ELANTAS
Electrical Insulation

Processing Guide
Secondary Insulation

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

A member of ALTANA

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Process Step	***Optimum***	***Minimum***	***Comments***
Preheat	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
Dry Vacuum	2 hours at 29-30 in Hg	1 hour at 27 in Hg	Removes air to allow penetration of varnish.
Part Temperature when resin is introduced	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
Wet vacuum	15 – 30 minutes at 29-30 inches Hg	None	Pressure should be applied as soon as possible to assist with varnish penetration.
Pressure	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.
Drain Time	15-30 minutes	10-15 minutes	Longer drain will re-capture more resin.
Bake Schedule	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.