JOHN GODRICH

Industrial Test & Mixing Equipment

Datasheet

This product datasheet has been provided by
John Godrich in Partnership with Admix

Rotosolver II®

The Ultimate Energy Saver High Shear Mixer

ADMIX
Advanced Mixing Technologies

Rotosolver II delivers performance & efficiency

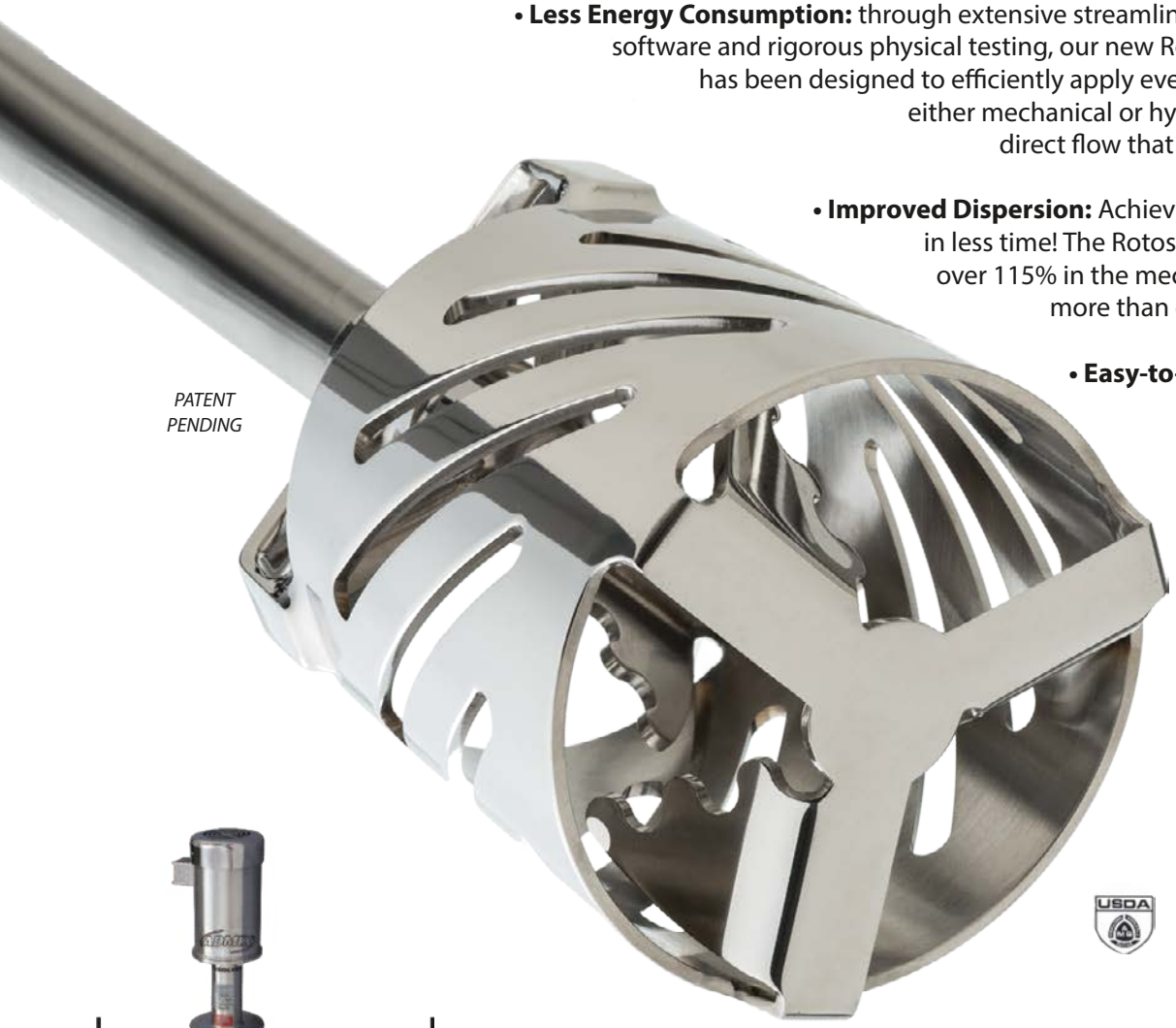
Admix's Rotosolver high shear mixer has been well known as an industry leader since 1993. Our goal was to enhance our existing Rotosolver design and make it even better, offering processors a significant improvement in performance and efficiency.

- **Less Energy Consumption:** through extensive streamlining, utilizing the latest CFD software and rigorous physical testing, our new Rotosolver II mixing impeller has been designed to efficiently apply every bit of energy to produce either mechanical or hydraulic shear and optimally direct flow that is beneficial to the process.

- **Improved Dispersion:** Achieve the same or better results in less time! The Rotosolver II offers an increase of over 115% in the mechanical high shear surface, more than double the shearing edges.

- **Easy-to-Clean Design:** We opened up the mixing chamber to ensure that conventional CIP procedures provide maximum cleanability.

PATENT PENDING



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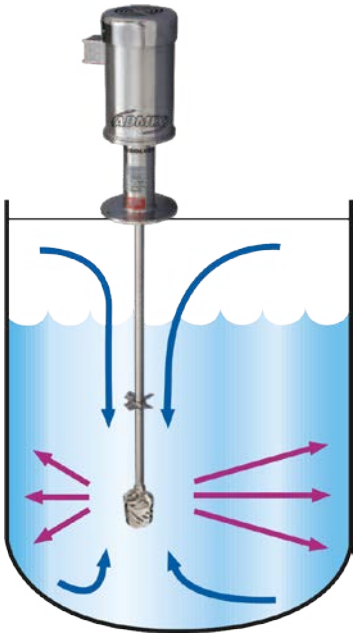

Flow pattern:
Blue arrows = flow into the mixing head

Purple arrows = expulsion from the mixing head

- Reduce energy consumption up to 30%
- Increase overall shear rates
- Reduce batch times for increased capacity
- Improved cleanability
- Retrofit available for existing installations
- Wet out & disperse Carbopol®, Methocel®, Opadry®, Avicel®, CMC, xanthan and guar gum, soy proteins, starches, pectin, carrageenan and other "tough" hydrocolloids and ingredients

Typical Selection of a Rotosolver

Models and Specifications

The following table lists each of our standard Rotosolver models, along with typical working volumes based on the specific design criteria listed below. All selections are based on a moderate level of mixing (mixing intensity of 7,0) and a specific gravity of 1,0.

Note: Higher viscosities, greater mixing intensities, non-standard tank geometries or a specific gravity greater than 1,0 may require a different selection than shown. Different ingredients may require higher tip speeds for best performance and a different mixer selection may also be necessary. Please contact Admix, Inc. for an Applications Engineer to determine the optimum mixer configuration.

Rotosolver Model	Maximum Batch @ 100 cP(1) (liters)	Maximum Batch @1.000 cP(2) (liters)	Standard kW	Speed (RPM)	Mixing Head Diameter (mm)
RS-02	37	20	0,75	3.600	60
80RS70	940	245	4	3.600	70
90RS70	940	245	4	3.600	70
1000RS88	2.460	660	7,5	3.600	88
112RS88	2.460	660	7,5	3.600	88
132RS101	3.200	850	11	3.600	101
132RS133	4.730	1.135	7,5	1.800	133
160RS159	9.460	2.250	15	1.800	159
180RS175	15.140	3.785	22,5	1.800	175
200RS200	15.140	3.785	15	1.200	200
225RS225	18.900	4.730	22,5	1.200	225
250RS250	23.650	5.650	37,5	1.200	250
315RS300	30.250	9.460	37,5	900	300
355RS300	30.250	9.460	45	900	300
400RS300	37.850	9.460	55	900	300

(1) **Maximum batch size (100 cP)** with a standard upper foil based on 100 cP and 1,0 specific gravity.

(2) **Maximum batch size (1.000 cP)** with a standard upper foil based on 1.000 cP and 1,0 specific gravity.

Call us today at +45 (3213) 8743 for more information!

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CUSTOMER FOCUSED

Rotosolver II: How It Works

The Rotosolver II 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, counter-current 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.

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