The Prestovac® reactors are used in applications which require pressure as well as vacuum and thermal conditioning capabilities for the processing of materials. They add a dimension of synergism to the process by having the capability of mixing, drying, cooling, reacting, or any combination of these processes in a single vessel. Many of these techniques demand the processing flexibility to handle material in a variety of physical forms. Materials may range from low solids slurries, paste or pseudo plastic materials, dense granular solids, to fine powders.

The mechanically fluidized bed principle with the versatility it offers extends the capabilities of single vessel processing to a wide range of applications. In many cases several steps in the process can be consolidated by eliminating costly material handling and related auxiliary equipment. The Processall Prestovac® is available in sizes ranging from 4 liters to 25,000 liters of total volume. Additionally a continuous patented design (CVDR) is also available.

**Typical Applications:**
- Sterilization of Food and Pharmaceuticals
- Modification of Polymers
- Cellulose Derivatives
- Alkalization of Food and Chemical Products
- Cryogenic Processing
- Cellulose Sulfonation
- Dry & Pigment Intermediates
- Chlorinated Organics
- Cross Linking of Chemicals
- Exothermic Reactions Requiring
- Rapid Temperature Control
- Soaps and Detergents
- Solvent Extraction

**Processall Accessories**

**Processall Shaft Seals**
Seal configurations such as braided packings are supplied in materials compatible with the application. Gas purge or mechanical face seals are available for extended life and maintenance simplicity.

**Discharge Designs**
A contour discharge located on the bottom of the vessel is standard. An optional hemispherical discharge valve with a self-cleaning seat is available. A plug valve located in the head or other custom designed systems are also available. Valves can be either manually or pneumatically operated.

**Ball Valve Charging / Discharging**
Due to higher internal pressure rating a specially designed ball valve is needed in the charging and discharging functions of the reactor; also it is well suited for the metering of material. The valve can be either manually or pneumatically operated.