WESTFALL

Model 2900

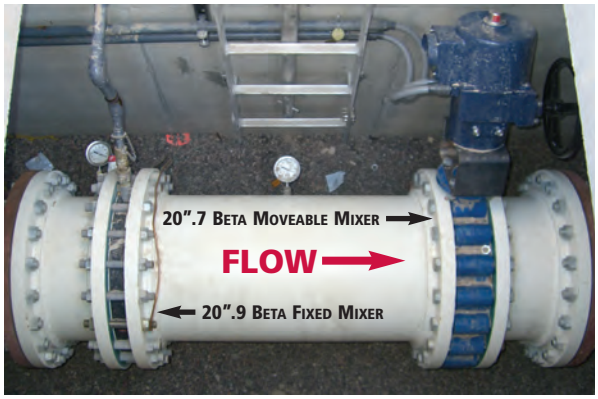
Variable Flow Static Mixer

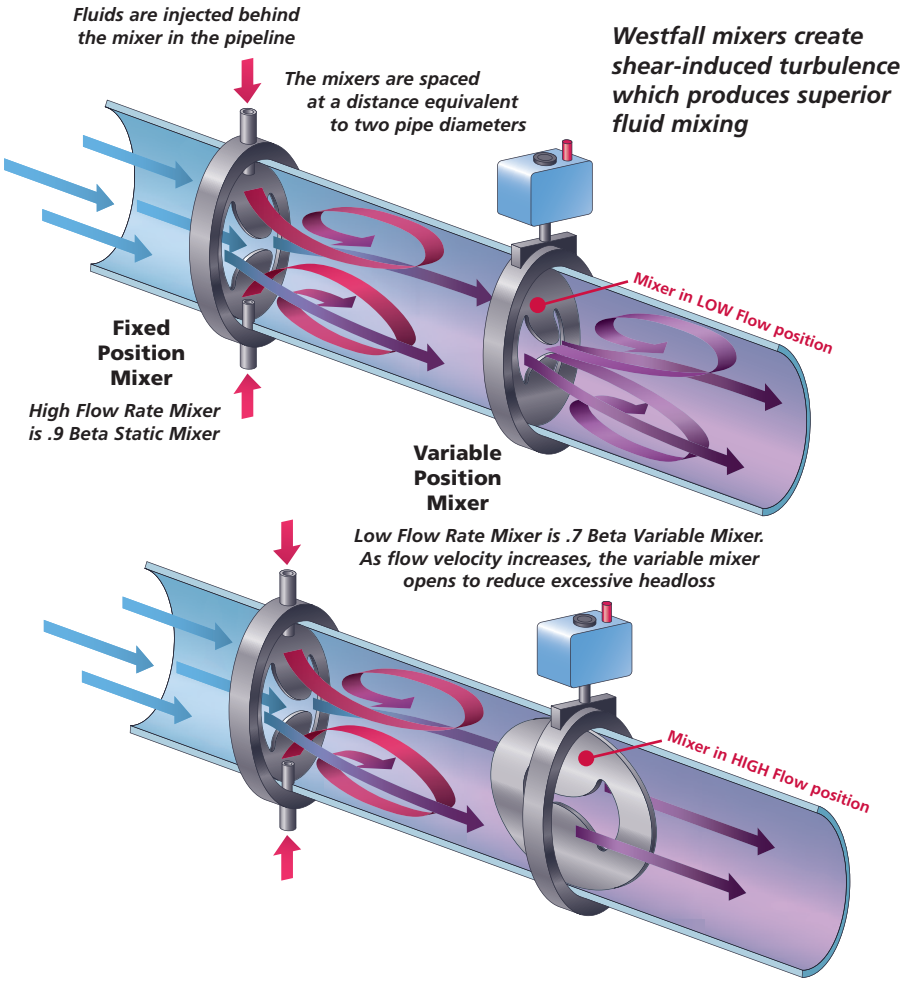
● US Patent No. 7,281,844 B2

Compact Mixer Optimizes Mixing and Minimizes Headloss

- Innovative, patented design features two in-line wafer type mixers: one stationary and one mounted on a pivot that adjusts incrementally to changing flow conditions.
- Downstream mixer is designed to literally "go with the flow" in response to a differential pressure controller – wide open when operating at maximum flow velocity to reduce headloss; and closing as flow decreases to enhance mixing turbulence and retain more constant differential pressure across the mixers.
- Westfall's unconventional wafer mixer's computer designed, geometric shape creates vortex shedding and shear-induced turbulence inside the pipeline, effectively mixing the injected fluid(s) with the main process stream.

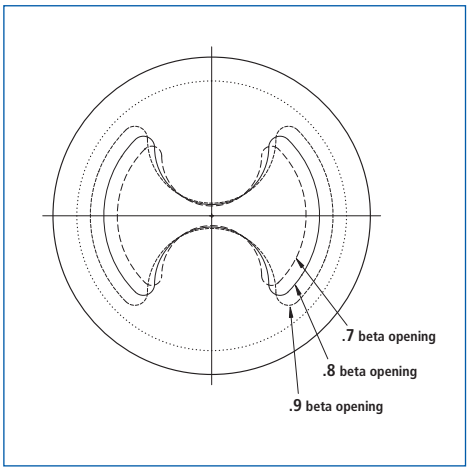
Finally: a static mixer that significantly reduces headloss at maximum flow, while maintaining thorough, consistent mixing through a 20 to 1 turndown ratio.





Advantages

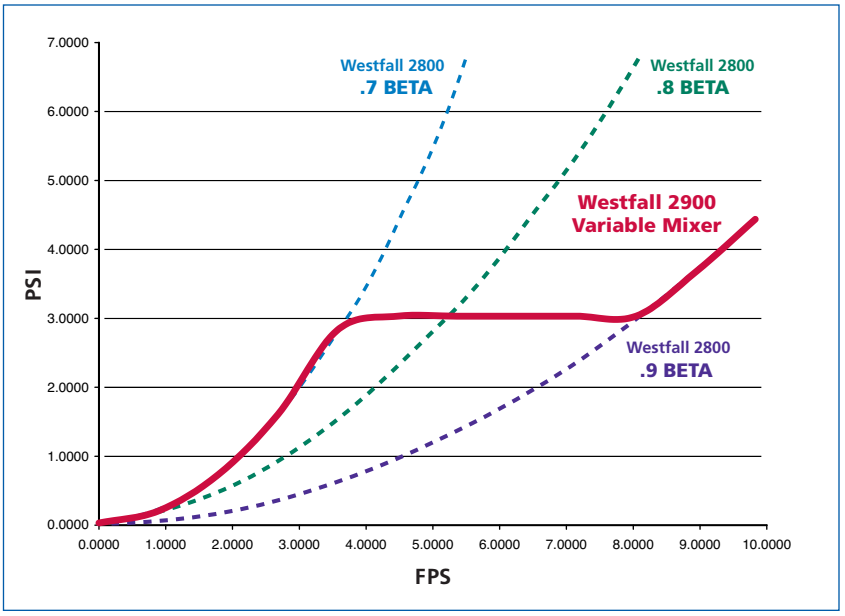
- Accommodates Wide Range of Flow Rates (Up to 20 to 1 Turndown Ratio) Without Excessive Headloss at Maximum Flow
- Dramatically Improves Mixing at Low Rates of Flow
- Alden Lab Tests Verify Excellent Mixing from .5 to 10 FPS
- Control DP across the variable position mixer for desired blend
- Available in Line Sizes 3" to 120" Diameter
- Short Laying Length Saves Space
- Integral Injection Fittings
- Predictable Mixing
- Lower Cost, Easy Installation
- Long Service Life and Low Maintenance Requirements



Westfall 2800 Standard Mixer Sizes

Standard and Custom Designs and Materials

- Materials of Construction: PVC, FRP, 316 Stainless Steel, Titanium, etc.
- Custom materials and configurations are available, with manual or automatic controls
- Mixer plates are offered in 0.7 – 0.9 -Beta ratios



Mixer Plate Beta Openings

Alden laboratory CoV = .008 for .7 beta ratio with excellent mixing at 1-3 FPS
Alden laboratory CoV = .009 for .8 beta ratio with excellent mixing at 3-8 FPS
Alden laboratory CoV = .050 for .9 beta ratio with excellent mixing at 8-11 FPS

CoV = standard deviation of the test data divided by the average of the test data

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www.westfallstaticmixers.com

Typical Applications

If you operate any of the following processes, you could benefit from installing Westfall Model 2900 Variable Flow Static Mixers:

- Municipal & Industrial Water Treatment
- Chemical Blending
- Dissolving Gases
- Contact Chambers
- Polymer Blending
- Flocculant Blending
- pH Control
- Potable Water
- Waste Water
- Chlorination/De-Chlorination

for further information and laboratory data including the white paper:

An Evaluation of the Hydrodynamics Mechanisms Which Drive the Performance of the Westfall Static Mixer

by Dr. Thomas J. Gieseke, NUWCDIVNPT
(Naval Undersea Warfare Center Division Newport)

The study focused on measurement of pressure patterns through the Westfall Mixer and the measurement of the flow-field in its wake.

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