1. **PC Blister technology:**

It is one of the thermal forming methods of thermoplastic plastic. Clamping the sheet or plate material on the framework of vacuum forming machine, through the air channel mold side, with its vacuum adsorption to the mold, after a short period of time of cooling, molding plastic products are produced.

Advantage: This is a new progressive technology that the products are quite light. Mainly used for helmets(bicycle, kids, skateboard, horse, etc), daily packaging(food, toy), lighting, advertising, decoration, electronics, electric appliance industries, etc.

1. **Plastic injection molding technology:**

Injection molding process refers to the process of producing a semi-finished product of a certain shape by pressing, injecting, cooling and disintegrating.

Advantage: Injection molding is the most common modern method of manufacturing plastic parts; it is ideal for producing high volumes of the same object. High efficiency & precise, can realize automation operation. The products can be shaped by simple to complex, from small to big. What’s more, the injection products are easier upgrading. The technology is suitable for mass production with complex shape product and processing field.

Injection moulding can be performed with a host of materials mainly including [metals](https://en.wikipedia.org/wiki/Metal%22%20%5Co%20%22Metal), (for which the process is called [die-casting](https://en.wikipedia.org/wiki/Die-casting%22%20%5Co%20%22Die-casting)), [glasses](https://en.wikipedia.org/wiki/Glass%22%20%5Co%20%22Glass), [elastomers](https://en.wikipedia.org/wiki/Elastomer%22%20%5Co%20%22Elastomer), confections, and most commonly [thermoplastic](https://en.wikipedia.org/wiki/Thermoplastic%22%20%5Co%20%22Thermoplastic) and [thermosetting](https://en.wikipedia.org/wiki/Thermosetting%22%20%5Co%20%22Thermosetting) polymers.

Application of plastic injection molding technology:

Injection moulding is used to create many things such as wire spools, [packaging](https://en.wikipedia.org/wiki/Packaging%22%20%5Co%20%22Packaging), [bottle caps](https://en.wikipedia.org/wiki/Bottle_cap%22%20%5Co%20%22Bottle%20cap), automotive parts and components, [gameboys](https://en.wikipedia.org/wiki/Game_Boy_line%22%20%5Co%20%22Game%20Boy%20line), [pocket combs](https://en.wikipedia.org/wiki/Comb%22%20%5Co%20%22Comb), some musical instruments (and parts of them), one-piece chairs and small tables, storage containers, mechanical parts (including [gears](https://en.wikipedia.org/wiki/Gear%22%20%5Co%20%22Gear)), and most other plastic products available today.

1. **Carbon fiber technology:**

Carbon fibers have several advantages including high stiffness, high tensile strength, low weight, high chemical resistance, high temperature tolerance and low thermal expansion. These properties have made carbon fiber very popular in aerospace, civil engineering, military, and motorsports, along with other competition sports.

Application of carbon fiber technology:

### **1)SPORTING GOODS**

Its application in sports goods ranges from the stiffening of running shoes to ice hockey stick, tennis racquets, and golf clubs. ‘Shells’ (hulls for rowing) are built from it, and many lives have been saved on motor racing circuits by its strength and damage tolerance in body structures. It is used in crash helmets too, for rock climbers, horse riders, and motorcyclists – in fact in any sport where there is a danger of head injury.

**2)CARBON FIBER IN FLIGHT**

Carbon fiber has gone to the moon on spacecraft, but it is also used widely in aircraft components and structures, where its superior strength to weight ratio far exceeds that of any metal. 30% of all carbon fiber is used in the aerospace industry. From [helicopters](https://www.thoughtco.com/history-of-the-helicopter-1991899) to gliders, fighter jets to microlights, carbon fiber is playing its part, increasing range and simplifying maintenance.

### **3)MILITARY**

### The applications in the military are very wide ranging – from planes and missiles to protective helmets, providing strengthening and weight reduction across all military equipment.

It takes energy to move weight – whether it is a soldier’s personal gear or a field hospital, and weight saved means more weight moved per gallon of gas.

### **4)CARBON FIBER AT HOME**

The uses of [carbon fiber in the home](https://www.thoughtco.com/example-of-composites-820426) are as broad as your imagination, whether it is style or practical application.

iPhone cases, pens, and even bow ties – the look of carbon fiber is unique and sexy.

### **5)MEDICAL APPLICATIONS**

Carbon fiber offers several advantages over other materials in the medical field, including the fact that it is ‘radiolucent’ –[transparent to X-rays](https://www.thoughtco.com/x-ray-1992692) and shows as black on X-ray images.

### **6)AUTOMOBILE INDUSTRY**

As costs come down, carbon fiber is being more widely adopted in automobiles. Supercar bodies are built now, but its wider use is likely to be on internal components such as instrument housings, seat frames and bumpers.