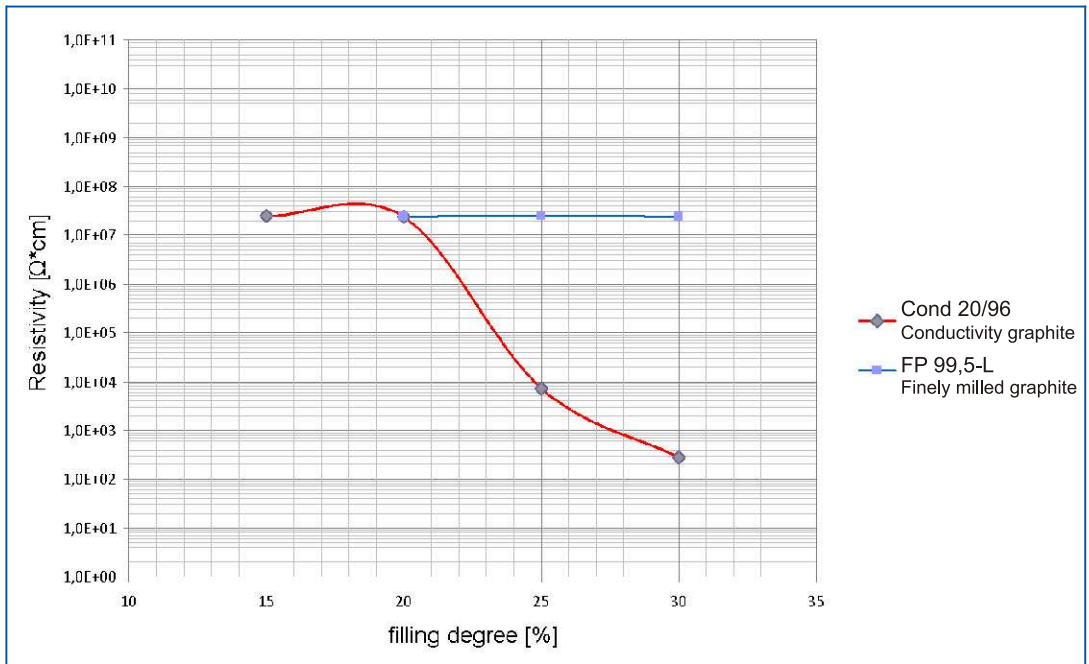
Graphit Kropfmühl /
AMG Mining AG
Langheinrichstr. 1
94051 Hauzenberg
Germany

Tel.: +49 8586 609-178
Fax: +49 8586 609-112

info@gk-graphite.com
www.gk-graphite.com

Electrical resistance

The considerably improved electrical conductivity of the Cond grades compared to finely milled natural graphite is shown in the following chart:



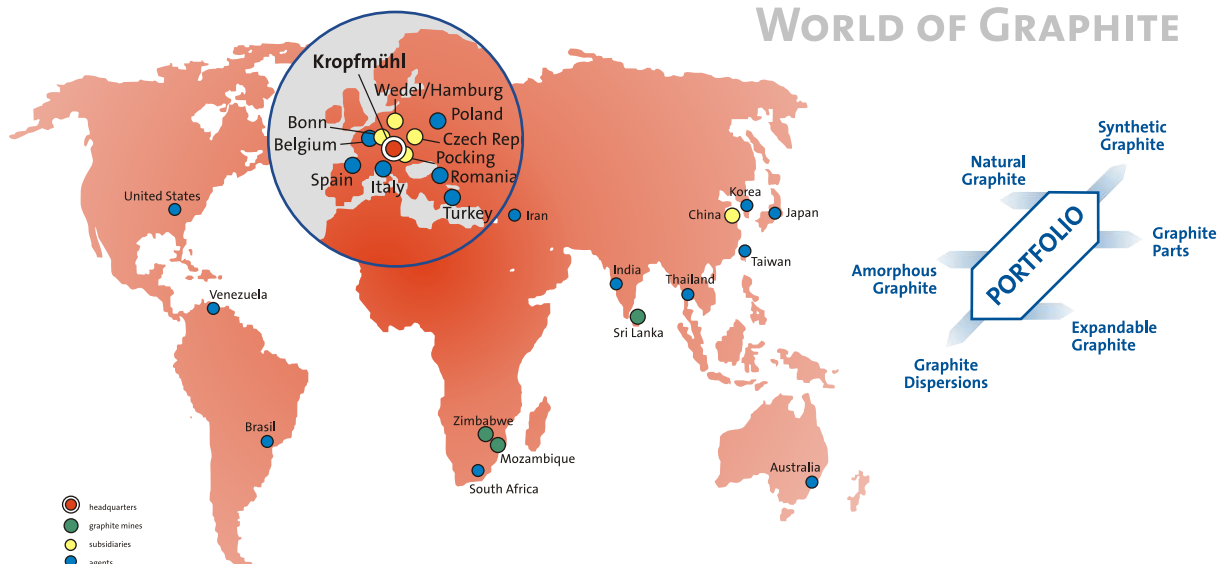
At a filling degree of 25 % the electrical resistance clearly declines with Cond, whereas the finely milled graphite does not function as an electrical conductor at a filling degree of 30 %.

Our product portfolio

Grade	Carbon content [%]	Particle size [µm] – typical values	
		d50	d90
Cond 5	96 - 99,9	5,5-7,0	≤ 13
Cond 8	96 – 99,9	7,0-9,0	≤ 17
Cond 20	96 – 99,9	16-21	≤ 50

Graphit Kropfmühl / AMG Mining company profile

Graphit Kropfmühl has more than 140 years of tradition and expertise in graphite refining. With our know-how and on the basis of state-of-the-art, quality-conscious high technology, we develop high-quality tailored products for our customers' demands. With our own mines, located in Africa, Asia and Europe, we secure the raw material supply.



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