

**Processing Guide  
Secondary Insulation**

**PG-127**

**Vacuum Pressure Impregnating (VPI)  
Epoxy for Dry Type Transformers**

## Processing Guide PG-127 – Vacuum Pressure Impregnating (VPI) Epoxy for Transformers

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, assist in penetration.
<i>Dry Vacuum</i>	30 minutes @ 29 - 30 in Hg	15 minutes @ 29 - 30 inches Hg	Removes air to allow penetration of resin and removes moisture.
<i>Part Temperature when resin is introduced</i>	20 - 32°C (68 - 90°F)	20 – 32°C (68 – 90°F)	Temperature has a direct bearing on resin penetration. If too low resin will not penetrate fully. If too high resin can be damaged.
<i>Wet vacuum- Flood process tank</i>	Re-establish 29 – 30 in Hg for additional 30 minutes	Re-establish 29 – 30 inches Hg for additional 15 minutes	N/A
Release Vacuum	Nitrogen or Dry Air	Dry Air or Atmospheric air for products not moisture sensitive.	Recommended to release vacuum prior to pressurizing tank to insure the safest operation.
Pressure	Apply 80 – 90 PSI for 1 to 2 hours.	Apply 80 – 90 PSI for 30 minutes to 1 hour.	Applying pressure will assist resin penetration into the coils and laminations aiding in both Noise Reduction and Heat Transfer
<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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