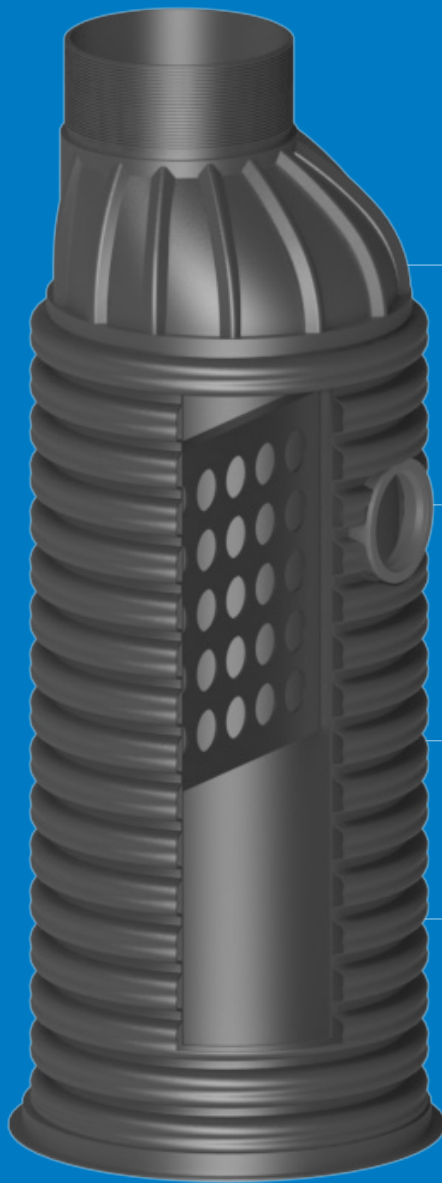


Uponor Smart Trap
Technical datasheet

uponor



Smart Trap



Controlled retention

Prevents collected contaminated sediment from swirling out at high water flow

Cost-effective cleaning

Reduces maintenance costs for tanks, cassettes, ponds and lakes

Simple construction

Can also be installed in existing chambers

Protects the environment

Prevents pollution from reaching ponds and lakes. Prevents sediment and oil from entering the infiltration or attenuation systems and flushing to water ways or other systems in the network.

Uponor Smart Trap

Uponor Smart Trap is a patented sand trap for cleaning stormwater. The construction collects 100% more sediment than a traditional sand trap, even at high water flow, where it is otherwise normal for the sediment to be washed out. Smart Trap is advantageously used as central sedimentation collection point from several public car park gullies. Can also be used for pre-sedimentation before an attenuation tank. The standard chamber can be used for hard surfaces which are up to 4000 m² in size. For bigger areas Uponor can dimension the chamber size accordingly.

Application	Stormwater management
Material	Polypropylene (PP)
Colour	Black
Dimensions (mm)	1000
Height (mm)	2930. Cone can be shortened by 250
Water flow	710mm from the bottom
Volume	Up to 300 liters of sand trap

System and material data

Properties	Value	Unit	Standards
E-modulus, short term	≥ 800	MPa	ISO 527
Density	≈ 940	kg/m ³	ISO 1183
Linear expansion coefficient	≈ 17·10 ⁻⁵	K ⁻¹	
Thermal conductivity	≈ 0.36–0.50	W/(K · m)	
Specific heat capacity	≈ 2300–2900	J/(kg · K)	
Surface resistance	> 10 ¹³	Ω	
Poisson ratio	0.45	(-)	
Tensile strength	> 15	MPa	ISO 6259
Elongation at break	> 350	%	ISO 6259
Roughness k ^(*)	0.25	mm	
Impact strength test temp.	-20	°C	EN 1401

Patented Cleaning Technology, performance tested by Minnesota University.

(* Study by Luleå University shows that 60–80 % of storm water contaminants are bound to particles larger than 250 micrometers.

Dimension mm	Inlet/outlet dimension mm	Height mm	Uponor number	VVS number
1000/600	315	2930	1087616	223296100

Calculation effect

Smart Trap is a larger sedimentation chamber with a perforated plate for more efficient sedimentation.

Example

This solution is typically used for an area corresponding to a parking area at a shopping center (0.20 ha). There is a plate that prevents liquid oil from passing through the outlet pipe.

In a calculated plant, the water depth was 1.65 m, the diameter 1.0 m and the permanent water volume to the outlet level was calculated to be approximately 1.3 m³.

Uponor pollution reduction calculation for each project (Storm-Tac method) is available upon request.

Moving > Water

uponor

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