Technology and Mold Design for Production of Hollow Carbon Composite Parts

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This essay aims to describe technology and mold design for production of hollow composite parts like carbon rims or sport rackets. Tested materials correspond to those used for composites in sport applications. Production technology called inflatable bladder molding (IBM) is describe with respect to used material, molds and process parameters. Furthermore, prototype mold for verification of flexible bladder, inner pressure and curing conditions is constructed and tested. Construction design of manufacturing mold together with description of technological steps is proposed.

Keywords: Mold, Carbon Composite, Carbon Rim, Compression Molding, Inflatable Bladder Molding, Prepreg

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