

EQUIPMENT



ROTARY DRUM FILTER SCREEN

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- **High-Efficiency Solid Removal:** Effectively captures suspended solids, fibres, and debris using precision wedge wire or perforated screens, improving downstream treatment performance.
- **Fully Automated Operation:** Integrates screening, washing, conveying, and dewatering into a continuous automatic process, reducing manual intervention.
- **Reliable & Stable Performance:** A chain-driven system and optimised flow distribution ensure consistent operation under varying hydraulic conditions.
- **Self-cleaning:** Timed spray/backwash or optional brush prevents clogging and maintains throughput.
- **Anti-Clogging Design:** Equipped with an automatic backwashing system to prevent screen blockage and maintain filtration efficiency.
- **Compact & Space-Saving:** All-in-one design reduces footprint and simplifies installation, making it ideal for both new and existing installations.

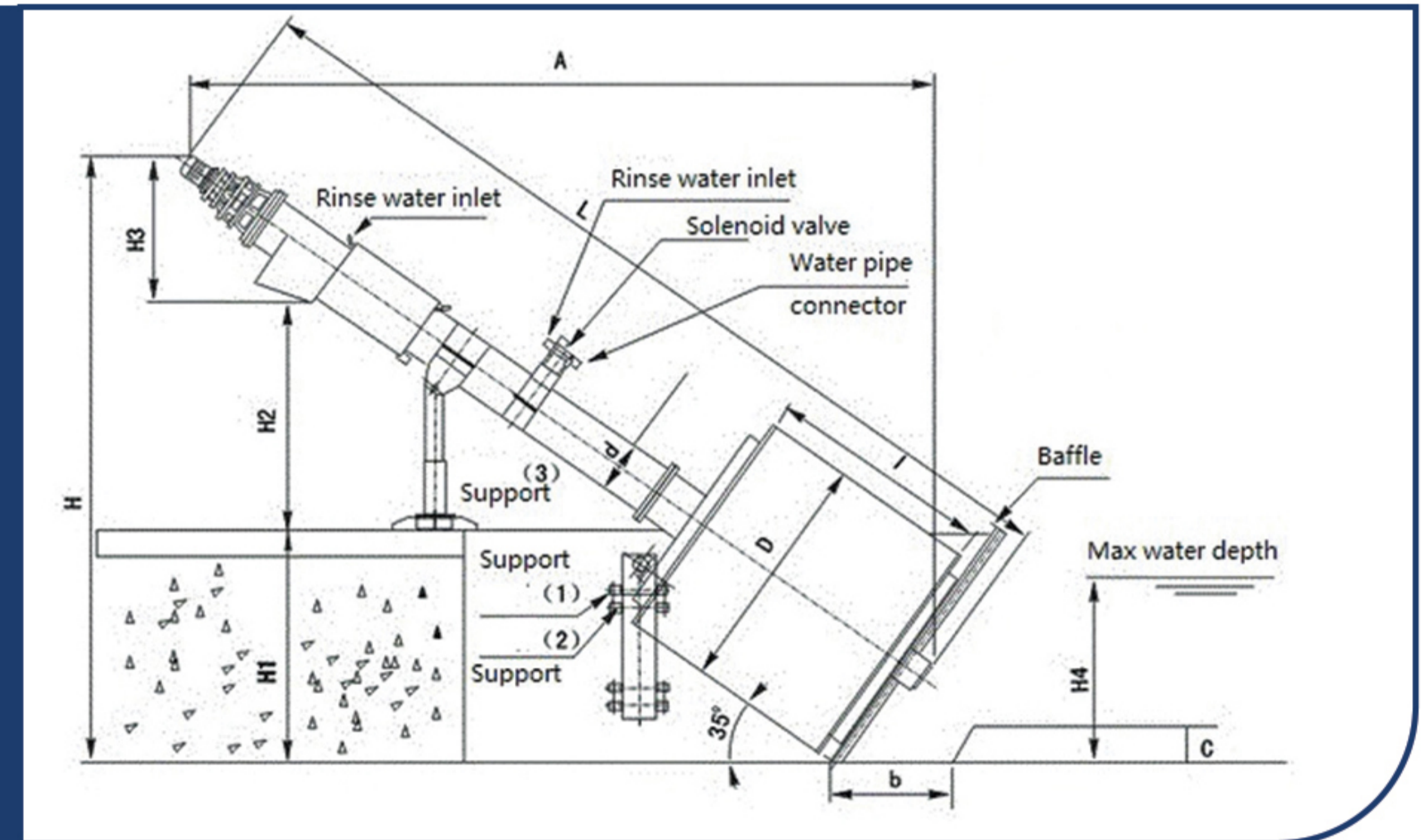


Working Principle

The Rotary Drum Filter Screen operates as a continuous mechanical separation system designed for wastewater pre-treatment.

Wastewater enters the inlet chamber and is evenly distributed across the rotating drum surface. As the drum rotates, liquid passes through the screen openings while suspended solids are retained on the inner or outer surface, depending on configuration.

Captured solids are transported along the drum by rotation and discharged via a screw or scraper mechanism. An automatic backwashing system continuously cleans the screen surface, preventing clogging and ensuring reliable operation.



Features

Standard Features

- Stainless steel construction (SS304/SS316) for corrosion resistance and long service life
- Integrated screening, washing, conveying and dewatering functions
- Chain-driven drum system for stable and efficient operation
- Automatic backwashing system for continuous self-cleaning
- Optimised flow distribution for uniform hydraulic loading
- Dual overflow protection to minimise splashing and improve hygiene
- Flexible installation options (channel-mounted or tank-installed)

Options & Accessories


- Screen type selection:
 - Wedge wire screen (0.5–6 mm)
 - Perforated plate (1–6 mm)
- Custom drum diameters (up to 3000 mm) for project-specific requirements
- Variable speed drive for process optimisation

Specifications and Parameters

Model	AQT-600	AQT-800	AQT-1000	AQT-1200	AQT-1400	AQT-1600	AQT-1800	AQT-2000		
Drum Diameter (mm)	600	800	1000	1200	1400	1600	1800	2000		
Drum Length l(mm)	500	620	700	800	1000	1150	1250	1350		
Transport Tube Diameter d(mm)	219	273	273	300	300	360	360	500		
Channel Width b(mm)	650	850	1050	1250	1450	1650	1850	2070		
Max Water Depth H4(mm)	350	450	540	620	750	860	960	1050		
Installation Angle	35°									
Channel Depth H1(mm)	600–3000									
Discharge Height H2(mm)	Customised									
Height H3(mm)	By reducer type									
Installation Length A(mm)	$A = H1 \times 1.43 - 0.48D$									
Total Length L(mm)	$L = H \times 1.743 - 0.75D$									
Flow Rate (m/s)	1.0									
Capacity (m³/h)	Mesh Size (mm)	0.5	80	135	235	315	450	585	745	920
		1	125	215	370	505	720	950	1205	1495
		2	190	330	555	765	1095	1440	1830	2260
		3	230	400	680	935	1340	1760	2235	2755
		4	235	430	720	1010	1440	2050	2700	3340
		5	250	465	795	1105	1575	2200	2935	3600

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