

SPEL Hydrosystem

Cartridge filter for tertiary stormwater treatment



spelstormwater
joy in water

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APPLICATIONS

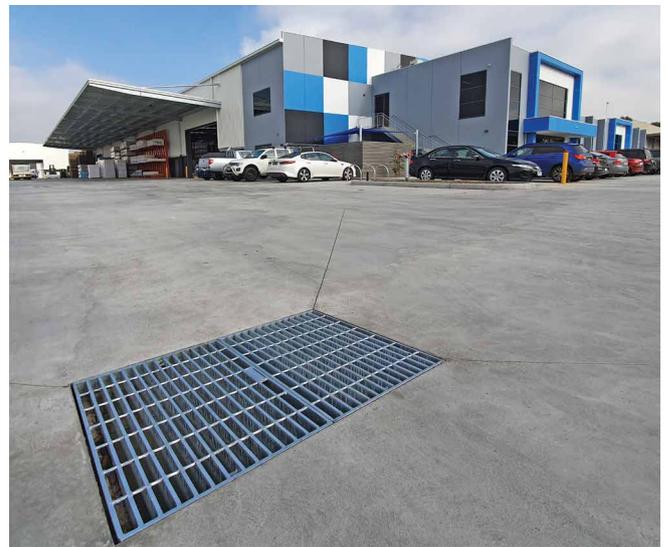


- Car parks & shopping centres
- Council depots
- Industrial estates
- Heavy vehicle maintenance
- Transport depots & loading bays
- Tunnels
- Highways & transport corridors
- Recycling yards
- Airport aprons & tarmacs

SPEL Hydrosystem is a specialist stormwater filtration system that is purpose-built to reduce the footprint of WSUD on constrained projects. Manufactured, designed, and engineered in Australia using fibre-reinforced polymer (FRP) this generational asset is supplied with a 25-year warranty & 100-year design life.

This innovative approach to stormwater treatment uses an up-flow filtration process. With minimal head drop required between inlet and outlet, these devices are suitable for installation on flat sites or low gradient developments. The stormwater is treated within the unit by the following processes: sedimentation, filtration, adsorption, and precipitation.

The Hydrosystem has been extensively laboratory and field tested for the removal of pollutants – including heavy metals, total suspended solids (TSS), and nutrients (Phosphorous and Nitrogen).



FEATURES

- Manufactured, designed, and engineered in Australia at our FRP production facility.
- Lightweight, easy to install and minimal on-site lifting requirements (no crane required).
- Reduced on-site footprint.
- Up-flow filtration process suitable for flat sites requiring only 250 mm of hydraulic head.
- Scalable sizes with variable cartridge configurations from 1 to 39 filter cartridges.
- Treatment flow rates from 2.5 litres per second (LPS) to 156 litres per second installed in offline configuration.
- Custom-designed inline systems available.
- Installed in trafficable and non trafficable applications.



SPECIFICATIONS

Model	NO. CARTRIDGE	TFR	ID (m)	Height (m)	Inlet/Outlet (mm)
400 SERIES					
HS.400/1	1	2.5 LPS	1.13	1.5	100
HS.400/2	2	5 LPS			
HS.400/3	3	7.5 LPS			
1200 SERIES					
HS.1200/4	4	12 LPS	1.20	2.60	225
1500 SERIES					
HS.1500/4	4	16 LPS	1.50	2.00	225
HS.1500/5	5	20 LPS			
HS.1500/6	6	24 LPS			
1850 SERIES					
SHS.1850/7	7	28 LPS	1.85	2.00	225
2200 SERIES					
HS.2200/7	7	28 LPS	2.20	2.50	225
HS.2200/8	8	32 LPS			
HS.2200/9	9	36 LPS			
2500 SERIES					
HS.2500/10	10	40 LPS	2.50	2.70	300
HS.2500/11	11	44 LPS			
HS.2500/12	12	48 LPS			
HS.2500/13	13	52 LPS			
HS.2500/14	14	56 LPS			
HS.2500/15	15	60 LPS			
HS.2500/16	16	64 LPS			
3000 SERIES					
HS.3000/17	17	68 LPS	3.00	2.85	300
HS.3000/18	18	76 LPS			
HS.3000/19	19	76 LPS			
HS.3000/20	20	80 LPS			
HS.3000/21	20	84 LPS			
3500 SERIES					
HS.3500/22	22	88 LPS	3.50	2.95	375
HS.3500/23	23	92 LPS			
HS.3500/24	24	96 LPS			
HS.3500/25	25	100 LPS			
HS.3500/26	26	104 LPS			
HS.3500/27	27	108 LPS			
HS.3500/28	28	112 LPS			
HS.3500/29	29	116 LPS			
HS.3500/30	30	120 LPS			
HS.3500/31	31	124 LPS			
4000 SERIES					
HS.4000/32	32	128 LPS	4.00	3.25	375
HS.4000/33	33	132 LPS			
HS.4000/34	34	136 LPS			
HS.4000/35	35	140 LPS			
HS.4000/36	36	144 LPS			
HS.4000/37	37	148 LPS			
HS.4000/38	38	152 LPS			
HS.4000/39	39	156 LPS			



Tested Treatment Efficiencies*

Pollutant	Efficiency
Gross Pollutants (GP)	100%
Total Suspended Solids (TSS)	85%
Total Phosphorus (TP)	66%
Total Nitrogen (TN)	43%
Petroleum Hydrocarbon	82%

*Contact Spel to confirm approved performance for the project LGA

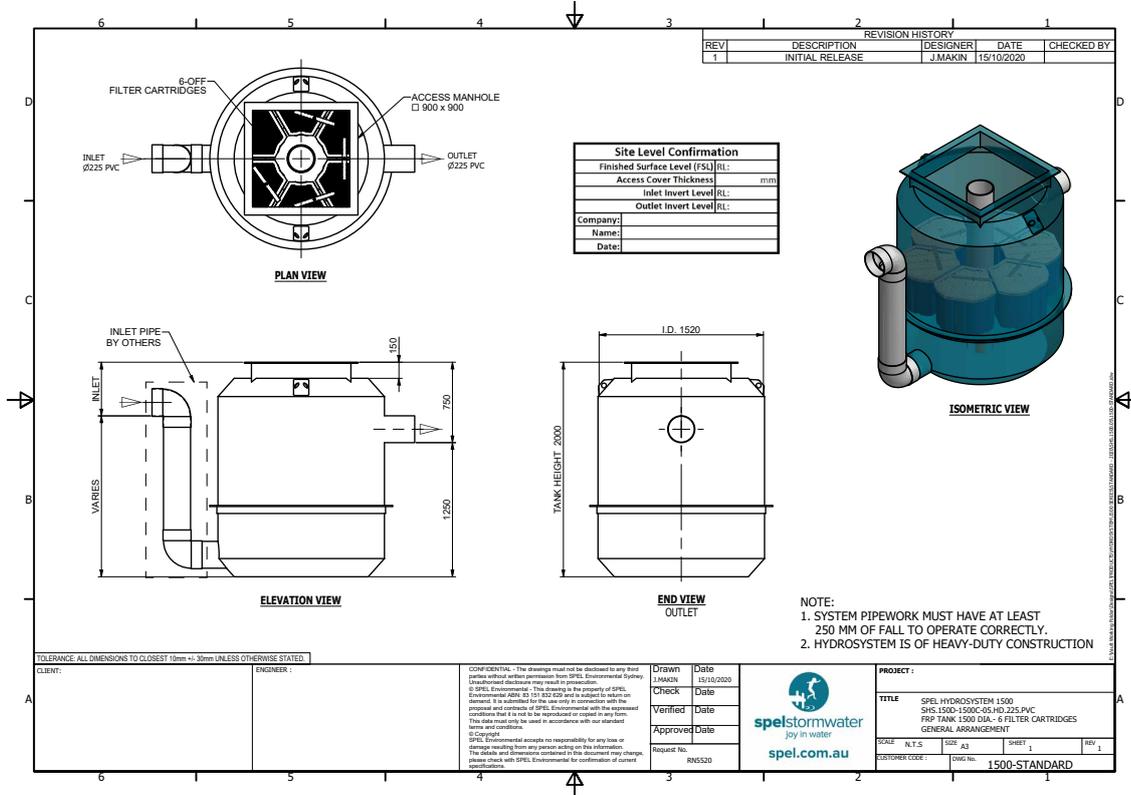


Operating System

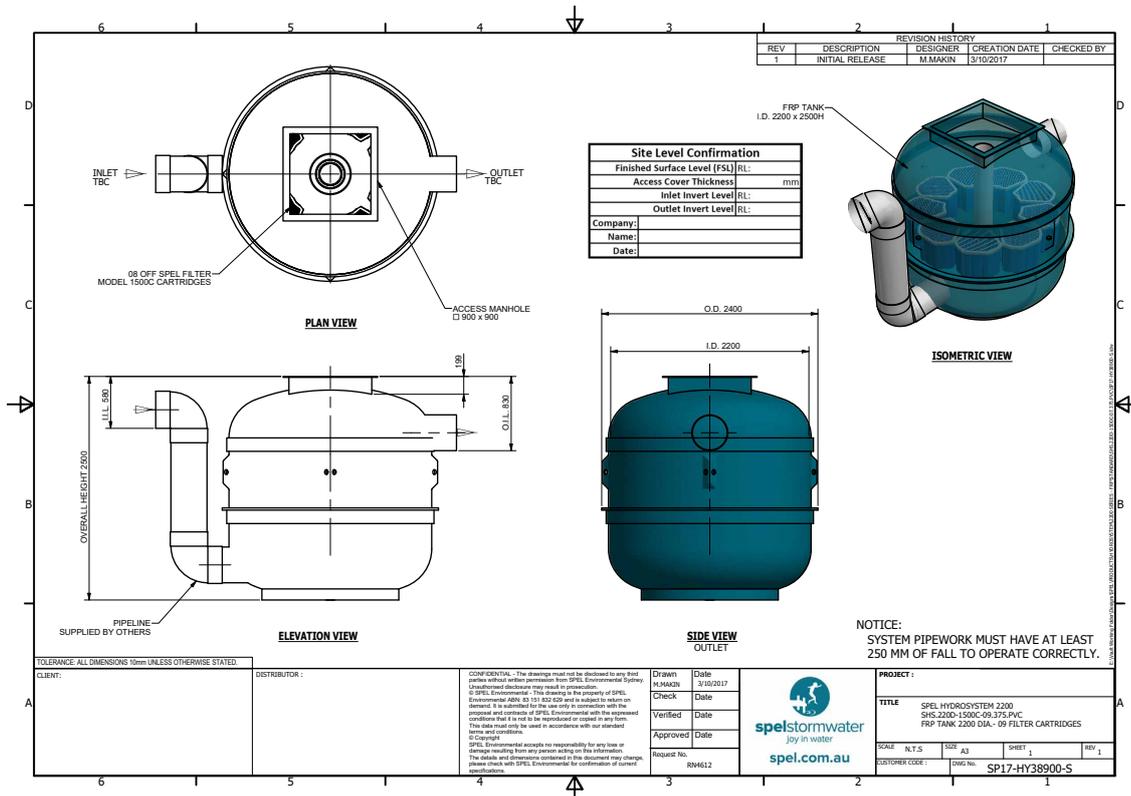
1. Stormwater from catchment enters the offline Hydrosystem inlet.
2. Sediment is retained within the sump area.
3. Filter cartridges operate in an up-flow process. The fine sediment is physically removed, and dissolved pollutants are precipitated and adsorptively bound to the filtration media.
4. Treated water flows from cartridges to outlet and into downstream water network.

DRAWINGS

Model HS.1500

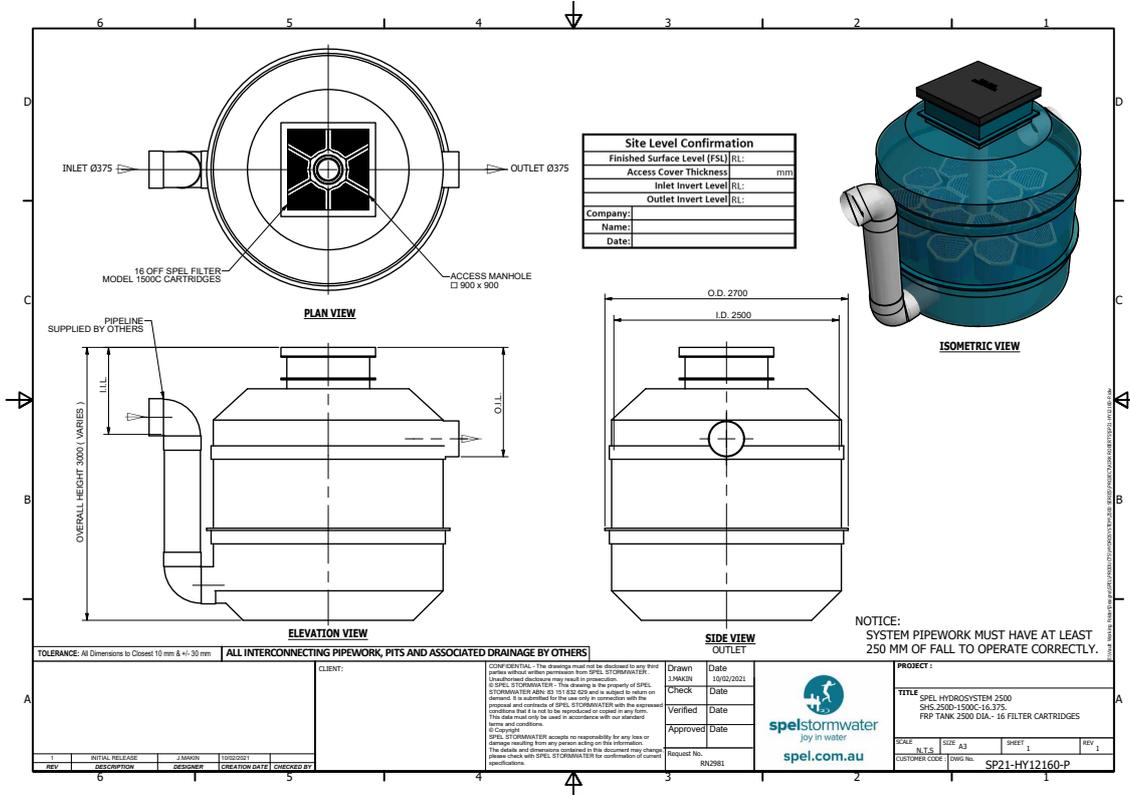


Model HS.2200

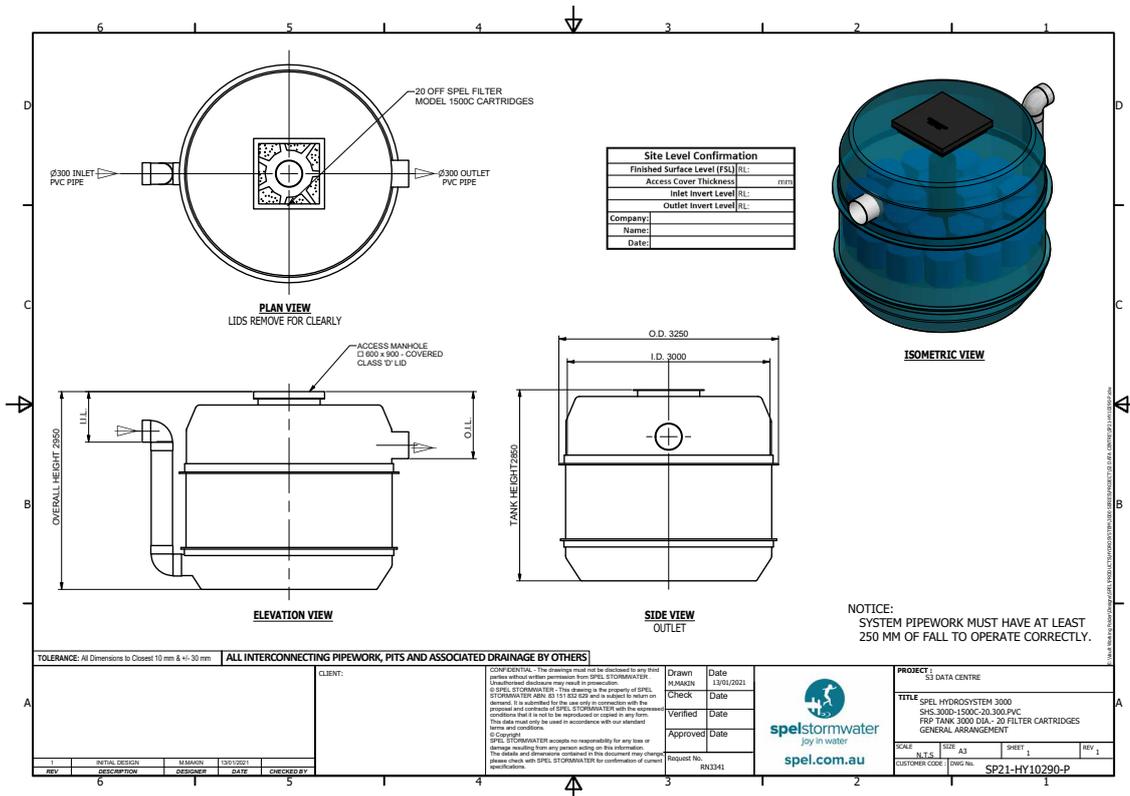


DRAWINGS

Model HS.2500

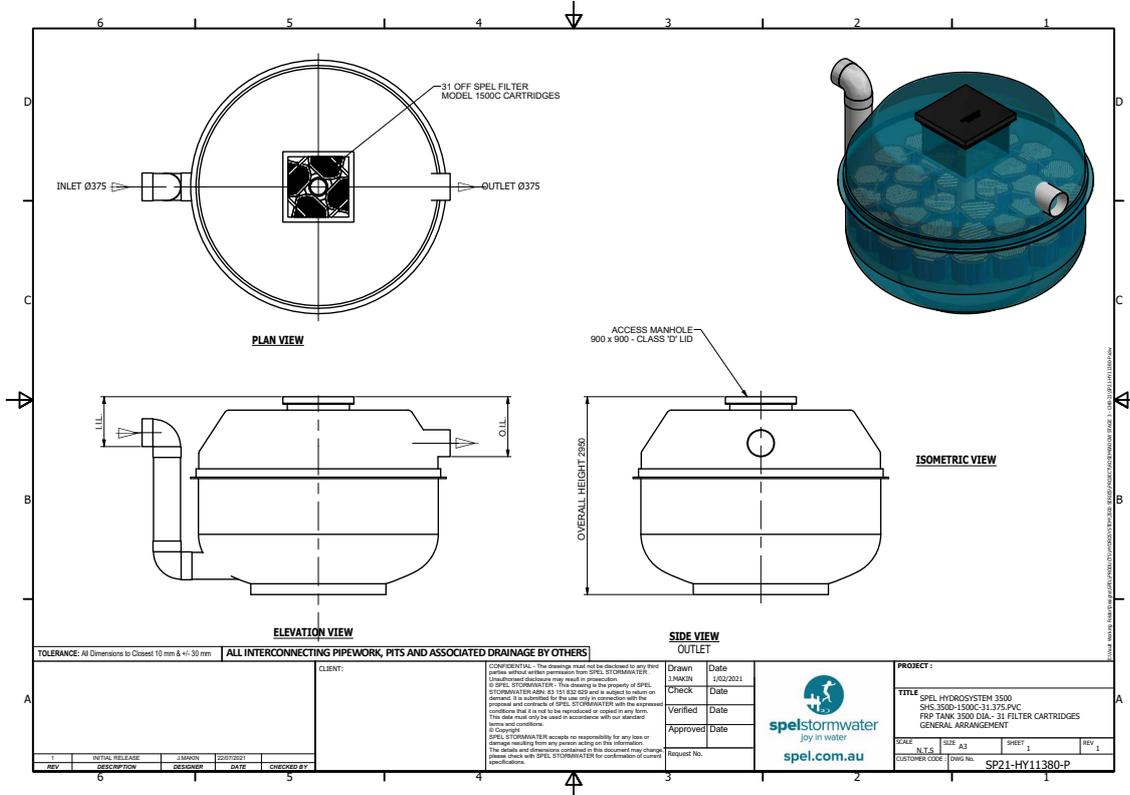


Model HS.3000

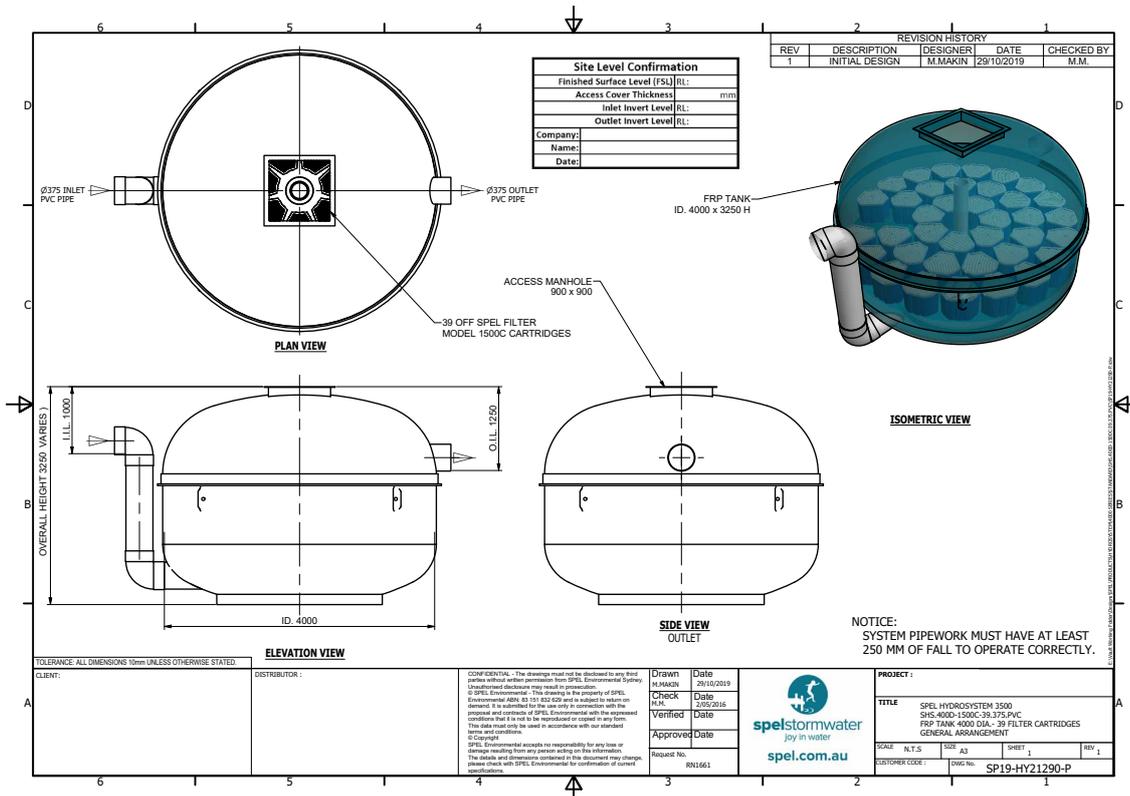


DRAWINGS

Model HS.3500



Model HS.4000



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We believe clean water is a right not a privilege and we work to ensure a joy in water experience for you with your children and grandchildren.



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