

### Product Description

The SR series glass-lined steel rotary dryer/blender combines the drying and mixing function in one simple and stable device. The rotation of the double cone allows the product to be mixed and dried without an internal agitator.

### Product Applications

This type of equipment is suited for processing corrosive products for drying, mixing or concentrating pharmaceuticals, dyes, pigments, synthetic resins, etc. In many cases, it is possible to appreciably reduce batch time in relation to conventional methods (e.g., drying chambers).

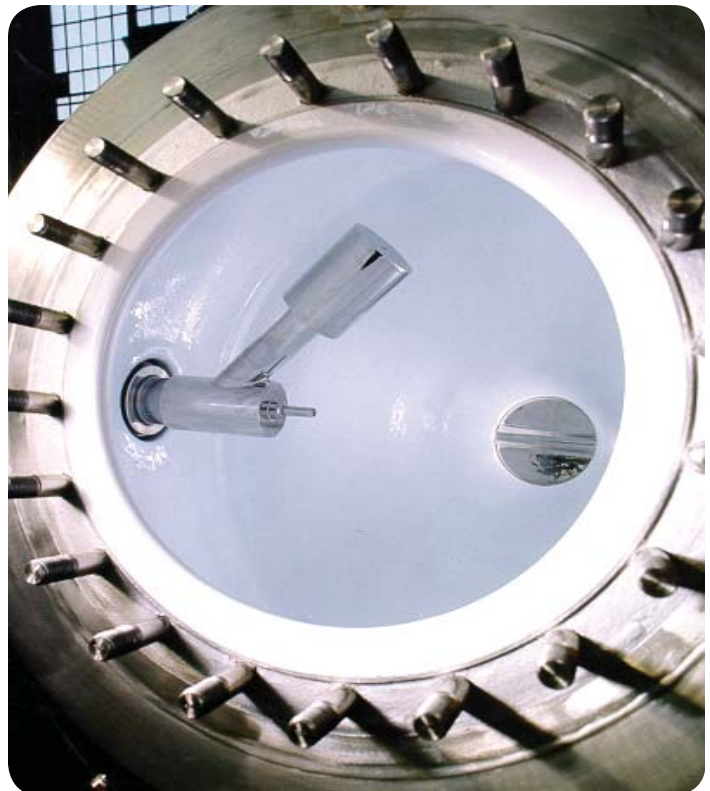
### Specifications

- Volumes from 100 to 7,220 liters (30 to 1,900 gallons)
- Heating area from 12.5 to 203 ft<sup>2</sup>
- Pressures from full vacuum to 90 psig



### OPTIONS

- The inner vessel can be manufactured of stainless steel, rather than glass-lined.
- A charging nozzle swaged into the plain cover.
- Both charging and discharging nozzles can be equipped with an optional butterfly valve.
- The vacuum tube can be constructed of other materials than the standard Hastelloy C and can be supplied with various breaker bar designs to limit product clumping.
- A RTD temperature sensor cartridge can be purchased for the vacuum tube thermowell to measure temperatures in the inner vessel (J or K thermocouples are also available).
- A nitrogen or gas inlet pipe has been designed to introduce a gas through the vacuum tube, while retaining temperature-sensing capability.
- Special support systems can be made for assembly on concrete piers or supporting steelwork.
- Custom designs to meet specific customer requirements.



*Special pharmaceutical dryer-blender featuring a unique hanging support system, polished stainless steel sheathing with insulation, bolted manway flange in lieu of clamps and Hastelloy vacuum tube.*

### Standard SR Design

See our SR Series Mini Print for dimensional specifications on standard sizes. The standard supply is as follows:

- Glass-lined carbon steel inner vessel.
- Charging and discharging nozzles.
- EasyLift™ Manway Assist with GasketSav'r™ and PTFE-lined protection ring for the charging nozzle cover.
- Steel conventional jacket welded to the inner vessel, including all nozzles necessary for heating.
- Two support structures forming a mono-block assembly, each equipped with double-row self-aligning roller bearings:
  1. The drive side is fitted with a rotary union to feed the heating medium. It also houses the drive assembly consisting of a spur gear drive, motor break and inverter duty explosion proof motor.
  2. The vacuum side support is fitted with a Hastelloy C vacuum tube. The vacuum tube is sealed by means of a mechanical seal with PTFE bellows and ceramic seat. The vacuum tube also houses a thermowell, which can be equipped with an option RTD or thermocouple.
- Standard working pressure of 90 psig/FV in the jacket coincident with vacuum in inner vessel (inner vessel is stamped for 40 psig/FV).

### Support Stand

For operating convenience, the steel support stand is deigned with an open front.

### Special Protection for the Manway

**Easy-opening manway assembly:** Our patented EasyLift™ Manway Cover Assist with GasketSav'r™ is standard on all SR Series dryer/blenders. The EasyLift™ takes just 10 lbs. force to lift, reducing the chance of accidental injury to personnel and damage to the cover and nozzle, while extending the life of the gasket.

**Special clamp arrangement:** Manway clamps are provided with cap nuts to protect the threads of these frequently used clamps from atmospheric corrosion while maintaining ease of operation. Clamps swing off and are held by a special stainless steel retaining ring, so they can not be dropped or fall into the vessel when loosened. Magnets hold the clamps in convenient open position when not in use. Optional stainless steel clamps and other hardware can be provided.

e

