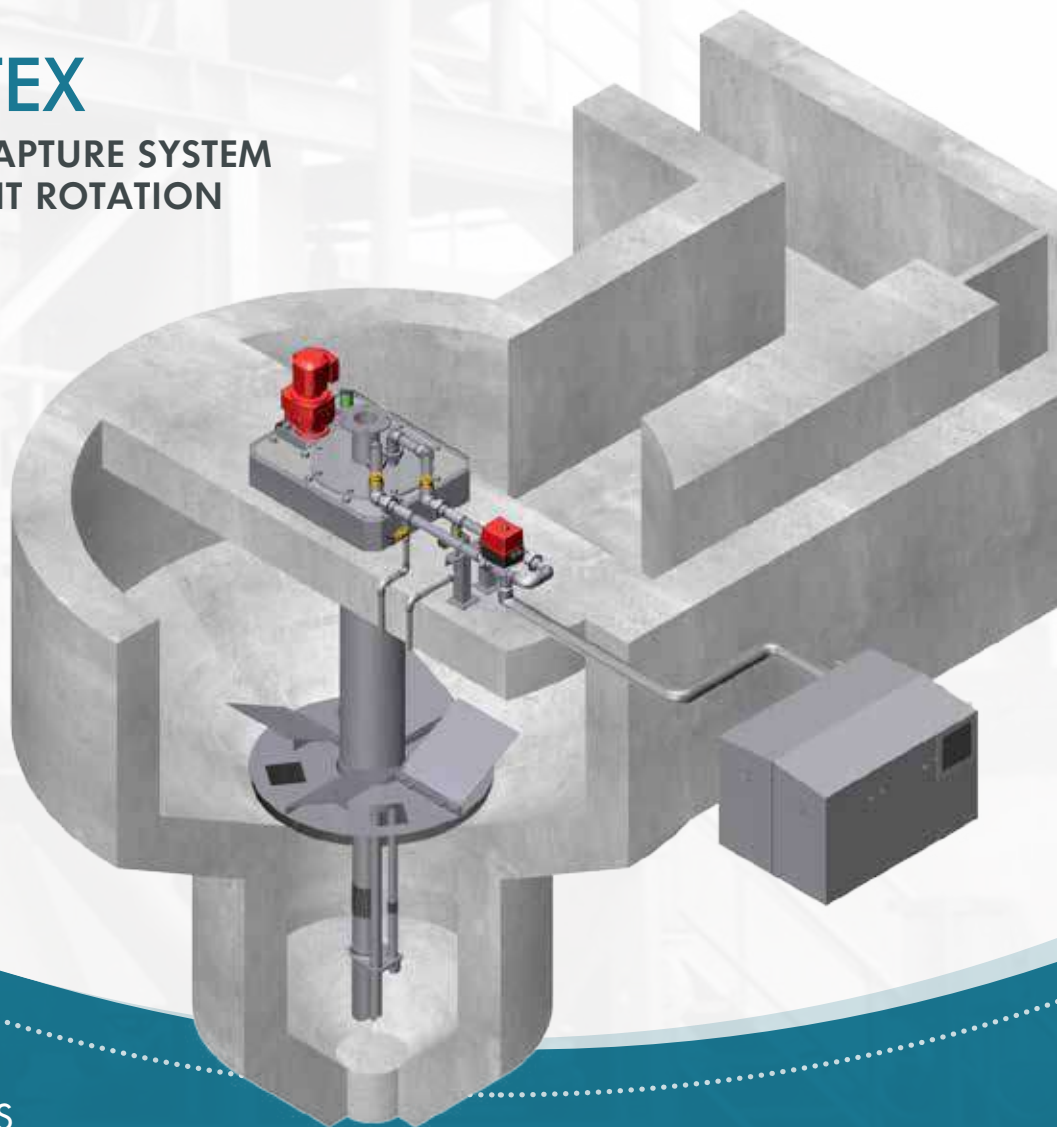




SPIRAC[®]
Solid Handling Solutions

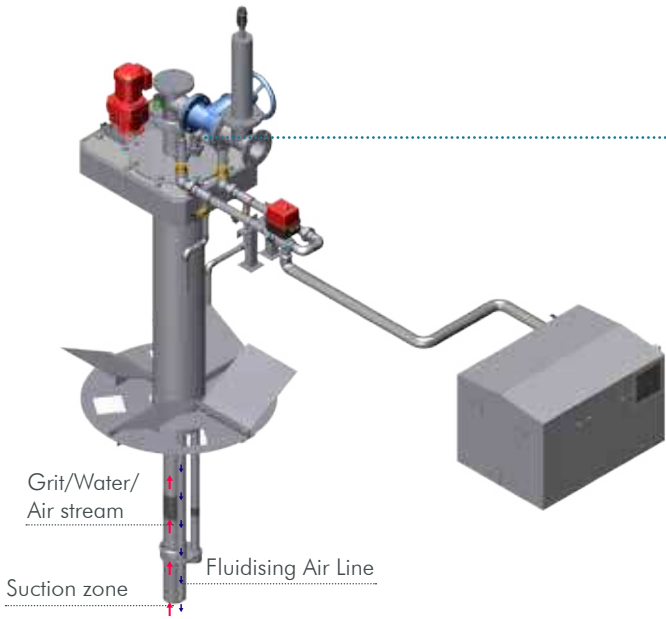
GRIT VORTEX

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.

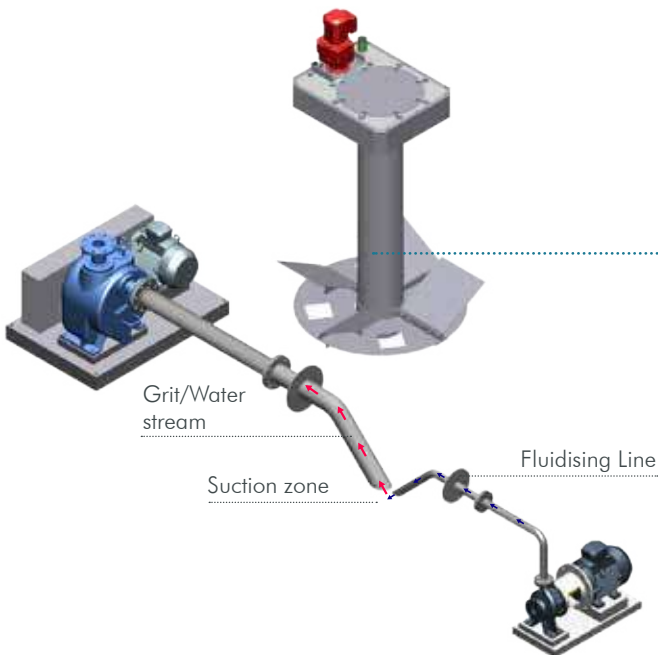
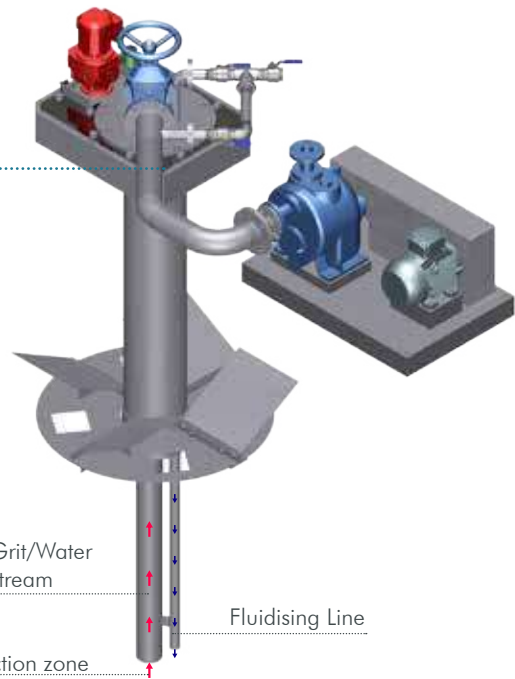


AIR LIFT SYSTEM

- ▶ 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.

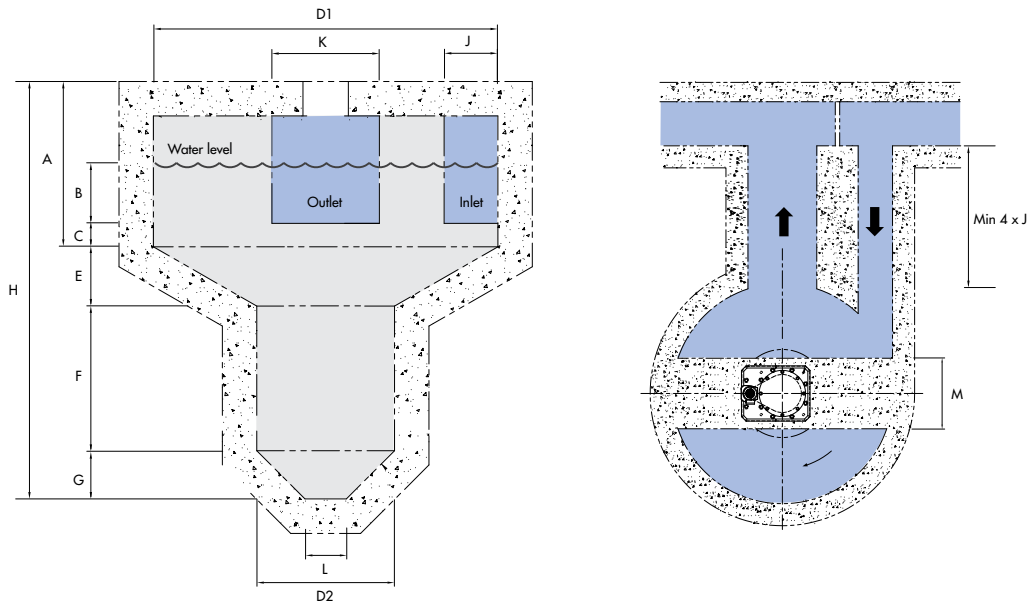
SELF-PRIMING GRIT PUMP SYSTEM

- ▶ 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 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 (lps) | D1 (mm) | D2 (mm) | Chamber Volume (m ³) | H (mm) | A (mm) | B (mm) | C (mm) | E (mm) | F (mm) | G (mm) | J (mm) | K (mm) | L (mm) | M (mm) |
|-------|---------------------|---------|---------|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| VG10 | 35 | 1000 | 800 | 0.92 | 2310 | 1000 | 180 | 270 | 60 | 950 | 250 | 170 | 350 | 200 | 800 |
| VG15 | 55 | 1500 | 800 | 1.54 | 2450 | 1000 | 180 | 270 | 200 | 950 | 250 | 270 | 500 | 200 | 800 |
| VG20 | 84 | 2000 | 1000 | 3.12 | 2800 | 1110 | 210 | 310 | 290 | 1050 | 350 | 310 | 620 | 300 | 800 |
| VG25 | 193 | 2500 | 1000 | 4.45 | 2830 | 1000 | 320 | 170 | 430 | 1050 | 350 | 390 | 780 | 300 | 800 |
| VG28 | 230 | 2800 | 1000 | 5.61 | 3000 | 1030 | 350 | 120 | 580 | 1050 | 350 | 490 | 970 | 300 | 800 |
| VG30 | 300 | 3000 | 1000 | 6.67 | 3010 | 1030 | 410 | 120 | 580 | 1050 | 350 | 490 | 970 | 300 | 800 |
| VG35 | 473 | 3500 | 1500 | 11.62 | 3540 | 1260 | 470 | 170 | 580 | 1150 | 550 | 630 | 1240 | 400 | 800 |
| VG40 | 628 | 4000 | 1500 | 19.76 | 4120 | 1400 | 580 | 390 | 720 | 1450 | 550 | 770 | 1550 | 400 | 800 |
| VG45 | 772 | 4500 | 1500 | 29.73 | 5050 | 1980 | 600 | 640 | 870 | 1650 | 550 | 990 | 1980 | 400 | 800 |
| VG50 | 968 | 5000 | 1500 | 36.49 | 5010 | 1800 | 620 | 600 | 1010 | 1650 | 550 | 1090 | 2180 | 400 | 800 |
| VG55 | 1337 | 5500 | 1500 | 54.16 | 5750 | 2100 | 700 | 900 | 1150 | 1950 | 550 | 1200 | 2400 | 400 | 800 |
| VG60 | 2056 | 6000 | 1500 | 66.61 | 5800 | 2000 | 760 | 890 | 1300 | 1950 | 550 | 1220 | 2400 | 400 | 800 |
| VG65 | 2435 | 6500 | 1500 | 80.74 | 6090 | 2150 | 800 | 900 | 1440 | 1950 | 550 | 1350 | 2700 | 400 | 1000 |
| VG70 | 2894 | 7000 | 1500 | 96.38 | 6280 | 2200 | 820 | 920 | 1580 | 1950 | 550 | 1500 | 3200 | 400 | 1000 |
| VG75 | 3250 | 7500 | 1500 | 118.53 | 6680 | 2450 | 900 | 980 | 1730 | 1950 | 550 | 1500 | 3200 | 400 | 1000 |
| VG80 | 3650 | 8000 | 1500 | 140.41 | 6880 | 2500 | 950 | 1000 | 1880 | 1950 | 550 | 1500 | 3500 | 400 | 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.



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