



5360 NW 35th Avenue
Fort Lauderdale, FL 33309

Capability Statement

Kim Armor Technologies Inc. is a leading manufacturing and engineering company, focused on advanced materials to produce versatile armor solutions for the most stringent application conditions at the highest and most sustainable quality standards available in the market.

CAPABILITIES & PRODUCTS

Manufacturing

Kim Armor Technologies Inc. KIM Technologies excels in advanced ceramic technology and nanotechnology, enabling it to provide pioneering solutions across an array of sectors including defense, energy, aerospace, and healthcare. This results in the manufacturing of ceramic materials such as:

- **Alumina** (Al₂O₃) - **Aluminum-Alumina** (Al-Al₂O₃)
- **Silicon Carbide** (SiC) - **Silicon-Silicon Carbide** (Si-SiC) - **Silicon-Boron Carbide** (Si-B₄C)
- **Boron Carbide** (B₄C)
- **Titanium Diboride** (TiB₂)

The company's dedication to Research & Defense, in addition to technological advancements, positions it as a vanguard trailblazer in materials science.

Other Activities

In-armor systems developed for Land Vehicles: Solutions of 42 kg/m² for **STANAG 4569 Lvl 3** and 52 kg/m² for **STANAG 4569 Lvl 4** were developed and passed the tests successfully.

As a result of intensive R&D work on Soft Ballistics, very successful results were obtained. Solutions with an areal density of 3.8 kg/m² have been found.

LOCATION & FACILITIES

Location

Kim Armor Technologies Inc. is located in Fort Lauderdale between Interstate 95 and Florida's Turnpike. This strategic location provides easy access to Port Miami and Port Everglades, as well as to Miami International Airport and Fort Lauderdale Airport.

The primary facility covers an area of **60,000 square feet**, accompanied by an additional 30,000 square feet open area designated for parking and logistics operations. The facility is equipped with seven loading and unloading docks.

The warehouse section constitutes around 70% of the enclosed area. It is outfitted with a three-level high-capacity rack structure, fully powered pallet jacks, stackers, and forklifts.

Manufacturing Line

KIM Armor has the capacity and ability to produce Boron Carbide, Silicon Carbide, Titanium Diboride, Alumina and their combinations with the technologies it has developed in its State-Of-Art facilities. Ceramic Production Technologies are:

- **Powder Production Technologies**
- **Micronization Technologies**
- **Forming Technologies**
- **Sintering Technologies**

Operational Management & Technology

All operations are managed through an **ERP-MES-PLM Software** custom developed for industry specific needs.

Subcontractors

Kim Armor Technologies Inc. utilizes subcontractors for various processes, creating additional capacity when needed and improving efficiency for the production of specific products.

Major Collaborations

The company has a B2B business model, aiming to cooperate with major leading solution providing companies for both commercial and military industries such as Integris Inc.



NAICS Code: **327110**

SIC Code: **23440**

PRODUCTION TECHNOLOGY

Ceramics Production

The production process of ballistic ceramics begins with various input powders, which are first blended and granulated to create a uniform mixture. This mixture is then subjected to ultra-high pressure to form the powders into near-final shapes. Following this, a high-temperature pre-sintering process is conducted to remove binders from the pressed shapes.



Material Preparation
Material blending
& granulating



Material Forming
Pressing of Powders
Under Ultra High
Pressure into Desired
Near Final Shaped



Material Sintering I
High Temperature
Pre-Sintering Process
for Removal of Binders



Material Sintering II
Hot Pressing or
Reaction Ultra High
Sintering for Final Shape

The final step involves hot pressing or reaction ultra-high sintering to achieve the final shape and properties of the ballistic ceramic plates, resulting in the finished product.

Composites Production

The composite production process begins with various input materials, including fabrics, films, and ceramics. The first step involves preparing and cutting the fabric according to the required geometry and orientation. Next, layers are prepared according to the design specifications.



Input Materials
Various Fabrics,
Films & Ceramics



Fabric Cutting
Preparation & Cutting
according to
geometry & orientation



Layer Preparation
Preparing Layers
according to design



**Autoclave Process /
Composite Press**
Pressurised finishing
& forming process

Finally, the layers undergo a pressurized finishing and forming process using either an autoclave or composite press to create the final composite product.

Supplier Base

The company material supply strategy is based on preferably local materials as well as overseas suppliers, combined with its unique cost-effective high technology, the company seeks to gain competitive advantage in the market