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## SEALED VS FLOW AIR PRESSURE

1. ALL Manufacturers making HVLP spray systems quote SEALED AIR PRESSURE in their literature and advertising. The SEALED AIR PRESSURE quoted from each HVLP Turbo manufacture is a direct measurement from the motor with no bleed or air relief installed. There are multiple manufacturers of turbo type motors used in HVLP spray systems and therefore different specifications. There are also many different types and style of motors that can also vary the specifications.
2. SEALED AIR PRESSURE is a measurement of the force of the air and is taken at the motor outlet before a hose or spray gun is attached. The motors used in ApolloSpray® Turbo spray systems are made to optimize pressure and performance. Apollo Sprayers, like other HVLP manufacturers quotes the SEALED AIR PRESSURE. SEALED AIR PRESSURE is the industry standard and helps the end user compare products with similar specifications.
3. FLOW AIR PRESSURE is a measurement of the moving or flowing air, taken at the turbine or spray gun. FLOW AIR PRESSURE is not the same as SEALED AIR PRESSURE. FLOW AIR PRESSURE is measured with the spray gun attached and the trigger wide open. FLOW AIR PRESSURE can vary based on how an HVLP system is designed or the orifice size of the air bleed or air relief, which is necessary when used with a non-bleed type spray gun. Additional variables include the motor temperature and variations in electric voltage.
4. Only select ApolloSpray® turbine systems are capable of providing SEALED AIR PRESSURE. These systems are installed with Apollo's patented Throttle Back Control (TBC™), which enables the motor to run without a bleed or air relief and without overheating. Apollo strives to provide the highest FLOW AIR PRESSURE a system can provide while maintaining the safety and longevity of the motor that is installed. Visible FLOW AIR PRESSURE will be lower than quoted SEALED AIR PRESSURE on models that are equipped with a bleed or air relief and when the spray gun trigger is pulled.
5. A simple test can be performed to verify the SEALED AIR PRESSURE of the PRECISION-5 Turbo spray system is normal. Momentarily block the air relief on the side of the system and note the pressure on the LCD. It should increase to the advertised or quoted pressure. Caution should be used since the air being expelled can become hot.

The most important evaluation is the performance of the system with the coatings or paints that one wants to use with the system. The performance of a system is directly related to its ability to provide higher FLOW AIR PRESSURES. Being able to measure the FLOW AIR PRESSURE is the best way to measure system performance, but must be measured at the air cap on the spray gun. This will provide an accurate measurement of the available atomizing pressure for a given type of coating passing through the nozzle of the spray gun. When measuring FLOW AIR PRESSURE at the air cap on the spray gun always make sure you have the fan adjustment wide open and the material flow screw open at least 2 full turns. Make sure there is not any material in the spray gun when testing the air cap pressure. This test should be performed with an empty cup. Apollo has designed an air cap pressure test gauge to make it easy for the operator to measure their available atomizing air pressure. Ask your sales representative for more information.