Paxis offers all levels of the most updated ballistic standards compliant armored ceramic plates, with superior ballistic performance and weight to cost ratio. Reaction Bonded Boron Carbide and Silicon Carbide ceramic is integrated with optimized composite structures to produce rugged yet lightweight multi-hit armor systems. Paxis has developed proprietary armor protection solutions, ranging from ceramic plates in various designs and dimensions to complete armor systems.

Paxis armor materials and components are ideally suited for a variety of vehicle armor solutions. All components are STANAG compliant and can be supplied as tiles or as a complete armored panel (mosaic or patented ceramic bonding). With best in class weight to ballistic performance ratio and multi-hit capability, tailor made per customer design Paxis vehicle armor can be seamlessly integrated into a wide variety of vehicle families.

For aircraft armor, weight and density are the most crucial factors. Utilizing the lightest, most advanced composites on the market, Paxis materials are ideally suited for a variety of rotary and fixed wing aircraft armor. The armor is tailored to fit customer’s specification and panel drawing, for stress free integration with other structural and defense systems.
**What We Do**

PAXIS CERAMICS is a world leader in design and manufacturing of customized advanced ceramics systems, panels and parts. Specific material formulations and customizations are designed to provide solutions for our customer's armor requirements and industrial application specifications.

**PAXIS**

- **Advanced Technology**
  - Reaction Bonding is the process of enriching a ceramic component with silicon based compounds, at high temperatures in a vacuum environment. Reaction Bonded silicon carbide (SiC) and boron carbide (B4C) are produced from mixtures of carbides and carbon, reacted and bonded together. These materials, among the strongest on earth, are the basic building blocks of bulletproof ceramic solutions.

- **Technology & Materials**
  - **Boron Carbide (B4C)**: Among the hardest materials found on earth, Boron Carbide's low density but high strength makes it ideal for bulletproof ballistic applications ranging from body armor to vehicle and aircraft protection.
  - **Silicon Carbide (SiC)**: An exceptionally hard, synthetically produced crystalline compound of silicon and carbon. As well as providing excellent ballistic protection, silicon carbide is commonly used for cutting tools, grinding wheels, sanding materials, wear-resistant parts and other heating elements.

**Custom Built Advanced Solutions**

The unique properties of Paxis advanced ceramic materials satisfy the needs for the most demanding applications. Based on a broad portfolio of materials and forming technologies, Paxis offers off the shelf as well as tailor made solutions to a wide range of threat levels.

**Quality Oriented**

Commitment to continuous improvement, customer satisfaction and quality make Paxis a perfect partner for ceramic development projects. Paxis offers full documented traceability from raw material to end product. Many of Paxis products and procedures are patented and we are ISO9001:2015 certified.

**Loyal Customer Base**

Among Paxis recurring customers are defense integrators and contractors from the USA, Europe, Australia, Southeast Asia, Israel and more.

**INDUSTRIAL APPLICATIONS**

**Aerospace & Satellite**

- Superb performance under high load (pressure, sliding speed, temperature)
- High resistance to wear
- Resistance to corrosion with aggressive materials
- Thermal shock resistance
- Low distortion under thermal loads

**Paxis designs and manufactures state of the art Silicon Carbide structures and modules for use in a variety of aerospace and satellite applications.**