

HI-PASS STATIC MIXER PATENT #5758967

NON-CLOGGING DESIGN



The KOMAX "Hi-Pass" Mixer is designed to effectively mix chemical solution into main flows prior to dewatering process. Polymer savings in excess of 25% can be achieved.

FEATURES OF THIS UNIT INCLUDE

1: MIXING ACTION: Each mixing element set in combination sweeps approximately two thirds of the circumference of the pipe and directs the flow to the opposite side, providing very strong "wall-to-wall" radial transfer. The standard four element set includes three inter-set cavities where intensive contacting occurs due to strong momentum reversal and flow impingement.

2. NON-FOULING DESIGN: This mixer is designed to be extremely resistant to fouling or clogging. The edges of the element sets are smoothly contoured with a large radius. The intersections of element ends with the wall are all oblique angles, eliminating "corners" that can trap solid or fibrous materials and began material accumulation. Momentum reversal and flow impingement provide a "self-cleaning" environment. The "Hi-Pass" design will readily pass individual solid items with a nominal diameter up to 1/2 that of the mixer.

3: ENGINEERED INJECTOR: The Injector manifold is designed to present the diluted chemical solution to the main flow for optimum efficiency. Better dispersion of the injection solution through the mixing elements is achieved.

4: VERY LOW PRESSURE DROP: Pressure Drop in the Komax Hi-Pass mixer is roughly 1/3 that of our Industry-leading Triple Action mixer. This makes it an excellent choice for gravity fed systems or where available head is limited.

The Komax "Hi-Pass" Flash Mixer will reduce chemical consumption and costs and will produce dryer cake solids in dewatering operations. It is particularly suited for use in high fouling duty or pressure sensitive applications.