



## Agitation Without Aggravation

Fusion Fluid Equipment, LLC is a rapidly growing designer, manufacturer, and supplier of mixers, mixing accessories, and complete agitation systems for various processes for use in Industrial, Chemical, and Pharmaceutical mixing applications.

Whether you require standard or custom equipment, our use of modern design and manufacturing techniques allows us to confidently handle your projects ranging from simple to complex.

When you choose to partner with Fusion, you'll experience shorter lead times and superior service from our willing and knowledgeable staff that's available to you from start to finish.

Your time is valuable; spend it wisely! Let Fusion provide you with quality mixing equipment without the hassle... Agitation Without Aggravation.

Fusion offers quality, American-made equipment to its valued customers. We are proud to say, "Made in the U.S.A.!"









We would like to introduce you to our company's website that contains even more helpful information and tools than our catalog!

- The Application Guides help direct you toward mixers that suit your needs.
- Descriptions and mixing data for our impellers are on the *Impeller Pages*.
- Our Knowledge Center offers valuable reference material including the Fundamentals of Mixing, O&M Manuals, and several *Mixing Calculators*.

We're sure you will find our site useful...Check it out!

www.fusionfluid.com



## **APPLICATIONS**

- Industrial Mixing
- Chemical Processing
- Corrosive Conditions
- Waste Water Treatment
- Sanitary Environments
- Pharmaceutical
- Biotechnology
- Food/ Beverage
- Low or High Viscosities
- Subtle or Aggressive Agitation

## **CAPABILITIES**

- 3D Modeling
- CNC Machining
- Laser Cutting
- Water-jet Cutting
- Mechanical Forming
- MIG & TIG Welding
- Electropolishing
- Polishing
- Passivation
- Coatings

	Equipment Overview													
Mixer Series	Direct Drive	Gear Drive	Batch Size	Max Shaft Length	Open or Closed Tank	Entry Point	Notes:							
Pro Series	1/4 - 5HP 1150 - 1750 RPM	1/4 - 5HP 175 - 350 RPM	5 to 3,000 gallons	120" FMB	Open or Closed	Top Entry	Portable and Fixed Mounts							
Pro Stainless Series	1/4 - 5HP 1150 - 1750 RPM	1/4 - 2HP 175 - 350 RPM	5 to 3,000 gallons	120" FMB	Open or Closed	Top Entry	Portable and Fixed Mounts All Stainless Steel							
Axiom Mixer	Consult Manufacturer	Up to 100 Watts 20 - 600 RPM	1 to 100 gallons	30" FMB	Closed	Top Entry	Autoclavable Sanitary Mixers for Small and Medium Batch Sizes							
Cirrus Mixer	1/4 - 2HP 1150 - 1750 RPM	1/4 - 2HP 175 - 350 RPM 1/4 - 3/4HP Up to 350 RPM	5 to 1,000 gallons	72" FMB	Closed	Top Entry	Heavy Duty Sanitary Mixer for Medium Size Batches							
Flow Series	N/A	1/4 - 100HP 3 - 450 RPM	50 to 1,000,000 gallons	360" FMB (30 feet)	Open or Closed	Top or Side Entry	Large Scale Industrial and Sanitary Gear Drive Mixers							
Drum Series	1/2 - 3HP 1150 - 1750 RPM	1/2 - 3HP 230 - 350 RPM	55 gallons (typically)	30" FMB	Open or Closed	Top Entry	Standard and Custom Drum Mixers							
Tote Series	1/2 - 3HP 1150 - 1750 RPM	1/2 - 3HP 230 - 350 RPM	275 to 575 gallons (typically)	36" FMB	Open or Closed	Top Entry	Standard and Custom Tote Mixers							
Lift Stands	Built to Suit													
Turnkey Systems	Built to Suit													
Specialized Lab Mixers	1/10 - 10HP 870 - 3600 RPM	1/10 - 10HP 4 - 500 RPM	As Req'd	36" FMB	Open or Closed		Custom Lab Mixers							

Need something different? Look to our Custom Mixers for additional solutions!



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Fusion Impeller Styles													
Power Number	Pumping Number		Number	Pumping Number		Power Number	Pumping Number						
(N <sub>p</sub> )	(N <sub>q</sub> )	Style	(N <sub>p</sub> )	(N <sub>q</sub> )	Style	(N <sub>p</sub> )	(N <sub>q</sub> )						
0.34	0.50	Rushton	5.75	0.72	Retreat	2.52	0.74						
0.30	0.50	Cowles/Sawblade	0.45	0.26	Folding Impellers	0.50	0.50						
1.27	0.79	BioProp - Sanitary (Marine-Type)	0.40	0.45	BioProp - Sanitary (Mass Flow)	3.00	0.74						
	Number (N <sub>p</sub> )  0.34  0.30	Number (Np)         Number (Nq)           0.34         0.50           0.30         0.50	Power Number (Np) Number (Nq) Style  0.34 0.50 Rushton  0.30 0.50 Cowles/Sawblade	Power   Number (N <sub>p</sub> )   Number (N <sub>p</sub> )   Style   Number (N <sub>p</sub> )	Power   Number   Nu	Power Number (N <sub>p</sub> ) Rumber (N <sub>p</sub> ) Style Pumping Number (N <sub>p</sub> ) Style Style Style Number (N <sub>p</sub> ) 0.34 0.50 Style 0.45 0.72 Retreat 0.30 0.50 Cowles/Sawblade 0.45 0.26 Folding Impellers 0.40 0.45 BioProp - Sanitary	Power   Number   Nu						

Custom Impellers

Custom impellers can be produced to your exact specifications supporting your specific tank geometry and protected proprietary processes. We can also design and produce replacement impellers, or modified and hybrid versions of other designs.

Top Entry

lost impellers are available in other materials, like 304SS, Hastelloy, Aluminum, Carbon Steel, & Teflo