

## The Unconventional Rotor-Stator High Shear Mixer

### Unmatched Performance & Efficiency

No other rotor-stator mixer provides the optimum shear and pumping rates of the Rotostat. The multi action of the high speed rotor, unique revolving stator and the large lower prop dramatically reduces dispersion and overall mix time to less than 10 minutes for many applications. This combination of mix heads results in lower power consumption and 100% product uniformity throughout the batch. Process viscosity can range from waterlike to over 50,000 cps without requiring auxiliary agitation.

### Give your process a boost

- 100% lump free dispersion, hydration and emulsification
- Superb emulsion stability for extended shelf life
- Deagglomerate soft and hard particles within 60 seconds
- Easy and accurate scale up from benchtop to any production size model with our exclusive Mighty Mix™ parameters



◀ **Flow pattern:**  
Blue arrows = flow  
into the mixing head  
Green arrows = expulsion  
from the mixing head



## Rotostat Sanitary Features from Top to Bottom

The Rotostat single shaft design eliminates guide bars to hold the stator. The entire mixing head can be dismantled, separated and rinsed out within a few minutes, or can be cleaned in place. Other features include:



### Stainless Steel Motors and Speed Controllers

Three grades of all stainless steel motors, including end bells, are available up to 50 HP. Units are also available in an epoxy-coated washdown design. Plus a full line of AC speed controllers is also available with stainless washdown enclosures.

### Stainless Bearing Supports

Most models feature bearing frames machined from 316SS, with stainless steel internal components for maximum protection and durability. All bearings are sealed and the output of the frame is double sealed.

### The Only Detachable Shaft Rotor/Stator Emulsifier

With an optional detachable shaft coupling below the mounting flange, inspection and servicing of the rotor/stator head is easy. This is especially useful where shaft lengths are long or where access to the mixing head is difficult. In addition, low headroom installations are easily accommodated when combined with our low profile belt drive model.

### Optishear® Your Process

The unique patented revolving stator when combined with the close clearance rotor and high efficiency lower propeller optimizes shear rates, pumping rates and particle size reduction. The rotors, stators and props are interchangeable for maximum flexibility, and the unit will never overshear sensitive materials or formulas.

## Options to Fit Every Processing Need

- ✓ Sanitary in-tank couplings and a choice of gas or flush mechanical seals are exclusive Rotostat options.
- ✓ Models through 10 HP are available with all stainless mobile or wall lift stands.
- ✓ Exclusive low profile belt drive arrangement for low headroom applications.
- ✓ Washdown epoxy frames and motors available.
- ✓ Benchtop lab models allow precision scaling of all applications.
- ✓ Complete mix stations may include jacketed tanks, vacuum, or scrape surface.



### ROTOSTAT XP Models (For high solids & viscosity)

Selections shown based on 100 CPD viscosity

MODEL	MAX. BATCH SIZE (GAL)	STD. HP	FLOW RATE (GPM)	MIXING HEAD DIA. (IN)	MAX. SHAFT LENGTH (IN)	APPROX. WEIGHT (LBS)
80XP63	60	15	410	5.1	32	75
80XP63	110	3	860	5.1	36	92
100XP81	250	5	1160	6.5	56	145
112XP94	400	7.5	1720	7.7	64	215
132XP124	600	7.5	2300	10.2	67	258
160XP148	1000	10	3490	12.6	92	350
280XP175	1500	20	5090	14.31	84	560
200XP200	2500	15	6010	16.5	102	710
225XP225	3500	25	7910	18.6	94	950
250XP250	5000	30	11,690	20.7	114	1210
280XP300	7500	40	14,060	24.8	128	1600
355XP300	10,000	50	19,140	24.8	135	1950

### ROTOSTAT X Models (For low to moderate viscosity emulsions)

Selections shown based on 100 CPD viscosity

MODEL	MAX. BATCH SIZE (GAL)	STD. HP	FLOW RATE (GPM)	MIXING HEAD DIA. (IN)	MAX. SHAFT LENGTH (IN)	APPROX. WEIGHT (LBS)
80X63	30	1	2310	5.1	48	60
90X81	75	3	500	6.5	46	95
100X94	150	5	770	7.7	52	130
112X124	225	5	890	10.2	54	160
132X148	450	7.5	1520	12.6	62	245
160X175	750	15	2400	14.3	68	490
180X200	1000	10	2490	16.5	91	530
200X225	1500	15	3550	18.6	93	645
250X250	2500	25	4860	20.7	115	980
280X280	4000	30	630	24.8	128	1250
355X350	7000	50	10,010	29.0	140	1930
400X400	10,000	75	14,950	33.0	160	2850