

**Processing Guide  
Secondary Insulation**

**PG-104 –Vacuum Pressure  
Impregnating (VPI) Epoxy Resins  
Wet Vacuum**

A member of  **ALTA**

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Process Step	<i>Optimum</i>	<i>Minimum</i>	<i>Comments</i>
<i>Preheat</i>	1 hour at 135 - 150°C(275 - 300°F) Once unit reaches temperature	None	Relax magnet wire, drives out moisture, thermosets tapes, assists in penetration
<i>Dry Vacuum</i>	2 hours at 29-30 in Hg	1 hour at 27 in Hg	Removes air to allow penetration of varnish.
<i>Part Temperature when resin is introduced</i>	50 – 55°C (120°F – 130°F)	25 – 50°C (77°F – 120°F)	Temperature has a direct bearing on varnish penetration. If too low varnish will not penetrate fully. If too high varnish can be damaged
<i>Wet vacuum</i>	15 – 30 minutes at 29-30 inches Hg	None	Pressure should be applied as soon as possible to assist with varnish penetration.
<i>Pressure</i>	2 hours 80-90 psi for coils with minimal taping. Add one hour for each layer of tape.	1 hour at 80 psi for coils with minimal taping. Add one hour for each layer of tape.	A short pressure cycle could reduce penetration.
<i>Drain Time</i>	15-30 minutes	10-15 minutes	Longer drain will re-capture more resin.
<i>Bake Schedule</i>	As recommended by product data sheet.	As recommended by product data sheet.	Full cure is required to develop all performance properties.

Please contact ELANTAS PDG, Inc. Technical Service if you have any questions.

Phone number 1.314.621.5700 Extension 717 or 1.800.325.7492 Extension 717

**The above properties are typical values and are not intended for specification use.**

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