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ВАКУУМНА ІНФУЗІЯ ПІД ПЛІВКОЮ

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VACUUM INFUSION UNDER FOIL

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The vacuum infusion process is a technology of manufacturing a composite material that uses the power of the vacuum pressure to push the resin into the laminate. This technology is used for manufacturing parts made from fiberglass and carbon fiber. The detail sizes can be small, with a surface area less than $1~{\rm M}^2$, in large parts, such as yacht hulls. Technology is recommended for use in the manufacture of single parts or small runs. Briefly, the method consists in the following: the future composite materials are laid out in dry condition into equipment, then vacuum is applied to input the resin. Once full vacuum is achieved, the resin is sucked into the laminate by using special tubes. The process uses a set of auxiliary materials and tools.

Suggested vacuum infusion method, through the use of vacuum, does not allow excess resin to get into the laminate. This method significantly improves the ratio of the fiber - resin in the laminate, resulting in a more rigid and lightweight product. Vacuum infusion method requires experience in the field of composite materials, making the process of creating a laminate even more perfect.

An important aspect when using epoxy or polyester resins is their harm on the human body. From the firth production of parts made of resins and reinforcing materials hazard is known. Vacuum injection has turned conception about resins operations. Such technique needs large costs for ventilation and additional protection from compound contact with the skin because the formation is held covered from the environment. The only stage when a person faces resin vapor and hardener is a stage of mixing.

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