

# What is Vacuum Impregnation?



## Vacuum Impregnation:



Porosity, both micro and macro, can allow liquids and or gases to move through materials- thus not allowing the material or part to properly perform it's function.

The process of vacuum impregnation is simply a method removing the air that fills the porosity and then the filling this porosity with enough of an appropriate material to prevent the flow of liquid or gas.

The process can be accomplished in several different ways. Generally the best method used will yield results that allow parts to perform their necessary function and yet be cost effective. Many factors must be considered in constructing the correct process. Porosity may contain contaminates or inhibitors that can prevent the impregnate to cure properly. Processes prior to impregnation may also tend to smear the porosity opening and possibly interfere with the impregnate entering the pore.

Different impregnating resins are used to accomplish specific needs. High temperature, solvent resistance, flexibility, high pressure, and special coating or machining requirements are among some of the specific needs. Baron Industries has found the selection of Loctite resins is the best choice for meeting this variety of needs.

Finally, a variety of part materials need to be considered. Metals (both ferrous and nonferrous), plastics, ceramics, powdered metals, and other porous materials are all candidates for vacuum impregnation.

The process of vacuum impregnation is accomplished by filling porosity with a material to render a part serviceable.

**SEALS POTENTIAL LEAKERS**

**REDUCES COATING ISSUES**

**REDUCES MACHINING COSTS ON PM**

**REDUCES HAZZARDOUS MATERIALS USAGE**

**ADDED STRENGTH IN SOME MATERIALS**



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- Increases Profits
- Increases Labor efficiency
- Helps Eliminates Scrap

serviceable parts

