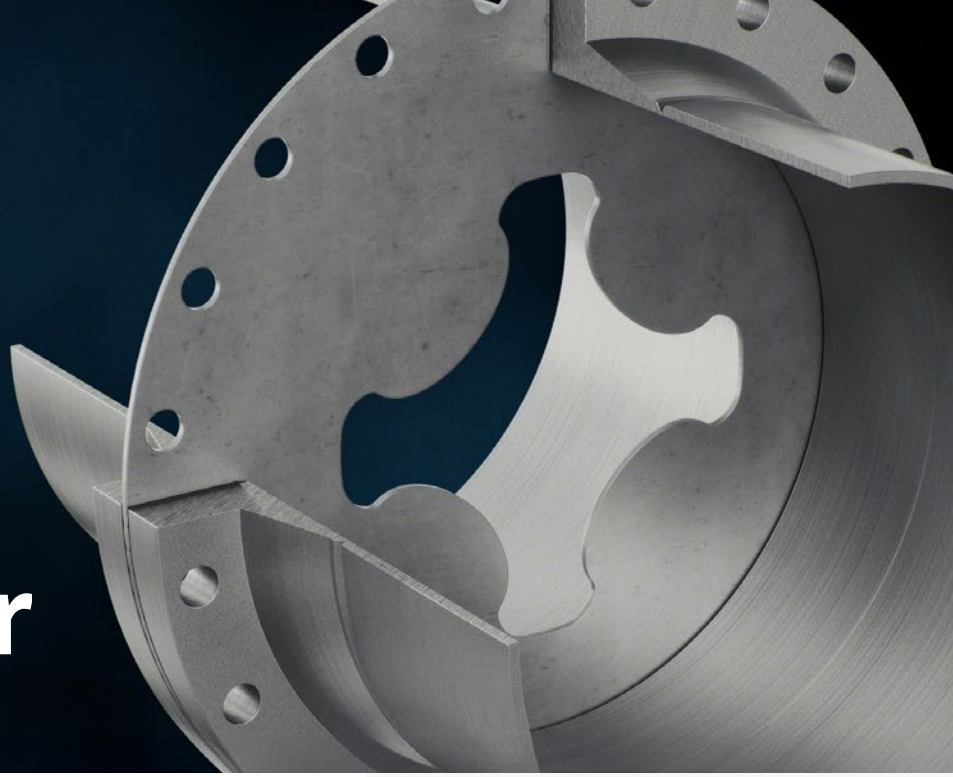
Kenics Ultraplate Static Mixer



Versatile, lightweight, and cost-effective solution for superior blending performance

The Kenics™ Ultraplate static mixer is a lightweight, easy-to-install, and cost-effective solution for water and wastewater turbulent flow blending applications. Designed for compact installation, our robust Ultraplate mixer ensures efficient blending over short distances downstream of the mixer with moderate pressure drops.

Computational fluid dynamics studies from NOV's Central Engineering Technology confirmed the Ultraplate static mixer achieves a Coefficient of Variation (CoV) of less than 0.1 at 10 pipe diameters downstream, a measure of mixing degree comparable to existing static mixers in the industry. Choose between Beta 0.7 and Beta 0.8 design options, depending on your desired pressure drop.

Application Versatility

The Ultraplate static mixer offers versatility for various blending applications:

- **Additive ratios:** From 1:3 to more than 1:10,000
- **Efficient mixing:** Turbulent eddies from the single element produce intense and rapid mixing of the bulk flow
- **Integral injector:** Provides a simple and effective means for additive injection, avoiding the issues of centerline injectors such as flow impedance, increased pressure drop, and fouling
- **Multi-point injectors:** Optional for mixing several additives into the main flow
- **Optimized performance:** Increased mixing performance in comparable space as "wafer" type designs with similar pressure drops

Typical Applications

- Water treatment applications
  - pH adjustment
  - Chemical injection
  - Acid dilution
  - Mixing flocculation agents
  - Coagulation processes
  - Sodium hypochlorite
  - Chlorination
- Desalination applications
  - Brine mixing and dilution
  - Chemical injection
  - Antiscalant blending
  - Flocculation and coagulation dosing
  - pH adjustment

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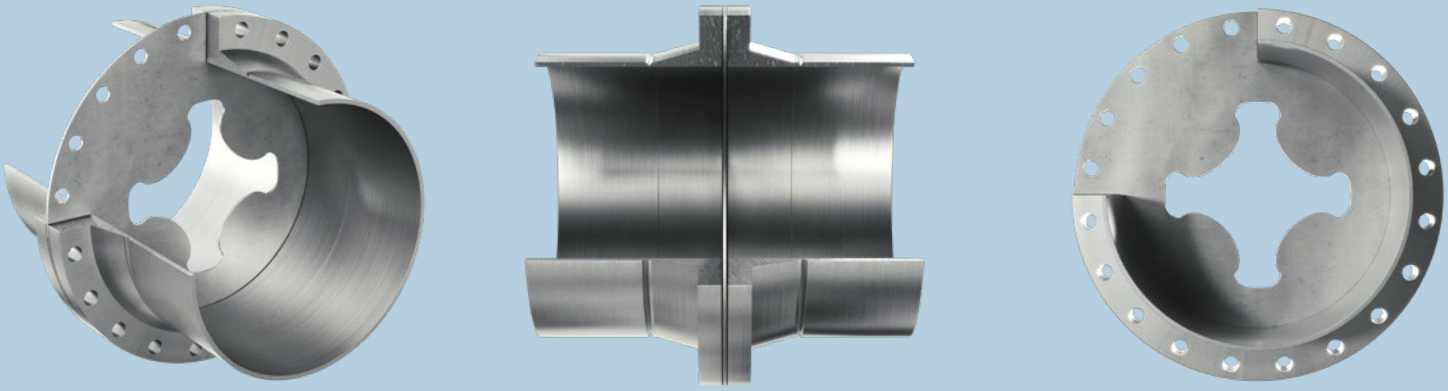
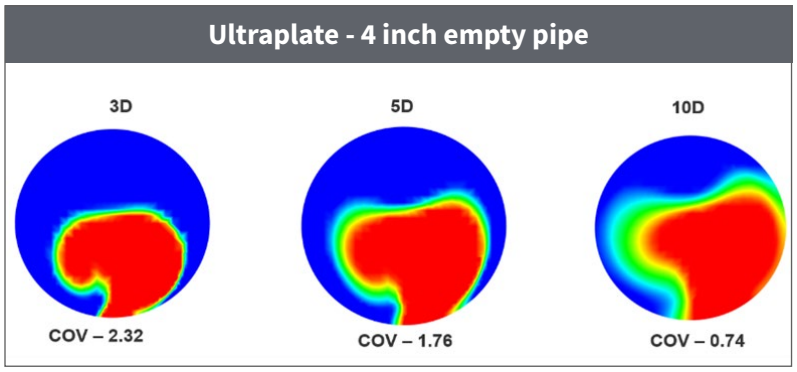
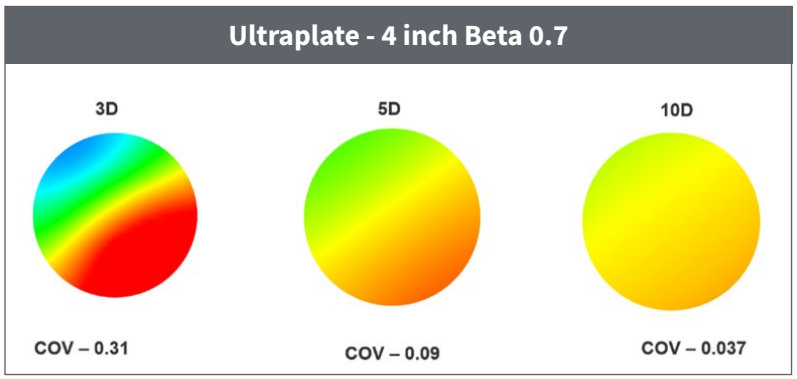


Turbulent Mixing Excellence

Turbulent mixing, characterized by mass interchange in both radial and axial directions due to turbulent eddies, is the primary mixing flow mechanism in water and wastewater applications. The shape of our Ultraplate fins is so designed to enhance the pressure and flow velocities in the downstream pipe, thereby providing the necessary energy for effective mixing.





Product Specifications

Sizes Available

- Standard sizes from 2 in. to 60 in. + (50 to 1,524 mm+)
- Custom sizes beyond 60 in.
- Flanged injectors
- NSF 61/372 certified mixer by UL

Material Selection

- Carbon steel
- Stainless steel
- Coated carbon/316 stainless steel

Configuration Options

- Multi-injection ports
- Spool piece with flanged or weld prep ends

*Our Ultraplate mixers are NSF61/372 certified by UL LLC, Certification Number MH60480, V.1, ensuring compliance with safety and quality standards.