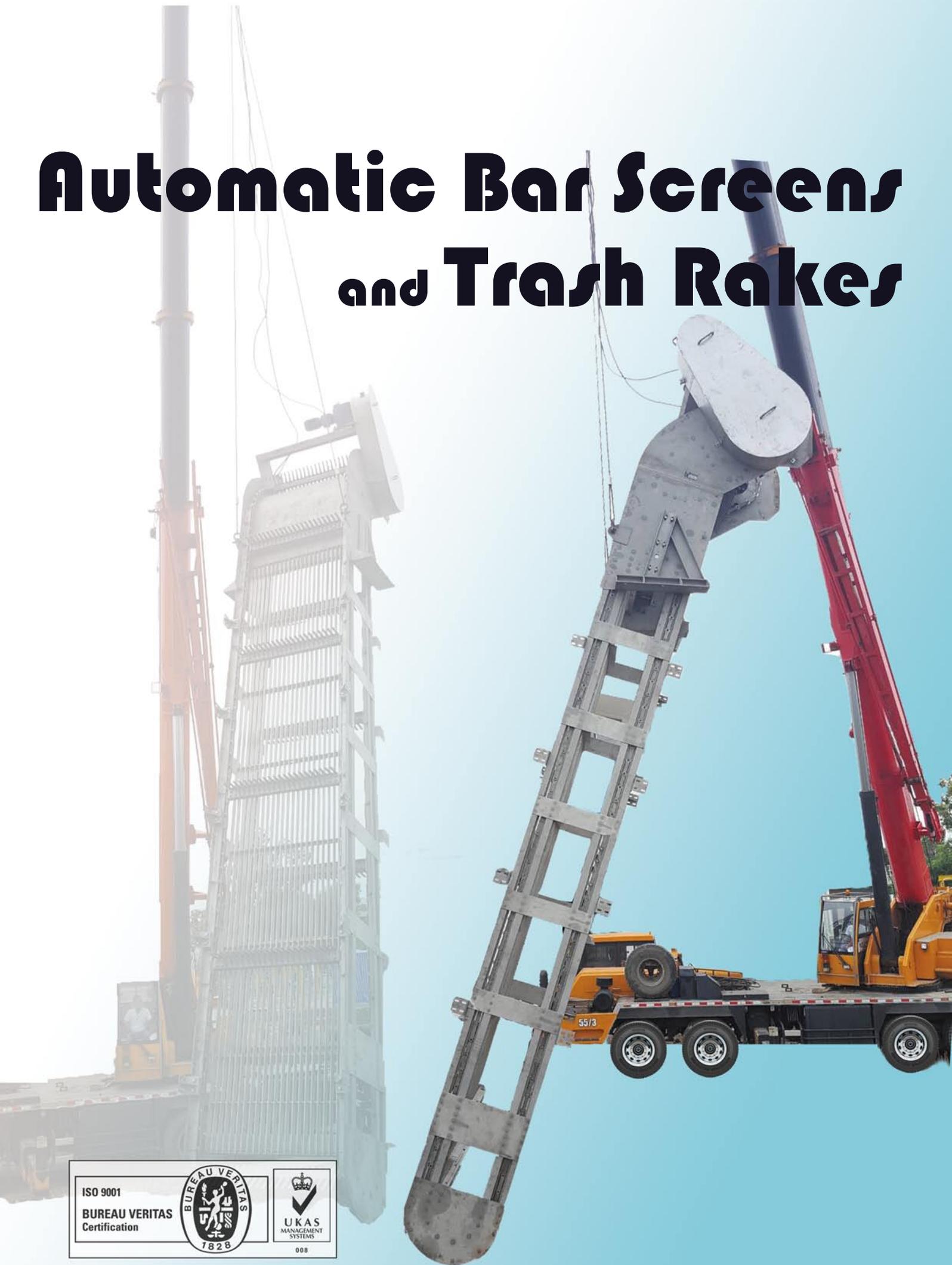


# Automatic Bar Screens and Trash Rakes



ISO 9001  
BUREAU VERITAS  
Certification



UKAS  
MANAGEMENT  
SYSTEMS  
008

# Automatic Bar Screens and Trash Rakes



## Design and function

The Automatic Bar Screens and Trash Rakes is ideal to be used in pumping stations, as first treatment stage of wastewater treatment plants or industrial plants, and in the inlet to power plants. The screen removes coarse and bulky material and therefore protects downstream systems.

The cleaning elements, attached to the chain system, can easily be adjusted to different requirements and remove even heavy objects and bulky material. As the cleaning rakes can be variably adapted, removal capacity is then adjustable. The benefit of high cleaning efficiency is especially favourable for high solids loads.

The installation height of the Automatic Bar Screens and Trash Rakes above ground level is very small and only dependent, even in case of deep channels, on the installation height of screenings transport or disposal units. Both ends of the cleaning rakes are connected to robust drive chains. Two

tracks, ensure true and smooth running of the rakes as they move upwards with the result of reliable intensive screen rack cleaning. Each chain is driven by a sprocket on a common shaft and a gear motor.

The rakes of the Automatic Bar Screens and Trash Rakes mesh with the screen rack bars at the bottom dead centre, at first with the back cleaned screen rack and then with the behind front cleaned screen rack. This operation principle avoids the accumulation of material in front of the screen and even extremely bulky objects are reliably removed by the screen rakes and transported upwards out of the channel.

The lower part of the Automatic Bar Screens and Trash Rakes consists in the steep conveying section followed by the upper part, the flat discharge section with a small inclination. This screen design guarantees the reliable discharge of screenings into a downstream transport or disposal system.

# Automatic Bar Screens and Trash Rakes

## The benefits of the Coarse Screen

- Innovative combination of a front cleaned and back cleaned screen rack in a single unit
- Reliable removal of bulky material with high operating reliability
- High capacity screen rakes
- Exact screen rake guidance for reliable cleaning of the front cleaned and back cleaned screen rack
- Compact L-shaped screen
- Easy to retrofit into existing channels
- Installation without channel recesses possible
- Simple and easy-to-access drive unit
- All parts in contact with medium (except the drive and bearings) are made of immersion pickled stainless steel.
- No additional consumables, such as service water, required for plant operation except electric current



# Rotary Screen Cleaner

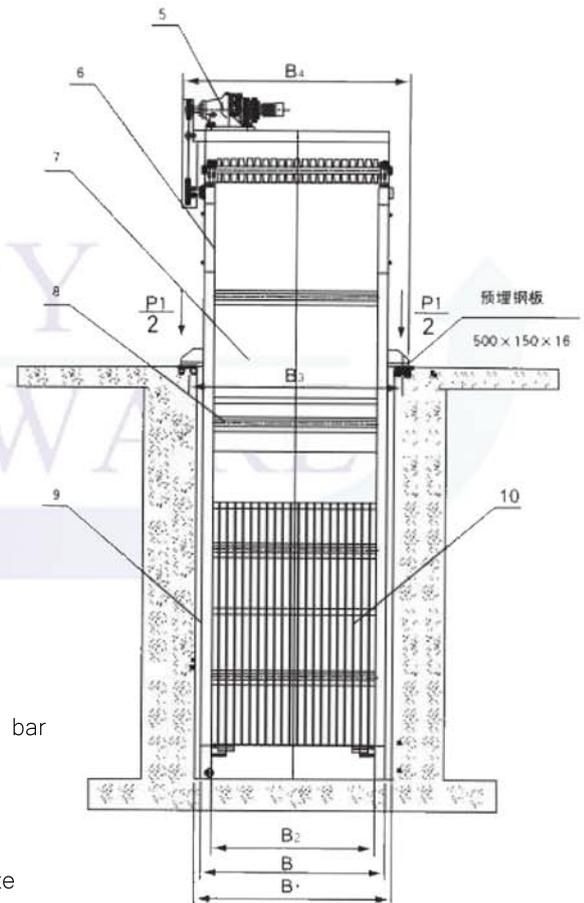
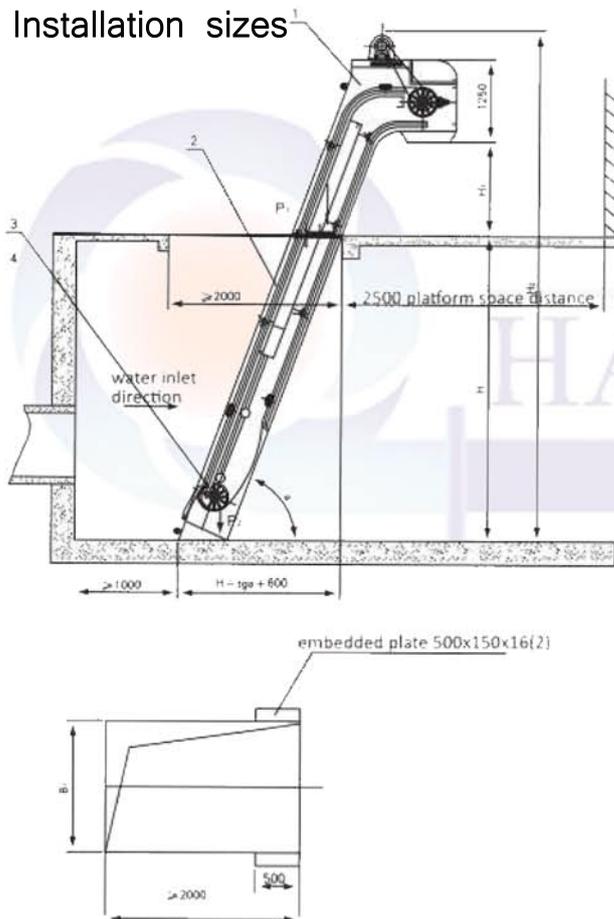
## 5 Main features

- \* The driving device is under the drive of cycloidal pin gear speed reducer or helical gear reducer, with low noise, neat structure & stable operation.
- \* The rake plate is of high precision and generous appearance, the space of rake plate is between 2.0 and 2.5m, an additional support plate is among them to effectively remove large residues.
- \* Integrated framework, with good rigidity and convenient installation and maintenance.
- \* Easy to operation, can be direct or remote controlled.
- \* Mechanical shearing bolt & over-current protection are set to ensure safe running.

## Water flow sheet

Model		HZ-800	HZ-1000	HZ-1200	HZ-1400	HZ-1600	HZ-1800	HZ-2000	HZ-2200	HZ-2400	HZ-2600	HZ-2800	HZ-3000
Parameters													
Water Depth H <sub>3</sub> (m)		2											
Flow Rate V'(m/s)		0.8											
Spacing b(mm)	20	0.57	0.76	0.94	1.12	1.30	1.48	1.66	1.84	2.03	2.21	2.39	2.57
	30	0.65	0.85	1.05	1.26	1.46	1.67	1.87	2.07	2.28	2.48	2.69	2.89
	40	0.69	0.91	1.12	1.34	1.56	1.78	2.00	2.21	2.43	2.65	2.87	3.08
	50	0.72	0.95	1.17	1.40	1.63	1.85	2.08	2.30	2.53	2.76	2.99	3.21
	60	0.74	0.97	1.21	1.44	1.67	1.90	2.14	2.37	2.60	2.84	3.07	3.30
	70	0.75	0.99	1.23	1.47	1.71	1.94	2.18	2.42	2.66	2.90	3.13	3.37
	80	0.77	1.01	1.25	1.49	1.73	1.98	2.22	2.46	2.70	2.94	3.18	3.43
	90	0.78	1.02	1.27	1.51	1.76	2.00	2.24	2.49	2.73	2.97	3.22	3.47
	100	0.78	1.03	1.28	1.53	1.77	2.02	2.27	2.51	2.76	3.01	3.26	3.50

## Installation sizes



1. pedestal
2. driving chain
3. guiding device
4. bottom flexible bar
5. driving device
6. manhole cover
7. slag baffle
8. rake tooth plate
9. side baffle
10. bars