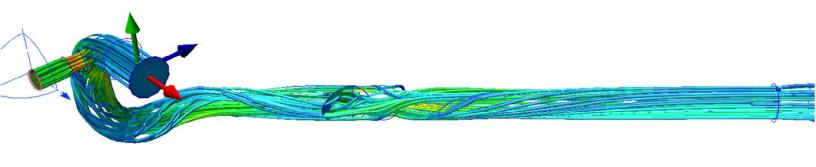


Compete against yourself

Welcome to UET Mixers. When you're an employee owned company, you understand the importance of putting the customer first. Thank you to all the valued partners we have worked with over the past 30 years. Your success is our success.

Give us a call anytime. We're always excited to talk about mixing!







# **Mixing Solutions**





**Static Mixers** (Starting on page 14)



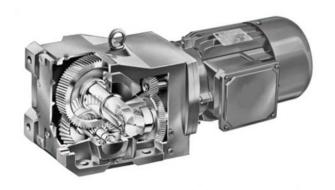


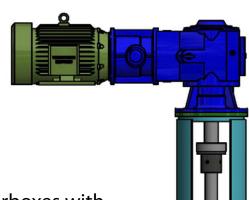
- 30+ YEARS EXPERIENCE
- QUOTES AND DELIVERY ON YOUR SCHEDULE
- MIXERS BUILT TO LAST
- PROUDLY MANUFACTURING IN MAINE
- EMPLOYEE-OWNED



# **XCEL-200N to 600N Series Agitators**

XCEL-200N to 600N Series mixers are engineered and manufactured specifically for the demanding operating parameters associated with difficult mixing applications.





XCEL-200N to 600N mixers feature custom gearboxes with helical/spiral bevel gear combinations. Large diameter output shafts accommodate the high bending moments and loads associated with these types of applications.

	• •		•
<b>5</b> p	есіт	ıcat	ions

**HP Rating:** Up to 1000 HP

**Speed Range:** 1 to 350 rpm

**Motor:** NEMA foot or C-face, TEFC or XP

**Gear Drive:** Helical and bevel gear

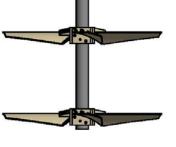
configurations

**Pumping Rate:** Up to 500,000 gpm

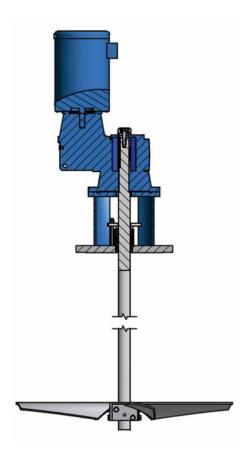
**Impeller:** Hydrofoil for highest efficiency

**Shaft:** Up to 50 feet long without a

steady bearing



### **XCEL-15 to 24 Series Agitators**



XCEL-15 to 24 Series mixers are ideal for a wide range of applications, where efficiency and dependability are key. The gearbox uses high efficiency helical gears and oversized bearings to handle long shafts with high overhung loads.

Parallel drive gearboxes provide a vertical mount with a minimal footprint. The use of oversized and spread output greased bearings result in an extended gearbox service life.

Typical mounting options include baseplate or flange.

#### **Specifications**

**HP Rating:** Up to 200 HP

**Speed Range:** 1 to 400 rpm

**Motor:** NEMA C-face, TEFC or XP

**Gear Drive:** High efficiency helical

Pumping Rate: Up to 86,000 gpm

**Impeller:** Hydrofoil for highest efficiency

**Shaft:** Up to 50 feet long without a

steady bearing







### **XCEL-3 to 10 Series Agitators**

Each XCEL-3 to 10 Series mixer is designed and manufactured for your specific application, using high quality components, engineered for dependable mixer service.

XCEL-3 to 10 Series mixers are available with pumping rates up to 54,000 gpm and utilize standard industrial motors up to 25 hp.

Typical applications include storage tanks and water treatment.

#### **Specifications**

**HP Rating:** Up to 25 HP

**Speed Range:** 1 to 350 rpm

**Motor:** NEMA C-face, TEFC or XP

**Gear Drive:** Worm and helical/worm

**Pumping Rate:** Up to 54,000 gpm

**Impeller:** Hydrofoil for highest efficiency

**Shaft:** Up to 20 feet long without a

steady bearing





# **Side Entering Agitators**

UET Side Entering mixers are designed and built in the same manner as our top entering mixers. They are commonly used in petroleum and pulp and paper applications. Industrial motors and mechanical seals are used with rugged cast iron gearboxes, featuring oversized bearings to carry horizontal shafts.



**HP Rating:** Up to 100 HP

**Speed Range:** 1 to 350 rpm

NEMA C-face or foot mounted, **Motor:** 

TEFC or XP

**Gear Drive:** Helical or Worm

Up to 31,000 gpm **Pumping Rate:** 

**Impeller:** Hydrofoil

**Mounting:** Flange

Mechanical seal or stuffing box Seal:

### **XCEL-2 Series Agitators**



The perfect solution for mixing low viscosity fluids in batches under 1,000 gallons. The XCEL-2 mixer offers high pumping rates and a cost effective price tag.

These mixers include industrial motors, rugged cast iron gearboxes, hardened steel gears, and antifriction bearings.

### **Specifications**

**HP Rating:** Up to 5 HP

**Speed Range:** 230 to 1800 rpm

**Motor:** NEMA C-face, TEFC or XP

**Gear Drive:** High efficiency helical

**Pumping Rate:** Up to 7,000 gpm

**Impeller:** Hydrofoil for highest efficiency

**Shaft:** Up to 12 feet long without a

steady bearing



### **Portable Agitators**

UET Mixers' portable agitators are built to last and designed to handle tough mixing applications, such as lime makedown and polymer storage.

Industrial motors with standard NEMA frames, hardened steel gears, and anti-friction bearings are all standard.



# Specifications

**HP Rating:** Up to 3 HP

**Speed Range:** 230 to 1800 rpm

**Motor:** NEMA C-face, TEFC or XP

**Gear Drive:** High efficiency helical

**Pumping Rate:** Up to 5,000 gpm

**Impeller:** Hydrofoil for highest efficiency

**Shaft:** Up to 8 feet long

**Mounting:** Adjustable C-clamp

or saddle plate

### **Magnetic Drive Agitators**

Yes, UET Mixers manufacture magnetic drive agitators!

These specialty mixers can be mounted on the top, side, or bottom of a vessel. Mag drive mixers offer a seal-less, leak proof design that eliminates contamination and assures operator safety. There is no need for a mechanical seal or lubrication system.

Available options include, but are not limited to:

- Sanitary finish for wetted parts
- Rated temperature to 650 F
- Rated pressure to 3,000 psi
- Speed sensors, tachometers, and power monitors

### **Specifications**

**HP Rating:** Up to 75 HP

**Speed Range:** 1 to 500 rpm

**Motor:** NEMA C-face, TEFC or XP

**Gear Drive:** Helical, Bevel, Worm

**Pumping Rate:** Up to 200,000 gpm

**Impeller:** All Options

**Mounting:** Flanged bearing stand,

Dry running bearings,

Magnetic seal-less coupling





# PL-V Pipeline Shear Mixer / Line Blender



In a UET Mixers Pipeline Mixer, the fluids enter a high shear zone where they experience intense mixing. These mixers are designed for continuous processing, where the fluids require more shear then a static mixer can provide.

Mechanical Pipeline Mixers can be used to blend miscible fluids or disperse immiscible fluids. Pipeline Mixers are available in a wide range of configurations and materials, and can be mounted at any angle to meet process requirements.

#### **Specifications**

**Line Size:** Up to 24" dia. pipe housing

**HP Rating:** Up to 20 HP

**Mounting:** ANSI flanged ends

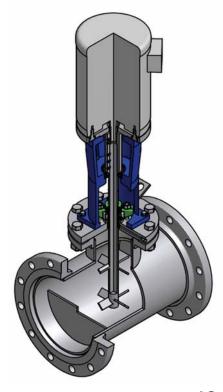
**Speed Range:** 350 to 3600 rpm

**Motor:** NEAM C-face, TEFC or XP

**Impeller:** Axial or Radial

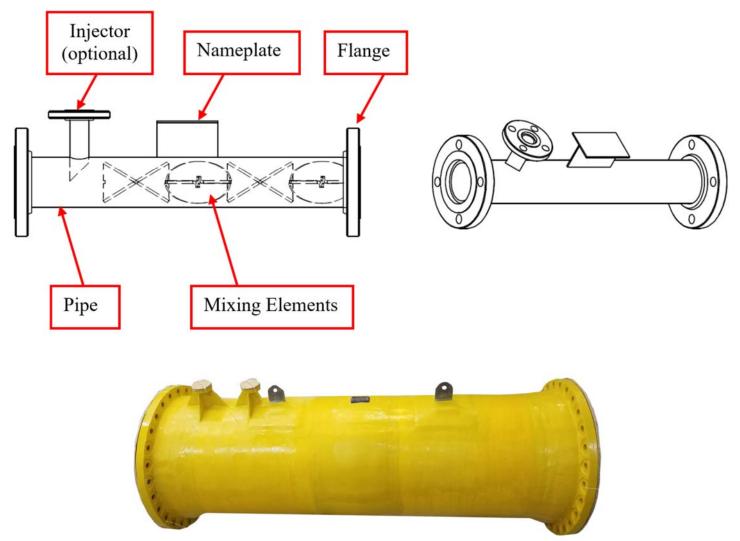
**Fluid Viscosity:** Up to 10,000 cPs

**Pressure Rating:** Up to 300 psig



### **Static Mixers**

Static mixers are a terrific, time-tested solution for in-line mixing of both miscible and immiscible fluids. Static mixers provide reliable, predictable mixing. They are capable of mixing process fluids with multiple liquid streams, multiple gas streams, or a combination of both. Static mixers perform well in all flow regimes, from creeping laminar to highly turbulent. They have no moving parts, need no direct energy, and require no maintenance. They are economical in terms of capital, operation, and maintenance costs.



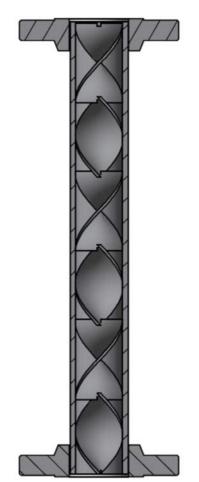


Fiberglass Static Mixer

### **Helical Static Mixers (Series 1)**

Series 1 static mixers utilize 180-degree helical elements. They are available in a wide range of materials and end connections, with optional ports, jackets, and more. These mixers are a terrific solution for a wide variety of in-line mixing applications, including general chemical, food & beverage, pharmaceutical, and more.





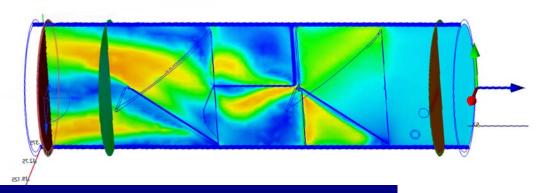
180-degreee helical elements are a proven solution you can trust. Materials of construction include a wide variety of metals, Teflon, sanitary, and more.

Specifications			
Pipe Diameter:	1/2" to 24"		
Element Style:	180-degree helices		
End Connections:	Flanged, Threaded, Ferruled, or Plain		
Materials of Construction:	Nearly any metal, Teflon, Kynar, sanitary, and more		
Common Applications:	Almost all liquid/liquid, gas/ gas, or liquid/gas applications		

### Whirled Static Mixers (Series 2)



Series 2 static mixers feature UET's Whirled mixing elements, which are both bent and twisted. These mixing elements result in a shorter overall length than traditional static mixers, yet still provide terrific mixing performance. UET Whirled elements are used in many industries, including chemical/petrochemical, oil & gas, food & beverage, water treatment, and more. Materials of construction include a wide variety of standard and exotic metals, fiberglass, Teflon, PVC/CPVC, etc.



### **Specifications**

**Pipe Diameter:** 4" to 48"

**Element Style:** UET Whirl

**End** 

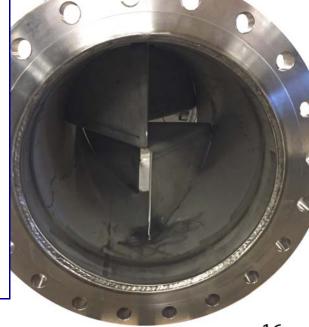
Connections: Flanged, Threaded, or Plain

Materials of Construction:

Nearly any metal, Many coatings, Fiberglass, PVC,

CPVC, etc.

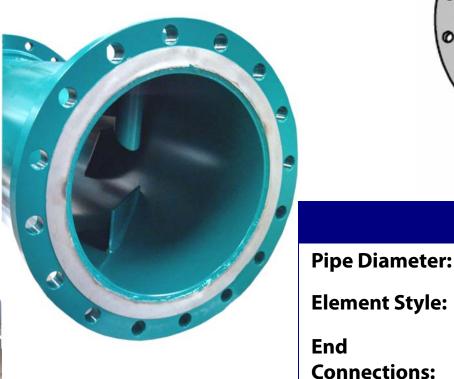
**Common** Almost all liquid/liquid, gas/ **Applications:** gas, or liquid/gas applications

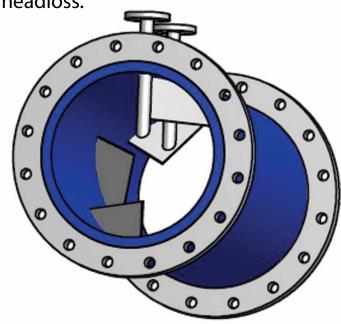




### **Foil Static Mixers (Series 3)**

UET's Foil static mixers are best suited for applications with highly turbulent flow, such as water treatment and gas blending. The mixer consists of custom engineered, 45-degree mixing foils, welded inside of the pipe. These mixing foils create specific flow patterns that produce extremely efficient mixing with minimal headloss.





4" to unlimited	
45-degree Foil	

End
Connections:
Flanged, Threaded, or Plain

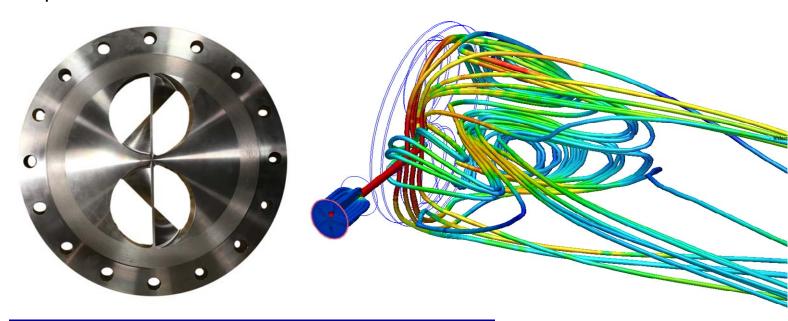
**Specifications** 

Materials of Nearly any metal

**Common** Water and Wastewater **Applications:** Treatment, Gas Blending

### **PAC Static Mixers**

PAC wafer-style static mixers are an ideal solution for highly turbulent mixing applications, when minimal space is available. These mixers are typically installed between two flanges. While most commonly used in the water treatment industry, PAC mixers can be used to add mixing wherever space restrictions exist.



#### **Specifications**

**Pipe Diameter:** 4" to unlimited

**Element Style:** Helical wafer

**End** 

Connections: Plain or Flanged

Materials of Nearly any metal, PVC, and

**Construction:** CPVC

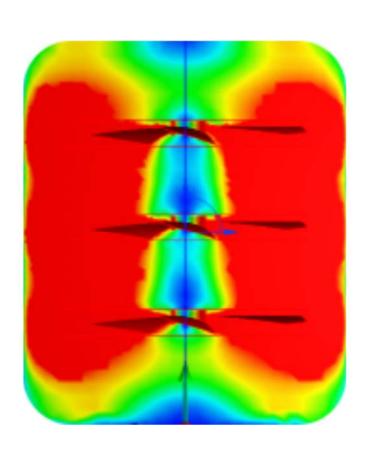
**Common** Limited Space, Water and Wastewater Treatment

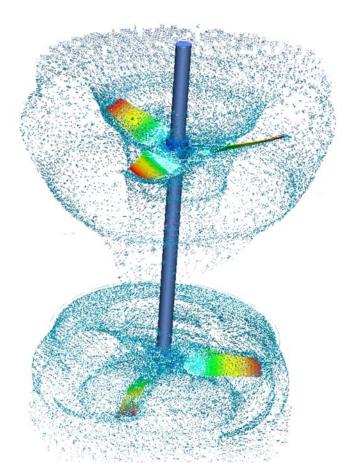


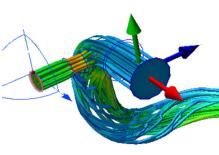


# **Design Philosophy**

UET Mixers uses **proprietary mixer design software**, computational fluid dynamics (CFD), and good old-fashioned experience to delivery custom mixer designs that meet the requirements of your specific application. We will work with you to completely analyze your process and design the perfect mixing solution.

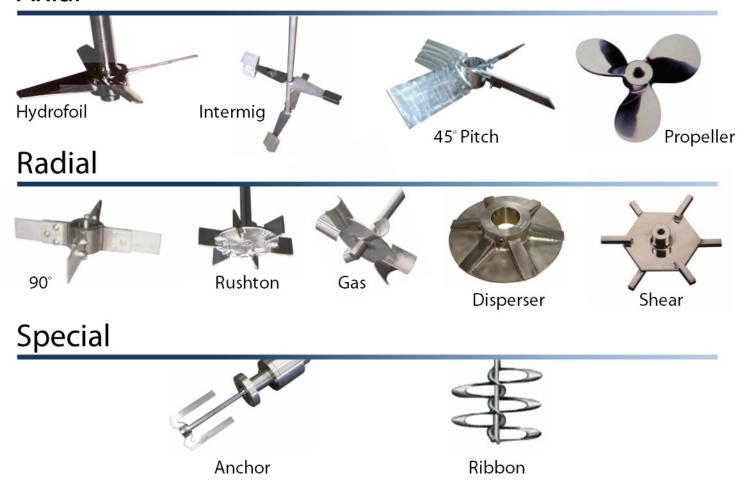






# **Agitator Impellers**

### **Axial**



# **Process Support**

- Troubleshooting
- Scale Up/Down
- CFD Testing

- R&D Support
- · CAD Drawings
- Applications Engineering

#### **UET Mixers**

A division of Downeast Machine & Engineering, Inc. 26 Maple St., Mechanic Falls, ME 04256

Phone: 207-345-3330

E-mail: sales@uetmixers.com Website: www.uetmixers.com