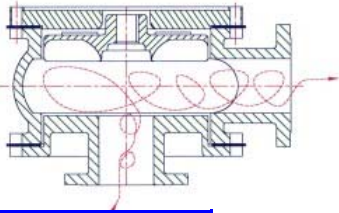
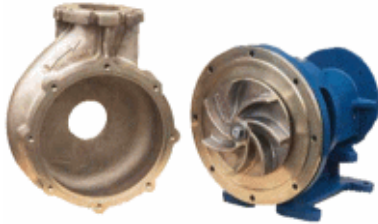


# ESSCO Vortex 100% Recessed Impeller Pumps

## Principle of operation



The principle of operation for a 100% recessed impeller vortex pump is very simple. The impeller spins in an area of the volute that is completely out of the liquid flow path. The spinning creates a vortex similar to that found in a toilet bowl when it is flushed or tornado. Since the impeller is not in the flow path of the volute, the pump is ideal for handling liquids that contain long stringy solids, large diameter solids, slurries or a combination of all of these without plugging up. Basically, whatever goes into the pump suction will be pumped out as long as the solids are smaller than the discharge

## Applications:

There are literally hundreds of applications for 100% recessed impeller vortex pumps. A few of them are listed below.

Submersible Pumps		
TufSubs® Severe Duty Submersible Pumps		
Submersible Pumps with Protective Jackets	MUNICIPAL APPLICATIONS	INDUSTRIAL APPLICATIONS
	Raw Sewage Lift Stations	Coal Wash
	Raw Sewage Head Works WWTP	Coal Slurry
	Grit Handling	Coal Pile Run-off
	Sludge Recirculation	Citrus Waste
Horizontal Pumps (All Metallurgy)	Sludge Handling	Sugar Waste Handling
	Digester Cleaning	Leather Tanning Waste
	Thickened Sludge	Rendering
Close Coupled Horizontal Pumps (All Metallurgy)	RAS	Plant Wash down Sumps
	WAS	Pumice Stone Handling
	Storm Water	Paper Mill- Green Liquor Dregs
Vertical Pumps (All Metallurgy)	Pipe Gallery Sump Pumps	Paper Mill- Caustisizers
		Paper Mill- White Liquor
		Clarifier Underflow
Close Coupled Vertical Pumps (All Metallurgy)		Carbon Black
		Cement Plant Waste
		Coke Handling
Column Pumps (All Metallurgy)		Lagoon Dredging
		Many other severe duty difficult applications