

MIXING SOLUTIONS REDEFINED

COMPREHENSIVE SOLUTIONS CATALOGUE FOR THE ENTIRE MANUFACTURING VALUE CHAIN



biopulsesolutions.com

Kest and BioPulse

Advancing Aseptic Fluid Handling Solutions Together

Kest Technology and Biopulse have forged a strategic partnership to advance aseptic fluid handling in pharmaceuticals and Biopharmaceuticals. Kest's equipment excellence in mixing solutions combined with Biopulse Solutions innovative open architecture approach and fluid handling specialization, the alliance delivers comprehensive, high-quality offerings worldwide.

BioPulse Solutions strategic technology partnership with Kest Technologies brings a unique dynamic to Asian market.

The BioPulse Advantage

Customers are at the center of everything we do. Our expertise combined with our integrated open architecture approach makes us a preferred partner for the Biopharma Industry.



Open Architecture
Get greater flexibility,
efficiency and costeffectiveness for
biopharma processes



Complete Fluid-Handling Solutions for seamless bioprocessing operations



Value Added Services
Enhanced bioprocessing
services that provide value to
your critical applications

Kest Solutions and Components

are used across Pharma Manufacturing

10000+
Active installations

Upstream	Process	Downstream	Formulation/Filling
Media Preparation Buffer Preparation	Cell Culture Harvesting Fermentation	Purification Unit Operations	
Couplings Pump Tank Pump Tank Sampling system	Pump Valve Reactor Tank	Filters Cromatografy Centrifugation	Filling

A Comprehensive Mixing Portfolio

Kest provides a wide array of durable, precision mixers and tank components for aseptic, reliable pharmaceuticals and food & beverage production.



ProFlow

Perfect for applications that demand general blending such as blending two miscible liquids or keeping a suspension. ProFlow range reaches up to 1200 Liter.



Polymer Line - PLine

A new generation of aseptic magnetic coupled mixers in medical grade plastic material, perfect choice for high corrosive applications.



KM mixer

is perfect for general blending handling volumes up to 22 000 Liter, the mixing head is designed for full product recovery and the robust bearing design ensures no particle shedding.



KMS mixer

it is user friendly and cleanroom optimized. The mixing head design secures full product recovery.



KM ATEX mixer

Handles volumes up to 200 Liter, is perfect for general blending, handling volumes up to 22 000 Liter, the mixing head is designed for full product recovery even under ATEX conditions. The robust bearing design ensures no particle shedding.



RM mixer

is perfect for powder incorporation and high energy blending, handling volumes up to 8 000 Liter. The robust bearing design ensures no particle sheddina.



Retrofit & Custom

Kest offers a range of customizations such as customized wing profiles, exotic alloys etc.



RM ATEX mixer

is perfect for powder incorporation and high energy blending in ATEX environments, handling volumes up to 8 000 Liter. The robust bearing design ensures no particle shedding.

Which mixer should I choose?

General blending – Downstream

If you have a critical application that demands general blending such as blending two miscible liquids or keeping a suspension the ProFlow or KMS is your perfect choice, the ProFlow range reaches up to 1200 Liter and is the successor of the KMS line. Those mixers can also be used if your company have environment requirements to reduce your carbon footprint – they can reduce energy consumption with up to 80% compared to AC induction motors.

General blending - Upstream

If you have a critical application that demands general blending of higher volumes such as blending two miscible liquids or keeping a suspension the KM range is your perfect choice, the KM range reaches up to 22 000 Liter. The KM range is also available in an explosion prof ATEX version.

High-intensity mixing

If you have an application that demands a more vigorous flow pattern like when you have a powder that is floating/lumping and need a light dispersion, the RM range is your perfect choice. The RM range has a mixing head with small wings and higher rotation speed, this is a way of injecting more energy into the tank. The RM range reaches up to 8000 L and are available in an explosion prof ATEX version.

Talk to the Experts Today! send us a message on enquiry@biopulsesolutions.com



ProFlow

The ProFlow Mixer is a bottom mounted magnetically coupled mixer with a unique mix of intelligent controls, user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance mixing processes with reliable mixing results.

Technical Specifications

- The range covers up to 1200 Liters
- Reduces energy consumption with up to 80%
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available (recommended)
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

ProFlow	0/3	3/7	7/20	20/70	70/120			
Mixing volume (at viscosity 1 cP)	30 Liter [8 gal]	70 Liter [18.5 gal]	200 Liter [53 gal]	700 Liter [185 gal]	1200 Liter [317 gal]			
Viscosity range	1 - 800 cP	1 - 800 cP	1-800 cP	1 - 800 cP	1 - 800 cP			
Speed range	50 - 680 RPM	50 - 490 RPM	50 - 490 RPM	50 - 490 RPM	50 - 490 RPM			
Inside Tank	Design Temperature: 0°C to +150°C [+32°F to +302°F]							
inside fank	Operating Temp: 0°0	C to +135°C [+32°F to	+275°F]					
Outside tank	Temp range: 0°C to	+40°C [+32°F to +104°	PF]					
Motor power	63 W	63 W	63 W	754 W	754 W			
Drive unit weight	2.5 kg [5.5 lb]	3.0 kg [6.6 lb]	3.5 kg [7.7 lb]	6.2 kg [13.7 lb]	6.4 kg [14.1 lb]			
Electric supply	24 VDC [3.5 A]	24 VDC [3.5 A]	24 VDC [3.5 A]	48 VDC [18 A]	48 VDC [18 A]			

^{*}Check with out Application specialists and related selection guide on data sheets for choosing the correct mixer



Polymer Line - PLine

The Kest Mixer PLine is a new generation of aseptic magnetic coupled mixers in medical grade plastic material, perfect choice for high corrosive applications. Everything from its innovative sustainable drive unit options to the mixing head design and the bearing materials is built for one thing: perfect flow.

Technical specifications

- The range covers up to 1200 Liters
- Full traceability on all parts in media contact
- 2.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA, USP Class VI

Pline	0/3	3/7	7/20	20/70	70/120
Mixing volume (at viscosity 1 cP)	30 Liter [8 gal]	70 Liter [18.5 gal]	200 Liter [53 gal]	700 Liter [185 gal]	1200 Liter [317 gal]
Viscosity range	1 - 800 cP	1 - 800 cP	1 - 800 cP	1 - 800 cP	1 - 800 cP
Speed range	50 - 680 RPM	50 - 490 RPM	50 - 490 RPM	50 - 490 RPM	50 - 490 RPM
Inside Tank Temp		Operating temp	perature: 0°C to +60°C	/ +32°F to +140°F	
Motor power	63 W	63 W	63 W	754 W	754 W
Drive unit weight	2.5 kg [5.5 lb]	3.0 kg [6.6 lb]	3.5 kg [7.7 lb]	6.2 kg [13.7 lb]	6.4 kg [14.1 lb]
Electric supply	24 VDC [3.5 A]	24 VDC [3.5 A]	24 VDC [3.5 A]	48 VDC [18 A]	48 VDC [18 A]

Kest Mixer Small Volume - KMS

The KMS Mixer is a bottom mounted magnetically coupled mixer with a unique mix of intelligent controls, user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance mixing processes with reliable mixing results.



Technical specifications

- The range covers up to 200 Liters
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available (recommended)
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

кмѕ	0/3	3/7	7/20		
Mixing volume (at viscosity 1 cP)	30 Liter [8 gal]	70 Liter [18.5 gal]	200 Liter [53 gal]		
Viscosity range	1 - 800 cP 1 - 800 cP		1 - 800 cP		
Speed range	50 - 680 RPM	50 - 490 RPM	50 - 490 RPM		
Inside Tank - Design Temperature		0°C to +150°C [+32°F to +302°F]			
Inside Tank - Operating Temperature	0°C to +135°C [+32°F to +275°F]				
Temp range Outside tank		0°C to +40°C [+32°F to +104°F]			
Motor power	63 W	63 W	63 W		
Drive unit weight	2.5 kg [5.5 lb]	3.0 kg [6.6 lb]	3.5 kg [7.7 lb]		
Electric supply	24 VDC [3.5 A]	24 VDC [3.5 A]	24 VDC [3.5 A]		

^{*}Check with out Application specialists and related selection guide on data sheets for choosing the correct mixer

Kest Mixer - KM

The KM Mixer is a bottom mounted magnetically coupled mixer with a user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance processes with reliable mixing results.



Technical specifications

- The range covers up to 22 000 Liters
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available (recommended)
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

КМ	0/3	3/7	7/20	20/70	70/120	120/230	230/600	600/1300	1300/2000	
Mixing volume (at viscosity 1 cP)	30 Liter [8 gal]	70 Liter [18.5gal]	200 Liter [53 gal]	700 Liter [185gal]	1200 Liter [317gal]	2300 Liter [608gal]	6000 Liter [1585 gal]	13000 Liter [3434gal]	22000 Liter [5812 gal]	
Viscosity range		1 - 800 cP								
Speed range		50-490 RPM								
Inside Tank	Design Temperature: 0°C to +150°C [+32°F to +302°F]									
inside rank		Operating Temperature: 0°C to +135°C [+32°F to +275°F]								
Outside tank			Ten	nperature Ro	inge: 0°C to +	40°C [+32°F to	+104°F]			
Motor power		250 W 550 W 750 W 1100 W 1500 W							3000 W	
Drive unit weight	7.0 kg [15.4 lb]	7.1 kg [15.7 lb]	7.4 kg [16.3 lb]	7.5 kg [16.5 lb]	10.6 kg [23.4 lb]	15.4 kg [34.0 lb]	19.6 kg [43.2 lb]	24.5 kg [54.0 lb]	45.0 kg [99.2 lb]	
Electric supply				230	V / 1.3 A [400	V /0.75 A]				

The Kest Mixer ATEX

A bottom mounted magnetically coupled mixer with a unique mix of intelligent controls, user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance mixing processes with reliable mixing results.



Technical specifications

- The range covers up to 22 000 Liters or 5812 gal
- ATEX Zone 1 and 21
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

KM ATEX	0/3	3/7	7/20	20/70	70/120	120/230	230/600	600/1300	1300/2000
Mixing volume (at viscosity 1 cP)	30 Liter [8 Gal]	70 Liter [18.5 gal]	200 Liter [53 gal]	700 Liter [185 gal]	1200 Liter [317 gal]	2300 Liter [608 gal]	6000 Liter [1585 gal]	13000 Liter [3434 gal]	2200 Liter [5812 gal]
Viscosity range		1 - 800 cP							
Speed range		50 - 490 RPM						35-340 RPM	
Inside Tank			Design T	emperature	e: 0°C to +150	0°C [+32°F to	+302°F]		
inside fank	Operating Temperature: 0°C to +135°C [+32°F to +275°F]								
Temp range Outside tank		Temperature Range: 0°C to +40°C [+32°F to +104°F]							
Motor power		250 W 550 W 750 W					1100 W	1500 W	3000 W
Drive unit weight	7.0 kg [15.4 lb]	7.1 kg [15.7 lb]	7.4 kg [16.3 lb]	7.5 kg [16.5 lb]	10.6 kg [23.4 lb]	15.4 kg [34.0 lb]	19.6 kg [43.2 lb]	24.5 kg [54.0 lb]	45.0kg [99.2 lb]
Electric supply	23	230 V / 1.3 A [400 V / 0.75 A]				230V/3.3A [400V/1.9A]	230V/4.7A [400V/2.7A]	230V/6.2 [400V/3.6A]	230V/11.8A [400V/6.8A]

^{*}Check with out Application specialists and related selection guide on data sheets for choosing the correct mixer

RM Mixer

A bottom mounted magnetically coupled mixer with a user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance processes with reliable mixing results.



Technical specifications

- The range covers up to 8 000 Liters
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available (recommended)
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

RM	RM01	RM03	RM06				
Mixing volume (at viscosity 1 cP)	560 Liter [148 Gallon]	2300 Liter [608 Gallon]	8000 Liter [2113 Gallon]				
Viscosity range		1 - 800 cP					
Speed range	270 - 1350 RPM	270-1420 RPM	270 - 1435 RPM				
Inside Tank	Design Temperature: 0°C to +150°C [+32°F to +302°F]						
inside funk	Operating Temperature: 0°C to +135°C [+32°F to +275°F]						
Temp range Outside tank	Temperature Range: 0°C to +40°C [+32°F to +104°F]						
Motor power	180 W	750 W	4000 W				
Drive unit weight	5.4 kg [11.9 lb]	11.0 kg [24.3 lb]	36.0 kg [79.4 lb]				
Electric supply	230 V / 1.17 A [400 V / 0.68 A]	230 V / 3.08 A [400 V / 1.79 A]	230 V / 14.37 A [400 V / 8.26 A]				

RM ATEX Mixer

A bottom mounted magnetically coupled mixer with a user-friendly design and innovative engineering. Its unique design and many powerful features provide cost efficient, low maintenance processes with reliable mixing results in an explosive environment.



Technical specifications

- The range covers up to 8 000 Liters
- ATEX Zone 1 and 21
- All tank plates are FEM analyzed according to PED and ASTM
- Welding tool available (recommended)
- Full traceability on all parts in media contact
- 3.1 material certificate on all parts in media contact
- Elastomers approved acc. FDA regulation CFR 177.2600, USP Class VI

RM	RM01	RM03	RM06				
Mixing volume (at viscosity 1 cP)	560 Liter [148 Gallon]	2300 Liter [608 Gallon]	8000 Liter [2113 Gallon]				
Viscosity range		1 - 800 cP					
Speed range	270 - 1350 RPM	270-1420 RPM	270 - 1435 RPM				
Inside Tank	Design Temperature: 0°C to +150°C [+32°F to +302°F]						
inside lank	Operating Temperature: 0°C to +135°C [+32°F to +275°F]						
Temp range Outside tank	Temper	ature Range: 0°C to +40°C [+32°	PF to +104°F]				
Motor power	180 W	750 W	4000 W				
Drive unit weight	5.4 kg [11.9 lb]	11.0 kg [24.3 lb]	36.0 kg [79.4 lb]				
Electric supply	230 V / 1.17 A [400 V / 0.68 A]	230 V / 3.08 A [400 V / 1.79 A]	230 V / 14.37 A [400 V / 8.26 A]				

^{*}Check with out Application specialists and related selection quide on data sheets for choosing the correct mixer

Kest Retrofit program

The retrofit program allows you to reuse a tank with an existing tank plate. We simply fit a Kest Mixer on top of it. Kest offers a range of retrofit versions to fit on the most common tank plate brands. The Kest-Mixer retrofit program does not only allow you to switch mixer it also enables you to take advantage of the Kest Mixer range features:

- Mixing to the last drop full product recovery.
- Zero particle shedding from the bearing.
- Kest-Lock connection reduced downtime.
- Energy efficient drive unit reduce energy consumption.
- Smart speed sensor system full process control.

TANK PLATE	0/3	3/7	7/20	20/70	70/120	120/230	230/600	600/1300	1300/2200
GMP Mixer	-	GMP 50	GMP 100	GMP 500	GMP 1000	GMP 2000	GMP 5000	GMP 10000	GMP 20000

Upgrade your current assets

Talk to the Experts Today! send us a message on enquiry@biopulsesolutions.com



About BioPulse Solutions

BioPulse Solutions Private Limited is India's first open architecture single-use bioprocessing integrator and cleanroom hose assembly manufacturer. We are also a prominent producer of stainless-steel process systems, with expertise in process engineering, automation, and turnkey projects. Our hybrid bioprocessing approach enables Biopharma customers to get access to unique, solutions for their complex applications without being restricted to rigid technology platforms. We manufacture and provide Custom Single-Use Assemblies, Fluid Handling Components, Integrated Systems, Hybrid Customized Solutions & Value-added Services thru our Certified Cleanrooms; also, Stainless Steel Fermenter, Bioreactor & Process Skids for Biopharma, designed & fabricated in house.



About Kest Technology

Kest Technology is a global provider of high-quality equipment for aseptic fluid handling. Through our sales network we support the global industry with solutions for agitation, aseptic couplings and sampling. Kest was founded in Sweden 2006 by a group mixed of engineers and installation and service technicians, that had over 30 years of experience from the international Pharmaceutical industry. With a background in companies such as Steridose, NovAseptic and Millipore, Kest Technology was founded on unique cutting-edge expertise and a thorough understanding of customer needs in all spectrums from quality to production and maintenance.