

TELEDYNE HASTINGS

APPLICATION NOTES

INSTRUMENTS

Goal: Vacuum Pressure Impregnation System



Vacuum Pressure Impregnation Systems require pressure measurements in the range of 5.00 Torr. Typical VPI Process for casting and motor industries requires a dry vacuum process. The pressure is measured using the HPM 760 Plus.

Product is flooded with impregnating material; for motors, this is the insulation material. The process then calls for a wet vacuum, after which the product will be pressurized to 85 - 95 PSI. The HPM-760S transducer is mechanically isolated during this operation from a maximum pressure of 30 PSIG.

The 0 - 5.00 VDC output signal from the HPM-760 Plus is connected to an analog input PLC for scaling set points internally with the logic program.

After the pressure process is completed, the material is then returned to a storage vessel and the VPI Process is complete. Once the process chamber returns to atmosphere pressure and can safely be opened, the product is removed.