



STOKES VACUUM PUMPS

Technical Bulletin

The basic use for a vacuum pump is to remove gas molecules from a sealed chamber or area which means to remove atmosphere. The molecules contained in earth's atmosphere are mostly nitrogen, carbon dioxide, oxygen, and common contaminants. The removal of the molecules continues until the level of required vacuum is achieved. Depending on the level of vacuum required you may need a series of various vacuum pumps to achieve this level. The pictured pumps are positive displacement pumps and are the most effective for low vacuums.

The most common configuration is to have one or two positive displacement pumps and a Diffusion/Molecular pump to achieve high vacuum. There are a number of various types of positive displacement pumps:

- Rotary vane which are the most common pumps
- Diaphragm
- Liquid ring
- Piston
- Roots blower or booster

Vacuum pumps are combined with chambers and operational procedures in a wide variety of vacuum systems and sometimes more than one pump will be used in series in a single application depending on the level of vacuum required. Vacuum pumps are used in a number of industrial and scientific processes as follows:

- Abar vacuum furnaces
- Heat treating
- Electron microscope
- Mass spectrometer
- Molecular beam welding
- Welding of advanced materials
- Composite Plastic molding
- Production of electric lights, vacuum tubes, and CRT's
- Semiconductor processing
- Medical processes requiring suction
- Industrial processes requiring suction
- Vacuum coating on glass, metal, and plastics for decoration, durability, and energy saving
- Hard coating engine components



Model 1736 is a combination of a Stokes 212 Pump and a Stokes 607 Booster Pump Assembly



Stokes 412J which is the current version of the Stokes 412-11



Stokes 615 Booster Pump

12 Month In-Service Warranty

All Units Are System Tested

No Charge Evaluation