

Designed for 24-hour-a-day operation

The DynaShear represents the latest technology for sanitary inline continuous processing, or batch processing with recirculation. The DynaShear will blend, dissolve, deagglomerate, disperse, and emulsify a wide range of fluids and semifluids, and is particularly effective for wetting out powders into a liquid. It is the first inline mixer featuring a tandem head design combining the benefits of both an axial and a radial stage...creating excellent shear and flow characteristics. The result is a processing unit with droplet size reduction capability of 2-3 microns and a very narrow distribution, while providing flow capacities that are substantially higher than existing inline mixers.



The DynaShear advantages – making your job easier and faster!

- Total washdown and CIP capability with  (#36-01) compliance
- Low maintenance design for minimum downtime – no bushings, wear sleeves, shims or bearing supports to wear out
- Disassemble and reassemble for inspection and cleaning in less than 15 minutes!
- Two models are available to process 10 to 175 gpm
- Seal pressure ratings up to 350 psi. Balanced single and double-barrier mechanical seals are available, designed for sanitary applications with CIP requirements.



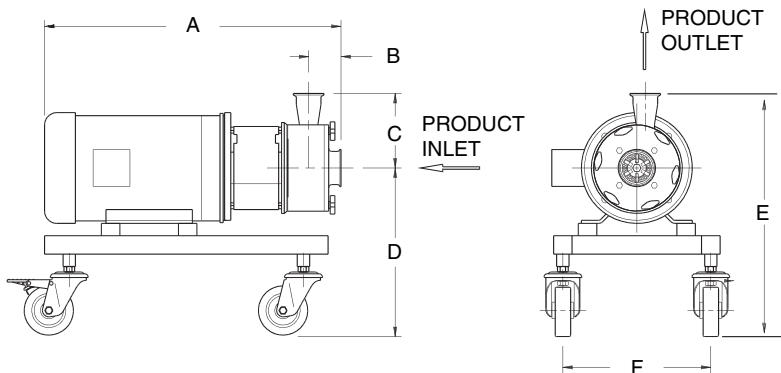
DynaShear Inline Mixing Technology Can Improve Your Process

The DynaShear is designed to provide maximum versatility to meet your processing needs, and is offered in several different configurations. Whether you are looking for a stand alone inline mixer, a mixer to augment your batch process agitator, or if you require product refinement, the DynaShear is the solution to insure consistent quality with precise reproducibility!

DynaShear Sizing and Engineering Data

Model	Axial Diameter	Axial Tip Speed	Radial Diameter	Radial Tip Speed	Motor Size	Motor Speed	Flow Rate
	(inches)	(fpm)/(fps)	(inches)	(fpm)/(fps)	(Hp)	(RPM)	(GPM)
DS-425	2.25	2121 / 35	4.25	4006 / 67	5	3600	65
DS-575	3.66	3450 / 58	5.75	5419 / 90	20	3600	175

Note: Flow rates are based on 1 centipoise. High viscosity, concentrations or discharge head conditions may require an auxiliary feed or stuffing pump.



DynaShear Dimensional Data

Model	Dimension in inches						Sanitary Fitting Size	
	A	B	C	D	E	F	Inlet	Outlet
DS-425	24	2.6	6	13.7	19.7	12	2.5	2
DS-575	31.3	3.18	8.5	15.5	24	14.5	4	3

Note: Dimensions are approximate and subject to change.

Your Area Representative

Mixing Solutions
for Your Toughest
Challenges



ADVANCED MECHANICAL DESIGN FEATURES

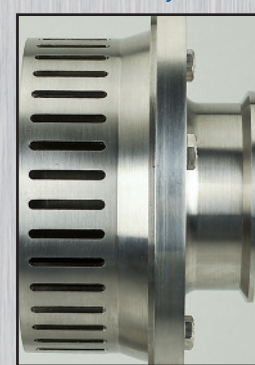
The Dual Stages Work as Follows:

The Primary Axial Stage

The axial stage consists of an axial flow rotor feeding into a stator with multiple small ports, forcing material between their faces and out through the ports. This mechanical and hydraulic action causes a tremendous shearing action and "pre-mixes" the materials prior to entry into the secondary stage. Particle and droplet size reduction of down to 5 to 7 microns is typical in this stage.



The Secondary Radial Stage



The radial stage consists of a radial, high flow rotor discharging through a slotted stator providing additional mechanical and hydraulic shear. The centrifugal force at this stage allows for the mixture to be pushed away from the shaft and along the radius of the stator, with high speed expulsion occurring at the edge of the slots. This stage

provides a substantial momentum change in the flow, resulting in beneficial residence time for further refining to be done on the mixture. Stable emulsions with droplet sizes from 2 to 3 microns or less are typical within this stage.

What the Combination Offers

The best of both worlds! This combination provides greater efficiency and effectiveness over conventional inline mixers offering either all axial or all radial technology. A single pass through the DynaShear provides product quality typical of multiple passes within conventional mixers.

