

# NANOTECHNOLOGY

Nanotechnology is a branch of applied sciences and technologies that handles with the control of the matter on a lower dimensional scale, with at least one dimension sized 1 to 1000 nanometres and of the planning and the realisation of equipment in that scale.

The term "nanotechnology" generally indicates the manipulation of matter on an atomic and molecular level.

Nanomaterials, like carbon nanotubes and nanoparticles are now implemented in several sports equipment to improve the performance of athletes and equipment itself.

Over the years, thanks to the evolution of the materials in sports equipment there has been a reduction of the weight of tools accompanied by a remarkable improvement in their resistance.

Carbon nanotubes are used more and more often in these materials, since they are 100-time stronger and 100 - time lighter than steel.

Carbon nanotubes are used to create super durable handle-bars for mountainbikes, for tennis rackets and frames of ultralight bicycles.

Many cyclists have won several trophies using these bikes, which weigh only 1035 grammes, but which have a 400-time greater tubular resistance than the stainless steel.

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