

## JetFlow Mixers

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JetFlow Mixers represent a unique class of equipment for agitating fluids in long tanks. The geometry of such tanks has always made agitation a difficult operation. JetFlow Mixers combine the flow pattern effectiveness of a side entering agitator with the physical mounting advantages of a top entering unit. Inherent in the design, is complete freedom from leaking seals, the reduction of agitation time, and trouble free operation. Sized from 1/4 through 20 hp., for handling liquids up to 2000 centipoise.

A JetFlow Mixer is essentially a top entering agitator with a three-blade propeller or hydrofoil operating inside a special draft bend assembly. The bend assembly and impeller are submerged in the fluid to be mixed. The impeller, turning at relatively high speeds, produces positive flow through and horizontally out of the draft bend, setting up a natural flow pattern. High linear exit velocity eliminates short-circuiting, and provides maximum circulation (even at the extreme ends of the tank) with minimum power requirements. Inside the bend assembly a zone of high turbulence insures complete interacting of the liquid phases.

### Typical Applications:

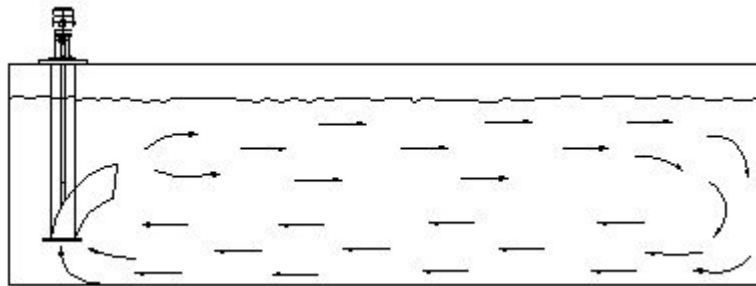
**Steel Pickling** - circulating acid over bundles of pipe or bars in long vats.

**Metal Working** - providing maximum contact of brine or oil quench with metal parts, maintaining constant temperature and eliminating gas film.

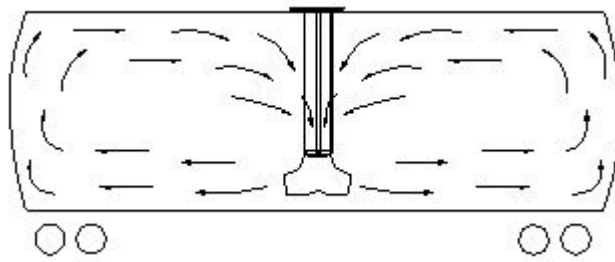
**Plating** - provide homogeneous agitation intensity in odd shaped tanks.

**Blending** - cutting tall oil with mineral spirits - blending hydraulic oils - wax storage at elevated temperatures

**Tank Car** - Transfer of heat to asphalt, fats and other solids for tank car melt out.



*Figure 1: Flow pattern developed by a JetFlow mixer in a long narrow rectangular tank*



**Figure 2: Flow pattern developed by a JetFlow mixer in a tanker car.**



**Figure 3: JetFlow draft bend assembly for tank car mixing**