PRESENTATION

We propose 5 types of coating and graphite impregnations for fine grain isostatic graphite (< 10µm):

- **Pyrolytic Carbon**: with the use of high-temperature, high-pressure chemical vapour deposition, (CVD process), the ultra-pure pyrolytic carbon coating provides a smooth surface, high density, strength and hardness along with very low porosity making it virtually impermeable to fluids and gases. The coating thickness is typically 2 to 30 microns. Pyrolytic carbon coating is composed of 99.9995% elemental carbon and is virtually free of organic or metallic impurities. This process prevents the formation of SiC (Silicon Carbide) in contact with the silicon. The coating resists attack by hydrofluoric (HF) and most other acids. Thermal shock will not cause spalling, crazing or flaking of the coating. It is ideal for both semiconductor and solar applications. It is thermally stable and ideal for applications with temperatures up to 550°C in the presence of oxygen and up to 2500°C in vacuum or inert atmosphere.

- **SiC**: Also obtained using the CVD process, the SiC layer is 75 to 125 microns thick. This treatment can seal the graphite completely, the result being a high-quality tool that is virtually inert to all process gases and chemicals, with great hardness, resistance to oxidation and good thermal conduction.

- **PTFE**: We also provide PTFE treatments which increase resistance to acids, eliminating porosity while maintaining the thermal characteristics of the graphite.

- **Methacrylate resin**: Graphite can also be impregnated with this resin which will ensure that the graphite provides excellent sealant capacities.

- **Antimony** (only available for carbo-graphite): Our graphite can be impregnated with antimony for applications where resistance to wear is essential.

For any question, please contact: info@final-materials.com
GRAPHITE ADHESIVE

Adhesive Cotronics 931 bonds Graphite or carbon components for use to 3000°C with 99% pure graphite. Just apply and cure at 120°C. Resbond 931 has excellent adhesion to graphite, and other porous surfaces, forming graphite to graphite bonds with strengths measuring more than 17.5 N/mm². 931 is ideal for repairing broken or cracked graphite trays, components, fixtures, dies; filling and rebuilding crevices, cracks, worn areas and bonding graphite cloths, felts, boards, etc.

GRAPHITE SPRAY

The graphite spray allows lubrication of metal, plastic or rubber parts without using fat. The binder allows to fix a film of graphite powder of very fine particle size with virtually no thickness on different materials.

Applications

- Agent Dry lubrication for all materials
- Anti-seize agent for all materials
- Release agent