

Rotosolver® RXRS

High Shear Marinade and Brine Mixer



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Rotosolver technology has been well known as an industry leader since 1993 in the preparation of poultry marinade and meat brines leading the way to help processors maximize yield and ensure 100% functionality of their ingredients. With the development of the RXRS series, we implemented our new, patent pending, Rotosolver II impeller combined with high efficiency features that include:

- 70% lower energy consumption
- Improved impeller designs
- 1750 RPM instead of typical 3450 RPM motors
- Drastically improved Washdown capabilities
- Simplified bearing frame design

What does that mean to your process?

- RXRS models provide over double the total flow when compared to standard Rotosolver models
- 70% lower energy consumption and 74% heat input for lower electricity costs but
- Cold temperatures can be quickly introduced into process.
- 38% more shear capability with all the addition being through hydraulic shear
- Better drawdown of floating powders
- Increase velocity low in the vessel to avoid settling and ensure complete incorporation of the heaviest phosphates, salts and sweeteners
- Reduced batch times



What does that mean to your maintenance & budget?

- Reduce mixer maintenance & downtime with lower speed (1750 RPM) and a simplified bearing frame design
- Faster turnaround in the maintenance shop
- Easily removable shafts eliminating tapers and complicated couplings
- Less stringent shaft straightness tolerances
- 26% reduction in average operation cost

Model	Max. Tank Gallons	Std. Shaft Length*	HP / RPM
125RXRS-150	100	36"	1.5 / 1750
125RXRS-200	200	50"	2 / 1750

*Custom shaft lengths available

How It Works

The Rotosolver combines the shearing capabilities of a high speed toothed rotor and a slotted stator with the additional advantage of high flow/ circulation from the dual rotor blades. This unique mixing head design provides a four-stage mixing action:

1. Product flow is drawn Into the mixing head from above and below. As flow is drawn in, materials and powders pulled down from the top (typically the toughest to disperse) are immediately exposed to two (2) additional mechanical shear zones and one (1) new shear zone from the bottom. These materials are then immediately mechanically ripped by the teeth on the rotor's discharge at the top and bottom of the stator.



- 2. The two high-velocity, countercurrent streams converge within the stator causing high turbulence and hydraulic shear, without momentum loss from obstructions within the stator.
- 3. Centrifugal pressure forces material to the periphery of the stator where it is subjected to further mechanical shear as material passes through the sharpened edges of the expanded slots in the stator.



4. The high velocity radial discharge combines with slower moving tank flow for additional hydraulic shear and circulation.

