



Zeheng Environmental Technology Co. Ltd.

# SCSR Highly Efficient Biofilm Reactor

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### Project Demons



Shi-Li-Pu Station (150 tons/day)



Guo-Zhuang Station (75 tons/day)



Sun-He Station (150 tons/day)



Tong-Xing-Chun Station (150 tons/day)



Li Station (200 tons/day)



Wang Station (100 tons/day)



SCSR Testing Platform



Real-time Monitoring Platform

## SCSR Highly Efficient Biofilm Reactor

The SCSR integrated wastewater treatment system is designed for 24-hour continuous operation. However, the system includes an intelligent automation control cabinet, which allows for programmable, adaptive cycling of components such as pumps and blowers to optimize energy use and prolong equipment life.

Break Timing During Operation (Examples):  
The control system enables automated rest periods based on real-time operating conditions. For example:

- A pump may run for 2 hours, then pause for 10 minutes.
- A blower may run for 3 to 4 hours, then pause for 5 minutes.

These intervals are automatically run by the controlled system and can be fine-tuned depending on the actual site conditions. Importantly, the treated water output remains continuous throughout these cycles.

Backwashing Requirements:  
The system does not require manual backwashing as it does not use traditional filtration media. The only component that requires backwashing is the sand filter tank, which is equipped with an automated backwash mechanism. This function is triggered by pressure differential changes during filtration and adjusts itself automatically—no manual settings or intervention are needed.

Sludge Discharge Cycle:  
Sludge discharge frequency depends on the incoming water quality:

For higher COD or turbidity, the system may need to discharge sludge more frequently.

For cleaner influent, the intervals can be longer.  
Under normal conditions, sludge discharge is typically required 1–2 times per week. This, too, is best adjusted according to real-time onsite data to ensure optimal system performance and to avoid unnecessary wear or customer dissatisfaction due to rigid preset configurations.

SCSR Model	Treatment Capacity	Total Weight (kg)	Volume (L*W*H)	Total Power (kw)
SCSR-5	5 tons/day	~ 1800	2.31*1.92*2.26	0.415
SCSR-10	10 tons/day	~ 2900	4.12*1.72*2.52	0.7
SCSR-10 (w/ thermal layer)	10 tons/day	~ 3050	4.25*1.87*2.53	0.7
SCSR-20	20 tons/day	~ 2800	3.33*2.32*2.85	0.735
SCSR-30	30 tons/day	~ 4585	5.32*2.61*2.91	0.865
SCSR-30 (w/ thermal layer)	30 tons/day	~ 4735	5.42*2.71*2.91	0.865
SCSR-50	50 tons/day	~ 5985	7.11*2.82*3.12	1.02
SCSR-75	75 tons/day	~ 6300-6400	8.5*2.82*3.12	1.49
SCSR-100	100 tons/day	~ 7600-7800	10.13*2.88*3.05	2.535
SCSR-150	150 tons/day	~ 9285	13.82*2.82*3.12	3.315
SCSR-200 (Main SCSR)	200 tons/day	~ 8185	11.41*2.82*3.12	5.465