Polyimide is often an integral part of magnet insulation. Traditionally, polyimide is available in film, such as Kapton®. Films are best applied to uniform a cross-section, however, magnets have components with complex shapes that also require insulation. CTD-201 Polyimide Coating provides excellent dielectric performance expected from polyimide in a low viscosity liquid form that can be applied to surfaces with complex shapes.

CTD-201 Polyimide Coating
Conformable Polyimide Barrier Layer

- Fully imidized polyimide coating
- Suitable for metallic and non-metallic surfaces
- For use from cryogenic to elevated temperatures
- High dielectric strength and mechanical toughness

Penetrations for Helium, electrical leads, instrumentation and other components for magnets being constructed for ITER represent complex shaped components that require insulation that meets the ground insulation requirements. Incorporation of a polyimide layer in this insulation is required. Due to the complex geometry of these components use of Kapton® film is not practical. CTD-201x provides the necessary performance as well as ease of application in the field required for these devices.

Dielectric Performance CTD-201 and Kapton® Film

Complex Shapes Coated with CTD-201

Schematic of Magnet Helium Penetration

CTD-201 Polyimide Coating
Applied Curves Tubes

Spray Application of CTD-201