

## Vacuum Assisted Strainers

### Applications

The VA Strainer will separate fiber from white water streams with up to 1% solids, and can be equipped with screens from 44 – 300 micron. The unit is versatile and can be used as a shower water filter, a fiber scalper, or a thickener producing fiber with 3 – 5% consistency.

### Features

- ▶ Corrosion resistant FRP tank with 316L shower assembly
- ▶ Low maintenance mechanical operation
- ▶ Continuous filter media showering
- ▶ Energy consumption less than 0.01 HP/GPM

### Benefits

- ▶ Reduces mill fresh water intake
- ▶ Recovery of high cost fibers from water streams
- ▶ Reduced flow of wastewater treatment
- ▶ Fast return on investment



The VA (Vacuum Assisted) Strainer offers a simple, effective way for paper mills to recycle process water streams. With construction similar to the Kadant 4000 series Gravity Strainer, the VA Strainer offers higher levels of performance in three key areas: 1) solids retention, 2) throughput, and 3) higher solids capabilities. Proper screen selection and vacuum assisted dewatering provide maximum process protection and produce optimum results for polishing, scalping, and thickening applications. Using a low-horsepower, low-head vacuum exhauster, the VA Strainer is capable of handling 1% feed consistency and lower freeness material than gravity strainers. The low-vacuum draw also enhances the use of finer filtration media for applications previously unachievable by gravity strainers.

### Paper mill applications

- ▶ Fiber thickener (3–5%)
- ▶ Cylinder mould effluent
- ▶ Clarifier effluent
- ▶ Filtration to 325 mesh (44 micron)
- ▶ Rich whitewater and wire pit water reuse

### Pulp mill applications

- ▶ Fiber reclaim
- ▶ Washer effluent
- ▶ Screening cleaner rejects

### De-inking mill applications

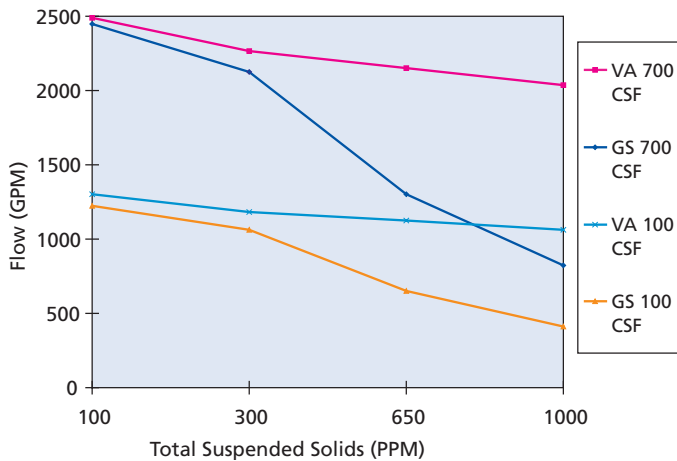
- ▶ Washing effluent
- ▶ Clarifier influent



# VA STRAINERS

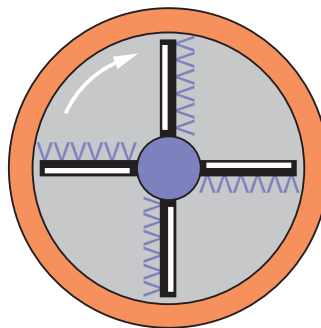
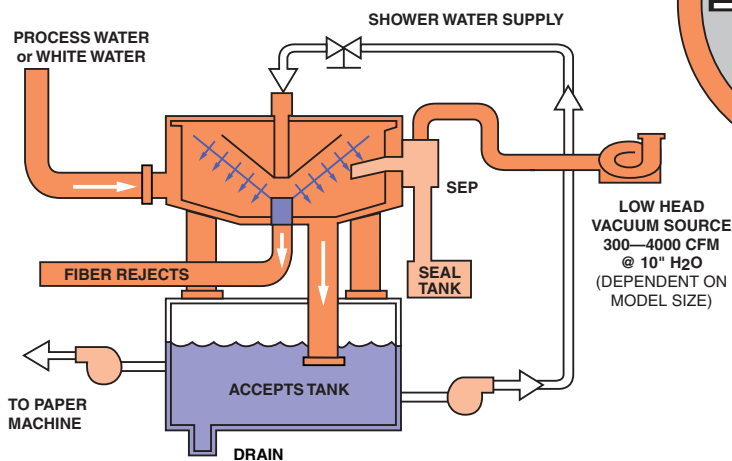
VA Strainer Specifications														
VA Strainer Model	Flow Capacity Range		Nominal Diameter		Nominal Height		Inlet/Reject Connection		Accept Connection		Gross Weight Dry - Wet		Shower Flows at 120 psi	
	GPM	LPM	inch	cm	inch	cm	inch	cm	inch	cm	Lbs.	Kg.	GPM	LPM
VA 05	100-525	375-2000	61	155	66	168	6	15	10	25	725-2875	330-1300	124	469
VA 15	175-850	665-3200	73	185	72	183	8	20	12	30	875-5150	400-2335	166	628
VA 25	250-1250	950-4750	85	216	78	198	10	25	14	36	1225-10750	555-4875	221	837
VA 35	350-1750	1325-6600	97	246	89	226	12	30	16	40	1800-18050	815-8185	276	1045
VA 45	550-2600	2075-9850	115	292	97	247	14	36	18	46	3000-29400	1360-13335	359	1359

**VA Vs. Standard Gravity Strainer**  
10 Ft Diameter Units Equipped With 150 Mesh Media



	Gravity Strainer	VA Strainer
Maximum Solids Loading	1,000 ppm (0.1%)	10,000 ppm (1.0%)
Particle Size Removed	75 – 230 micron (200 – 60 mesh)	41 – 150 micron (325 – 100 mesh)
Filter Area – 10 ft. Diameter Unit	48.5 sq. ft. filter media	78.2 sq. ft. filter media
Number of Shower Arms	3	4
Reject Consistency	1 – 2%	2 – 5%

## Typical VA Strainer System



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