# VARIABLE FLOW STATIC MIXER MODEL 2900

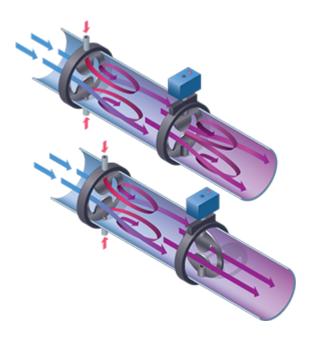
#### For maintaining constant headloss while blending liquids or gases of varying flows, viscosities and temperatures

The compact drop-in Variable Flow Mixer Model 2900 accommodates a turn down ratio of up to 20-1 in liquids or gases by incorporating two of Westfall's signature plate mixers. The mixer provides a faster, better and often more economic choice for mixing and blending while providing constant headloss.

The upstream plate remains stationary while the downstream plate pivots as it adjusts incrementally to changing flow conditions. The downstream mixer responds to a differential pressure controller, opening wide for maximum flow velocity to reduce headloss, and closing as flow decreases to enhance mixing. Headloss remains constant throughout.

Read Report

CFD Report 6" Variable Flow Rate Mixer 2900



## Variable Flow Mixer for Bitumen Blending

#### 10/18/2017

Westfall Manufacturing introduced the Variable Flow Plate Model 2900 for bitumen blending, viscosity and density control in 2010. The device mixes multiple diluents to the correct viscosity and density, and allows pumping over a wide range of flow rates.

The Westfall Model 2900 is a high shear plate-style static mixer which achieves a low CoV (coefficient of variation) of injected diluents. Because it is capable of achieving a uniform concentration of injected materials while sustaining specific pressure loss criteria downstream, the Model 2900 reduces consumption of bitumen diluents.

<u>The CFD report from Alden Labs</u> shows that this mixer accommodates flow rates at up to a 20 to 1 turndown ratio.

### **Usage and Applications**

| 20" Variable Flow Static Mixer  |  |
|---------------------------------|--|
| Model 2900 for Bitumen Blending |  |

#### **Common Applications**

- Water Treatment
- Waste Water
- Chlorination/De-Chlorination
- Chemical Processing
- Polymer Blending
- Flocculant Blending
- pH Control
- Chemical Blending
- Food Processing





## **Benefits and Features**

| Sustains Required Headloss                                      |
|---|
| Fixed Upstream Plate  |
| Up to 20-1 Turndown Ratios                                      |
| Pivoting Downstream Plate                                       |
| Viscosity and Density Control                                   |
| Computer Designed Orifice                                       |
| Mixes Well at Low Flow Rates                                    |
| 3 Orifice Ratios  |
| Reduces Consumption of Dilutants                                |
| 1.5" to 120" Pipe Size  |
|   |
| Affordable, Easy to Install                                     |
| Affordable, Easy to Install<br>Differential Pressure Controller |
| -   |
| Differential Pressure Controller                                |

http://westfallstaticmixers.com/mixers/high-shear-static-mixers/variable-flow-mixing-plate-model-2900/

Variable Flow Mixing Plate Model 2900

|                             | 0 |
|-----------------------------|---|
| Ultra-Durable               |   |
| Bent Tabs                   |   |
| Easily Ships Worldwide      |   |
| 3/8" to 120" Pipe Diameters |   |
|                             |   |

# ALL OUR STATIC MIXERS, DE FILTERS AND VENTURI TUBES ARE CUSTOM ENGINEERED AND MANUFACTURED. WE STILL SAVE YOU TIME AND MONEY.