

Synthetic graphite / Electrode graphite

Synthetic graphite is not only produced to manufacture graphite electrodes for the steel industry, but also in the graphitisation of selected low-ash grades of coke.

The raw materials include calcined petroleum coke and also needle coke, whose sulphur content, nitrogen content and volatile components are minimised in graphitising furnaces at high temperatures of 2400-3000°C.

This process creates the unique hexagonal and crystalline layered structure of graphite.



Application

We distribute our synthetic graphites worldwide under the RANCO name. They are perfect as a carburising agent for grey cast iron (EN-GJL), spheroidal graphite (EN-GJS) and cast steel (EN-GS), and serve the purpose of setting the right carbon content in liquid iron.

Different types of carburising agents are available, varying in quality, shape and grain size.

The solubility of the carbon depends on the interaction between the degree of saturation of the melt, temperature and time. Other influencing factors include the furnace size, agitation of the furnace and the proportion of clinker in the melt.

PRODUCT INFORMATION

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Benefits of RANCO

Benefits of our synthetic graphite:

- Efficient liquidation in the melt due to a high degree of purity and crystalline particle morphology.
- Extremely low S and N content
- Positive effect on nucleation distribution during the formation of nodular graphite (EN-GJS), and enhancement of the inoculation effect against chilling.
- Grain sizes customised individually to match the size of the melting plant

We would be glad to support you in improving the quality and success of your products.

Your Richard Anton KG Team

Grain sizes

The ideal grain size depends on the melting plant and the point at which material is added to the melt. Standard grain sizes are 0.2-1 mm, 0.2-4 mm, 1-4 mm, 4-10 mm as well as pellets.

Quality
Reliability
Progress



Richard Anton KG