

SPIRAC[®] GRIT VORTEX

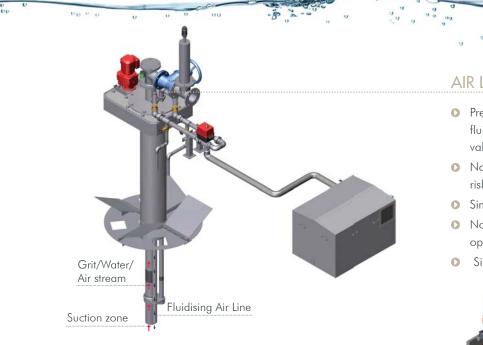
GRIT SEPARATION CAPTURE SYSTEM THROUGH CONSTANT ROTATION

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 SPIRAC[®] Grit Washer.

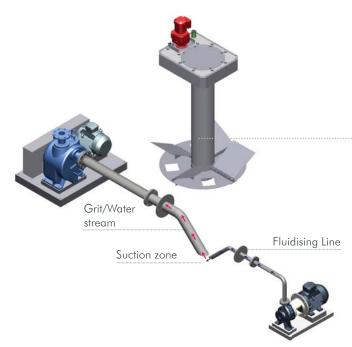


SPIRAC® GRIT VORTEX TYPICAL ARRANGEMENTS



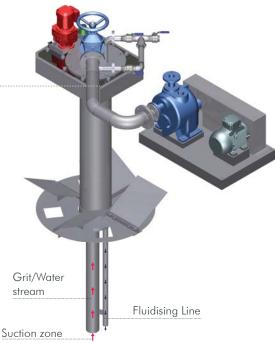
SELF-PRIMING GRIT PUMP SYSTEM

- 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.



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.



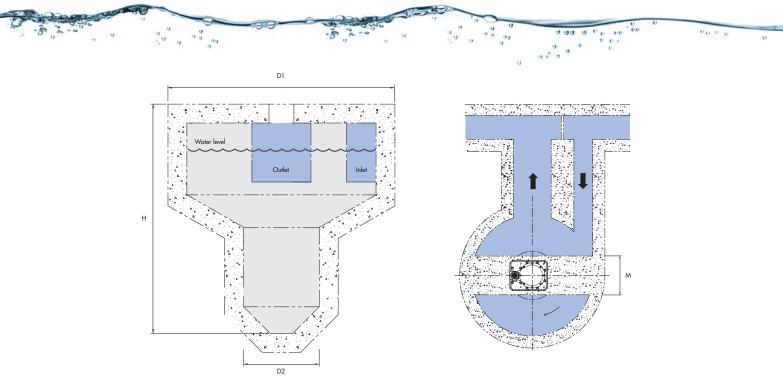
FLOODED SUCTION PUMP SYSTEM

- A high-capacity grit pump 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.

SPIRAC[®] GRIT VORTEX



DIMENSIONAL DATA AND HYDRAULIC CAPACITIES



AVAILABLE OPTIONS

• Stainless steel or painted steel free-standing vortex tanks (in lieu of concrete)

0	Variable speed impeller drive	0	Blower acoustic enclosures	O	PLC or electronic control packages	
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		Internal Diameters		Height	
Model	Max Flow Rate (lps)	D1 (mm)	D2 (mm)	H (mm)	M (mm)
VG10	35	1000	800	2310	800
VG15	55	1500	800	2450	800
VG20	84	2000	1000	2800	800
VG25	193	2500	1000	2830	800
VG28	230	2800	1000	3000	800
VG30	300	3000	1000	3010	800
VG35	473	3500	1500	3540	800
VG40	628	4000	1500	4120	800
VG45	772	4500	1500	5050	800
VG50	968	5000	1500	5010	800
VG55	1337	5500	1500	5750	800
VG60	2056	6000	1500	5800	800
VG65	2435	6500	1500	6090	1000
VG70	2894	7000	1500	6280	1000
VG75	3250	7500	1500	6680	1000
VG80	3650	8000	1500	6880	1000

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.



WE SPECIALISE IN

SCREENINGS HANDLING

- Screens
- Screenings washing
- Dewatering & compaction
- Conveying
- Containment & transport

GRIT HANDLING

- Grit capture & separation
- Grit washing
- Conveying
 - Containment & transport

SLUDGE HANDLING

- ▶ Conveying
- ▶ Storage (silos)
- Receival (bunkers & hoppers)
- Outloading (sliding-frames & live-bottoms)
- Containment & transport



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