

Full Carbon Tecnology

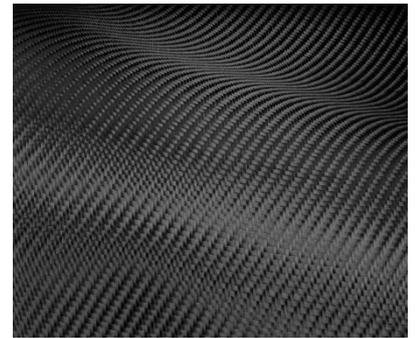
With the development of Carbon Fiber helmets production technology, we have been obtained helmets characteristics significantly higher than those previously produced.

The maximum weight / strength ratio of a helmet is obtained by using Carbon Fibers impregnated with epoxy resins. This is currently the best high-tech material that the industry is able to produce in appreciable quantities.



For this reason Cast continues to invest in the development of this fiber to obtain the best possible safety helmet.

A carbon fiber is a long and thin wire largely composed of carbon atoms. Several thousands of carbon fibers are woven together to form a fabric with a very high tensile strength. To give an idea, the tensile modulus or the resistance that can withstand without breaking is over 140 M.psi for more resistant and quality fibers.



For comparison, steel has a modulus resistance of about 29 M.psi, therefore, the best carbon fiber, it is about five times more resistant than steel (and lighter).

The carbon fiber fabric, obtained by thin carbon filaments arranged according to the classical scheme of the warp and weft, is impregnated with Epoxies, to obtain helmets with exceptional strength and limited weight.

The use of Technological Fibers such as Carbon allows to obtain very light helmets with very high mechanical and Kinetic Energy absorption.

A lighter helmet is less tiring for the rider, and does not weigh down the head area, so the rider is more alert and less tired.

The helmet as a whole has the task of absorbing the kinetic energy, which otherwise would be transmitted to the garment in the event of an impact.

The Carbon Fiber shell due to its high rigidity transmits the received energy to a wider surface, absorbing it. The goal is to limit the weight of the helmet as much as possible so as not to increase the energy that it must absorb.

Cast

Greater helmet weight means more energy to be dissipated in the event of a collision. It is useless for the helmet to withstand even the impact of energy derived from its own weight.

With the use of quality carbon fibers you get a helmet with the maximum characteristics of low weight and high energy absorption.

100% Carbon or Carbon Look?

The Carbon helmet is unmistakably aesthetic as well as technical.

Considering the greater cost of a helmet made of real carbon, on the market we offer helmets that have only the aesthetics of carbon

If your helmet is really in Carbon Fiber and not "Carbon Look" or with normal carbon dyed fibers or worse decals or colors you can evaluate it in two ways:

A safer but more complicated: X-ray control, Carbon is completely transparent so you won't have to see other fibers to reduce the cost.



The second simpler and faster: check the weight of the helmet, if the carbon fiber is placed only externally to give the look or normal "dyed" carbon fibers are used, the weight of the helmet reveals it to you.

CarbonSquare

Cast has developed the shell production with this innovative technology, the most technological available today. This latest generation super oriented multi-fiber used in aeronautics, military and F1 cars, disperses more kinetic energy by distributing it over the entire shell. Consequently it increases the safety of the helmet without increasing its weight.

The result is a helmet that can guarantee the highest safety, while maintaining a "light" weight.

Cast

The production of carbon helmets requires technique and experience.

The helmets are produced entirely in our factories in Italy by companies of the **BELL SAFETY** group, leader in the production of military and professional helmets, by specialized personnel with long experience.



The plants are located in Busto Arsizio (VA).

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The molding cycle of a Carbon helmet is always semi-artisan and subject to the experience of the operator, ie the quality of the helmet obtained depends on the skill and experience of the person who produces it.

The operator 's experience determines the quality level of the final helmet.

The CarbonSquare shell production more complex, this multi-orientated carbon fiber requires highly qualified and long-experienced technical knowledge and production personnel.

What you get is a product at the highest level.