

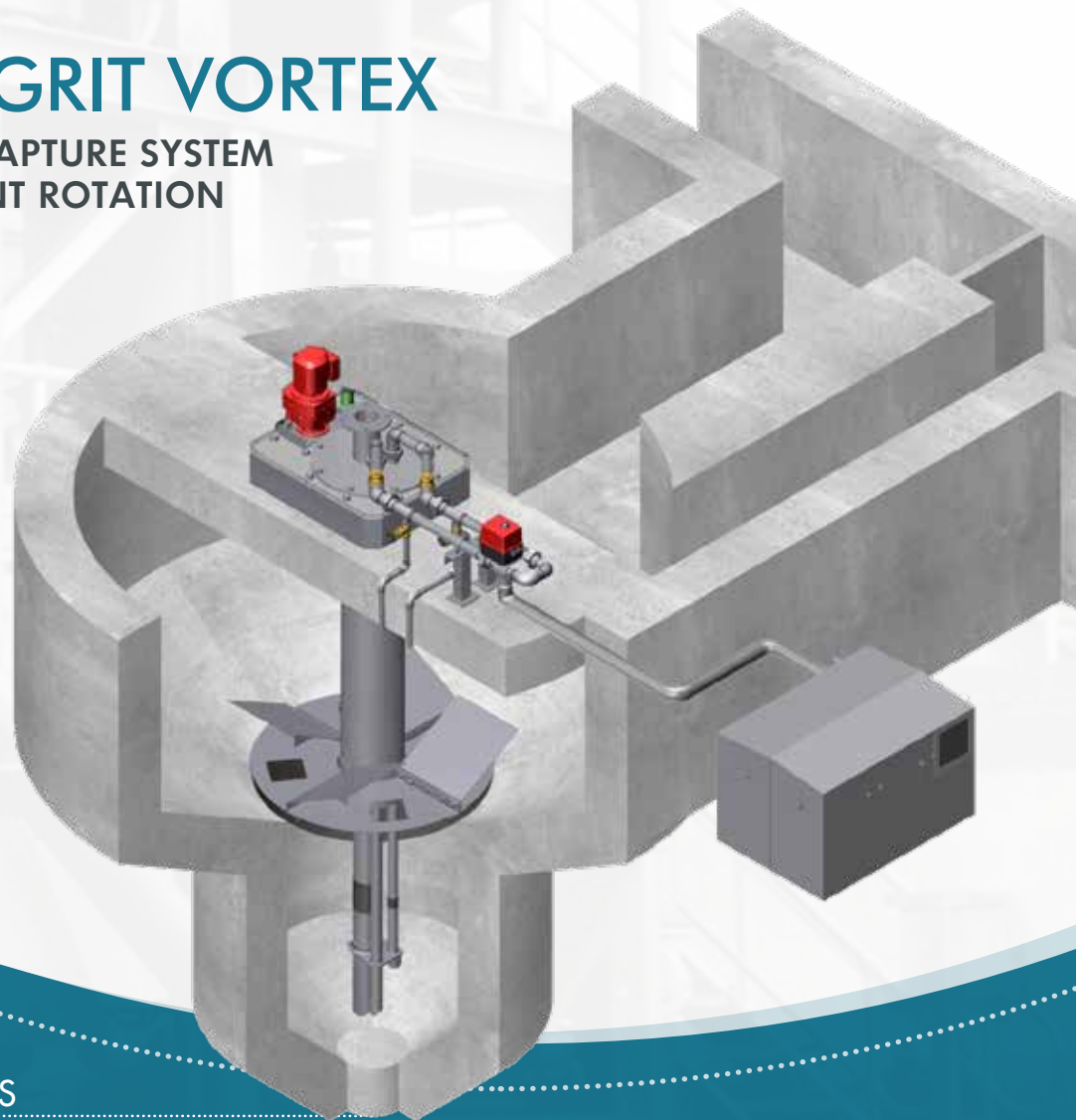


**SPIRAC**<sup>®</sup>

Solid Handling Solutions

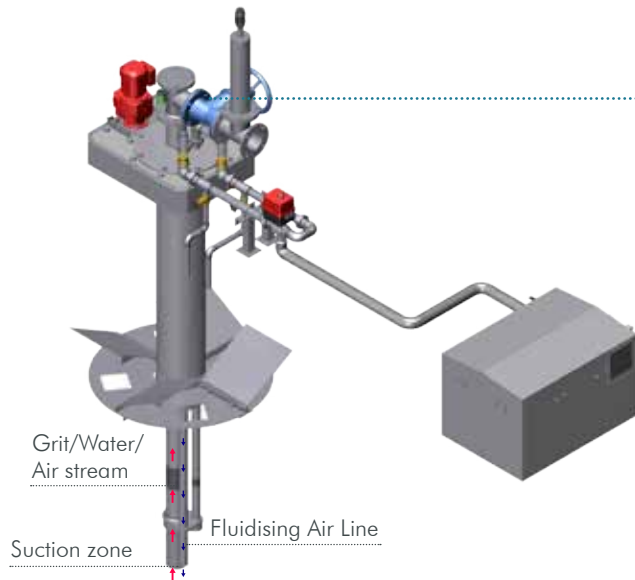
## SPIROSEP<sup>®</sup> GRIT VORTEX

GRIT SEPARATION CAPTURE SYSTEM  
THROUGH CONSTANT ROTATION



### FEATURES & BENEFITS

- Low capital cost and low power consumption.
- Rotating impeller creates a lift zone to ensure organics and lighter particles remain in suspension.
- Few moving parts therefore low maintenance.
- Simple and reliable operation due to low head loss.
- Effective across a wide flow and grit load range.
- Can be supplied as a complete grit capture and washing system in combination with the SANDWASH<sup>™</sup>.

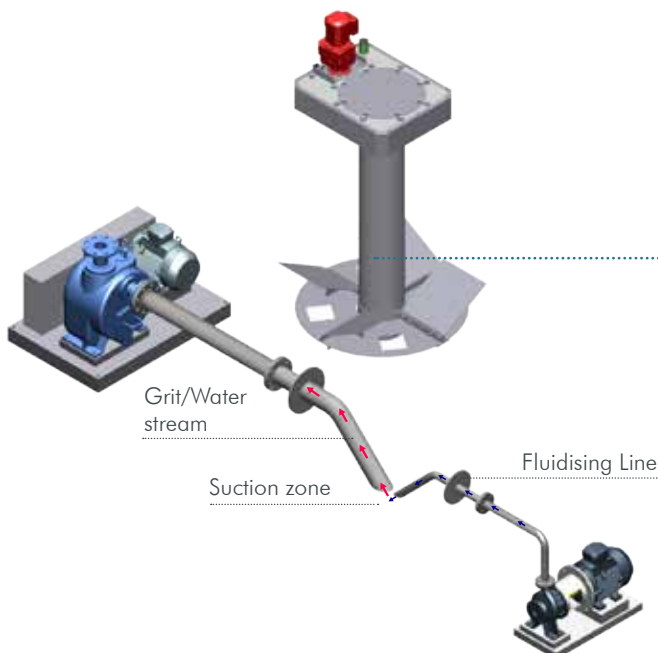
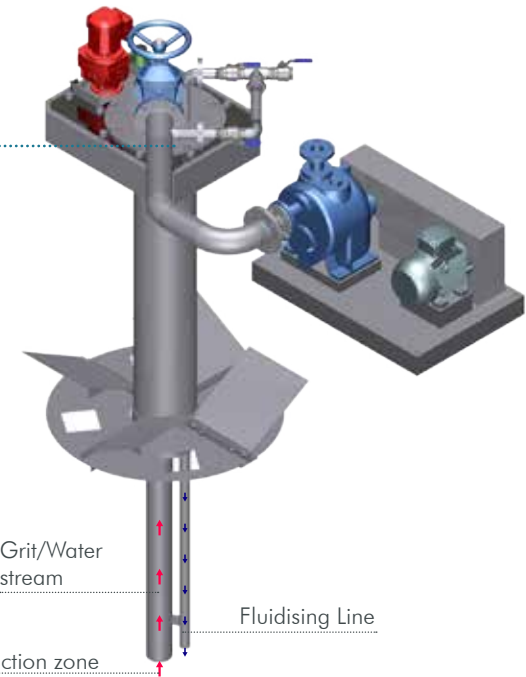


### AIR LIFT SYSTEM

- ▶ Pressurized air from a rotary lobe blower provides fluidizing air or suction lift air through a three way valve to a classifier
- ▶ No restrictions or impeller in line thereby minimizing risk of blockages
- ▶ Simple operation, easy to maintain
- ▶ No impeller erosion as grit slurry is in contact with open pipe walls only
- ▶ Simple timer controls.

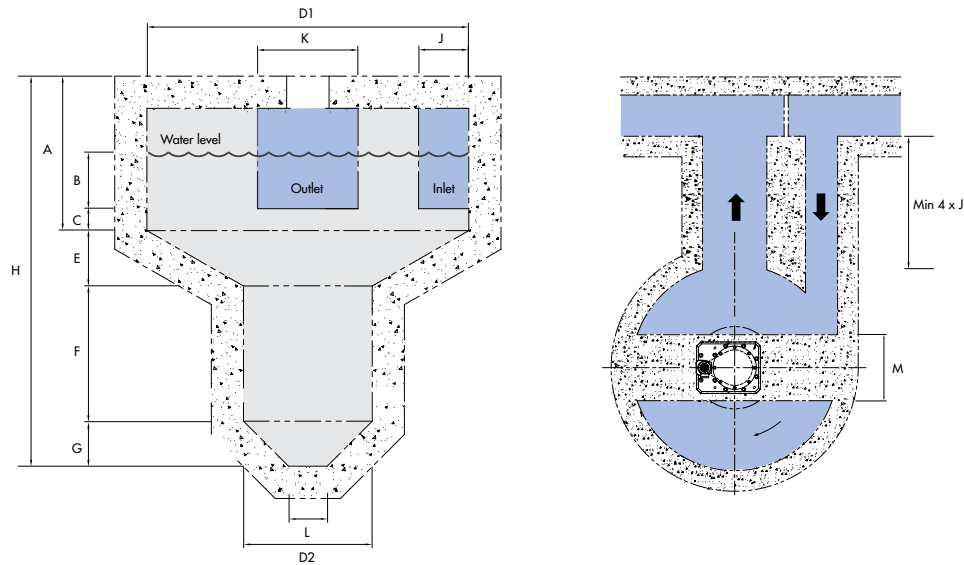
### SELF-PRIMING GRIT PUMP SYSTEM

- ▶ SPIROPUMP®, is a high capacity grit pump cycles to pump grit from bottom chamber to classifier.
- ▶ Self-priming pump designed for location above channel.
- ▶ Recessed anti-ragging impellor handles any objects which may not have been removed by the upstream screen.
- ▶ Simple timer controls.
- ▶ A second smaller pump may be used for sparging or fluidising the grit. Process water at high pressure could also be utilised for grit sparging or fluidising.



### FLOODED SUCTION PUMP SYSTEM

- ▶ A high-capacity grit pump (SPIROPUMP®) cycles to pump grit from bottom chamber to classifier.
- ▶ Continuously primed pump designed for location below channel water-level.
- ▶ Recessed anti-ragging impellor handles any objects which may not have been removed by the upstream screen.
- ▶ Simple timer controls.
- ▶ A second smaller pump may be used for sparging or fluidising the grit. Process water at high pressure could also be utilised for grit sparging or fluidising.



## AVAILABLE OPTIONS

- ▶ Stainless steel or painted steel free-standing vortex tanks (in lieu of concrete)
- ▶ Variable speed impeller drive
- ▶ Blower acoustic enclosures
- ▶ PLC or electronic control packages

Model	Max Flow Rate (mgd)	D1 (ft)	D2 (ft)	Chamber Volume (yd <sup>3</sup> )	H (ft)	A (ft)	B (ft)	C (ft)	E (ft)	F (ft)	G (ft)	J (ft)	K (ft)	L (ft)	M (ft)
VG10	0.8	3.3	2.6	1.2	6.9	3.0	0.5	0.8	0.2	2.9	0.8	0.5	1.1	0.6	2.4
VG15	1.3	5.0	2.6	2.0	7.4	3.0	0.5	0.8	0.6	2.9	0.8	0.8	1.5	0.6	2.4
VG20	1.9	6.6	3.3	4.1	8.4	3.3	0.6	0.9	0.9	3.2	1.1	0.9	1.9	0.9	2.4
VG25	4.4	8.3	3.3	5.8	8.5	3.0	1.0	0.5	1.3	3.2	1.1	1.2	2.3	0.9	2.4
VG28	5.2	9.2	3.3	7.3	9.0	3.1	1.1	0.4	1.7	3.2	1.1	1.5	2.9	0.9	2.4
VG30	6.8	9.9	3.3	8.7	9.0	3.1	1.2	0.4	1.7	3.2	1.1	1.5	2.9	0.9	2.4
VG35	10.8	11.6	5.0	15.2	10.6	3.8	1.4	0.5	1.7	3.5	1.7	1.9	3.7	1.2	2.4
VG40	14.3	13.2	5.0	25.8	12.4	4.2	1.7	1.2	2.2	4.4	1.7	2.3	4.7	1.2	2.4
VG45	17.6	14.9	5.0	38.9	15.2	5.9	1.8	1.9	2.6	5.0	1.7	3.0	5.9	1.2	2.4
VG50	22.1	16.5	5.0	47.7	15.0	5.4	1.9	1.8	3.0	5.0	1.7	3.3	6.5	1.2	2.4
VG55	30.5	18.2	5.0	70.8	17.3	6.3	2.1	2.7	3.5	5.9	1.7	3.6	7.2	1.2	2.4
VG60	46.9	19.8	5.0	87.1	17.4	6.0	2.3	2.7	3.9	5.9	1.7	3.7	7.2	1.2	2.4
VG65	55.6	21.5	5.0	105.6	18.3	6.5	2.4	2.7	4.3	5.9	1.7	4.1	8.1	1.2	3.0
VG70	66.1	23.1	5.0	126.1	18.8	6.6	2.5	2.8	4.7	5.9	1.7	4.5	9.6	1.2	3.0
VG75	74.2	24.8	5.0	155.0	20.0	7.4	2.7	2.9	5.2	5.9	1.7	4.5	9.6	1.2	3.0
VG80	83.3	26.4	5.0	183.6	20.6	7.5	2.9	3.0	5.6	5.9	1.7	4.5	10.5	1.2	3.0

Dimensions are for information only and not to be used for design. Please contact us for more details.



1. TWO PAINTED MILD STEEL VORTEX CHAMBERS WITH FLOODED SUCTION PUMPS.
2. A SINGLE SELF-PRIMING GRIT PUMP FEEDING A SPIRAC SGW GRIT WASHER VIA A HYDROCYCLONE.
3. A SMALL UNMANNED PLANT INCLUDING AN AIRLIFT GRIT VORTEX SYSTEM.
4. VORTEX CHAMBER WITH FLOODED SUCTION GRIT PUMPS.
5. TYPICAL VORTEX DRIVE-HEAD AND AIRLIFT SYSTEM PIPING.



PLEASE CONTACT US FOR MORE INFORMATION

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