VEIN GRAPHITE

Origin

Natural graphite is not only very special in terms of its versatile properties but also when it comes to its different geological origin. There are three types of natural graphite which can be differentiated by its origin:

- Amorphous graphite: occurs as seam mineral
- Flake graphite: disseminated throughout the ore rock
- Vein graphite: is found in veins and fissures of the ore rock

The origin of vein graphite, also known as lump graphite, is particularly special as it is apparently formed by hydrothermal fluids. An outstanding feature of vein graphite is that its deposits reach a graphitic carbon content of above 90%, even purities up to 99.5% are possible.

Sri Lanka currently is the only country where vein graphite is mined in large quantities. Graphit Kropfmühl is the major shareholder of the Bogala Mine in Sri Lanka which produces the lion share of graphite in the country.

Shape and Texture

The SEM picture shows our grade BC 97/99 from our mine in Sri Lanka. Vein graphite consists of needle-shaped particles which are responsible for its unique crystallinity.

Products

The range of vein graphite products is very wide, especially due to its various particle sizes. Vein graphite can be offered as coarse lumps, measuring several centimeters, as well as fine powders with a particle size of 5 micron.

Carbon contents from 94% to 99.5% are typical values for commercially used vein graphite.
Properties of vein graphite

- Enormous thermal and electrical conductivity
- Crystalline perfection
- Chemically inert
- Easy to disperse, mould and blend
- Resistant to oxidation and high temperatures
- Outstanding lubricating properties
- High density
- Environmentally friendly

Possible applications

- Batteries or fuel cells
- Carbon brushes
- Powder Metallurgy
- Friction
- Lubricants
- Plastics
- Refractory

As already mentioned, vein graphite has many advantageous properties predestined for a number of different applications. This type of graphite is easy to mould and can be formed into solid shapes without adding a binder. Besides, vein graphite can be easily blended with other components, particularly with copper. Graphit Kropfmühl has been supplying many different industries with our high-quality graphite and therefore, has gained an outstanding experience and expertise which we can share with our customers.

Graphit Kropfmühl / AMG Mining AG

Tradition and progress are two terms which describe the well-established business company Graphit Kropfmühl very precisely. In addition to our graphite mine in Kropfmühl, Germany, we also operate mines in Africa and Asia and therefore, we have reliable raw material sources for our high-quality products. Sound knowledge, experience as well as constant research & development are absolutely essential for the production of graphite. All these factors combined make us to your committed business partner.