

**S. HOWES**  
Established 1856

## Pharmaceutical Blenders



**For More Information  
Contact One of Our Sales Engineers**

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Used by many of the World's leading pharmaceutical companies, **S. Howes' Pharmaceutical Blenders** produce a superior uniform and consistent mix. Standard blenders are available in capacities from **7 to 476 cubic foot batch sizes** and are available in custom finishes and designs to meet your sanitary and production requirements. Custom sizes as small as 2 cubic feet and as large as **1,500 cubic feet** are also available.

**Construction features:**

- ◆ All Stainless Steel construction including tank, agitators, covers, and support legs
- ◆ S. Howes Double-Ribbon Agitator with the original reverse-spiral design or Paddle Agitator
- ◆ Drive and discharge components are painted white epoxy
- ◆ All welds are continuous, ground smooth, crack and crevice free. All butt weld joints are ground flush. All corner welds are ground to leave a radius and are blended into the joined components
- ◆ The tank is formed with internal radii at the end plates to eliminate corners where product can accumulate
- ◆ All agitator assemblies are designed with flanged journals. This allows the agitator assembly to be completely removed for cleaning and inspection as required
- ◆ Double lip-type seals are the standard shaft seal
- ◆ Internal components are passivated before shipment

**Available Options:**

- ◆ The mixer discharge can accommodate a variety of valve types and connections depending on the specific application. These can include but are not limited to knife gates, flush mounted ball valves, and flush-fit plug valves to name a few
- ◆ Flanged or sanitary discharge connections
- ◆ Liquid addition by either straight injection or two-fluid nozzles
- ◆ Center or end discharge
- ◆ Heating or cooling jackets
- ◆ Covers to suit the application (removable, hinged, flanged)
- ◆ Interior and exterior finishes can be as fine as 12-15 RA to meet specific industry or regulatory requirements
- ◆ CIP nozzles can be installed for use with existing CIP systems
- ◆ Split double-lip, packing gland and rotating shaft seals available
- ◆ High Velocity intensifiers available



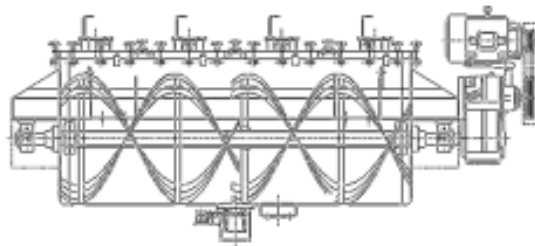
Agitator with Flanged Journal Construction



Packing Gland Seal with Air Purge



High Velocity Intensifiers to break up lumps



**LAB AND  
PRODUCTION UNITS  
AVAILABLE**

**Custom Systems can also be designed for your processing or development needs:**

- ◆ Bag dump, volumetric, or gravimetric feed systems can be used to load your mixer
- ◆ Custom collection tanks or conveyors can be used to collect and transport finished product
- ◆ System integration and custom controls can be developed for your specific needs