

## Rotary Drum Screen

### Introduction

The technology of this equipment is called microfiltration. It is used to separate the micro suspended solid (paper fiber) out of the liquid to reach solid-liquid separation. Microfiltration is that the filter media has tiny space and intercepts the suspended solid by the filter drum's centrifugal force.

This equipment is designed to improve the current drum filter, easy to be clogged, easy to be damaged, high maintenance cost, and other problems.

It can be applied in any circumstance which needs solid-liquid separation, such as municipal sewage treatment, paper making wastewater treatment, printing and dyeing wastewater treatment, chemical wastewater treatment, etc. It is mainly applied in papermaking wastewater treatment.

### Working Principle

When the sewage water enters the overflow water distributor through the water inlet, it will stay awhile to steady the flow. Then it will flow out evenly through the water outlet and distribute on the filter screen, which is rotated in a contrary direction. The water flow and the inner screen generate relative shear movement. The solid will be separated and discharged from the other end of the screen, and the wastewater flows out from the effluent outlet at the bottom. The outside of the filter screen is configured with a washing pipe, ensuring the filter screen's filtering capacity.

### Main structure

The drum filter is a mechanical filtering device consisting of a driving device, overflow water distributor, washing water device, filter screen, base, and other parts. The filter screen is stainless steel wedge wire screen.



## Features and Advantages

1. Simple structure, stable operation, easy maintenance, and long using life.
2. High treatment capacity, high efficiency.
3. Generally, the recycling rate of waste fiber is more than 80%.
4. Easy installation, less space covering, low-speed operation, energy saving.
5. Continuously automatic process, the recycled fiber concentration can reach more than 12%.

## Model

Item	JXPR-5	JXPR-7	JXPR-9	JXPR-11	JXPR-14	JXPR-16	JXPR-26	JXPR-30
Filter area (m <sup>2</sup> )	5	7	9	11	14	16	26	30
Filter mesh (mesh)	60-250							
Filter capacity (T/H)	50-100	80-150	100-200	120-240	150-300	170-350	240-400	300-500
Rotary speed (r/min)	4-6							
Washing water power (Mpa)	0.3							
Motor power (KW)	1.1	1.1	1.5	2.2	3	4	4	7.5
Filter screen dia. (mm)	φ1250	φ1250	φ1250	φ1500	φ1500	φ1500	φ1500	φ1780
Filter screen length (mm)	1500	1800	2300	2370	2870	3370	6000	5500
SS removal rate (%)	70-85							
COD removal rate (%)	35-50							