

東海

Tokai

Impregnation Treatments

Graphite can be treated with a number of materials that have the effect of improving certain properties for certain applications:

1. Reduction of loss due to oxidation

In the presence of heat and oxygen, the surfaces of graphite components react and break down. This process can begin at around 400°C and is accelerated with increasing temperature and exposure time. Using the unique, post machining, treatment developed at Tokai Carbon UK, GRAPHOX treated graphite's are impregnated with an oxidation retardant which leaves the surface protected against exposure to heat and oxygen. The effects of oxidation are markedly reduced which leads to much longer component life.

2. Reduction of porosity and improvement in mechanical properties

For some applications it is necessary for graphite shapes to be free from porosity, impervious to aggressive chemicals or have higher mechanical strength. Graphite is treated with various synthetic resins in order to achieve this aim.

Tokai Carbon can produce finished shapes or blocks of impregnated material.



Effect on Component Life

