

# Pressure Filtration Technology



**Rotary Drum Screen**  
External Inflow

# Rotary drum screen

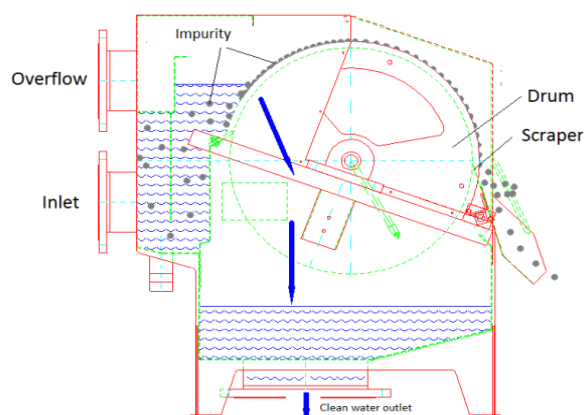
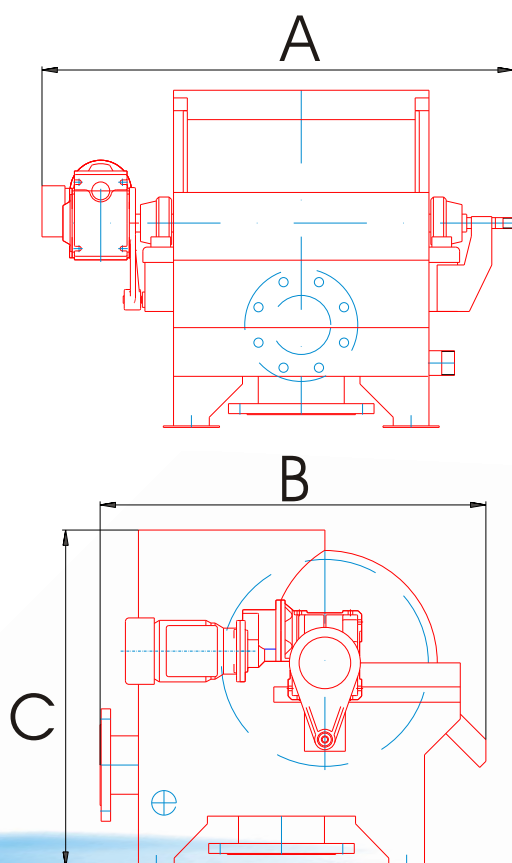
## external inflow

The rotary drum screen is a device working automatically designed for separation of solid particles from the suspension. High effectiveness of liquid's cleaning and ability for self-cleaning the slot screen supported by cleaning system are characteristic features of its operations.

### Operating specification:

The suspension flows into feed chamber from the top by nozzles and after reaching the adequate level, it washes on some area the rotating drum screen with bearings on both sides and powered by a geared motor. Liquid's stream, after separating of solid particles on the external surface of the drum, flows through the slots into its inside, and running outside cleans the slots from the reverse side. It gives a positive effect of self-cleaning of the rotary drum's slots.

### Dimensions and measurements



Solid particles, which adhere to the surface of the rotating drum, are being separated by a gathering knife and then they are carried outside the device by a chute. The purified liquid flows to the chamber's bottom of the rotary drum screen and then it is carried outside by nozzle. Additionally, it is possible to put inside the device the installation for screen's cleaning from the inside. The drive of the rotary drum screen, depending on needs, can be equipped with a two-gear motor enabling the operation at different capacity levels of the polluted liquid.

MODEL	DRUM'S DIMENSIONS [mm]		DIMENSIONS DIAMETER[mm]		
	Length		A	B	C
LB405x500	405	500	930	650	660
LB405x750		750	1180		
LB405x1000		1000	1430		
LB640X500	640	500	950	1180	1125
LB640X750		750	1200		
LB640X1000		1000	1450		
LB640X1250		1250	1700		
LB640X1500		1500	1980		
LB640X2000		2000	2480		
LB640X2500		2500	2980		
LB640X3000		3000	3480		
LB916x1250	916	1250	1750	1680	1650
LB916x1500		1500	2000		
LB916x2000		2000	2500		
LB916x2500		2500	3000		
LB916x3000		3000	3500		

## Design and equipment

The rotary drum screen consists of five basic components fabricated from suitable constructional materials. They are:

- ▶ stainless steel screen
- ▶ stainless steel
- ▶ connection flanges
- ▶ aluminum bearings' housing
- ▶ painted cast steel screen's cleaning system: stainless steel

Additional equipment depending on the device destination and work specificity:

- ▶ automatic steering system
- ▶ liquid level meter
- ▶ electromagnetic valve of the cleaning system
- ▶ cover with ventilation nozzle

The rotary drum can have the slot between 0,1 and 10 mm depending on required quality of filtration (purifying). Screen's material – stainless steel.

Slots and dimensions depend on the device's destination and a required capacity. The body is made of acid-resistant steel.

## Technical parameters

Type LB	Capacity [m³/h]	Slot [mm]				
		0,25	0,5	0,75	1,0	1,5
400x500		30	52	70	75	100
640x500		25	55	75	100	125
640x1000		54	120	130	160	220
916x2000		228	380	570	680	900
916x3000		350	620	870	1040	1390

Rotary drum screen's approximate capacities for water with pollution's contents not higher than 200 mg/l at given size of the slot.

We can offer specialist technical consulting and ready-made solutions for specific applications in the field of filtration and pollutions removing from various suspensions.

Please contact our sales department in order to choose a suitable device. The visit at our customer will allow us for detailed situation diagnosis and offering optimal solution.

## Application

Application the rotary drum screen is used successfully for many processes connected with the water, inter alia for:

- ▶ purifying of municipal sewage
- ▶ purifying of industrial sewage
- ▶ purifying of municipal water

Our rotary drum screens work in the following branches:

- ▶ sugar industry
- ▶ brewing industry
- ▶ meat and poultry industry
- ▶ processing industry of fruits and vegetables
- ▶ chemical and plastics industry
- ▶ cellulose and paper industry
- ▶ power industry



We kindly ask for possible detailed and readable fill with print of fields in the following form. Obtained information will allow us to realize the inquiry/order precisely as soon as possible.

(INQUIRY) / ORDER

Please e-mail or fax to:  
liskewr@pftechnology.eu  
Fax: +48 48 618-20-82

Subject: ..... Date: .....

#### Contact data

Company: .....  
Technical Person: ..... Trading Person: .....  
Address/Street: ..... Zip code: ..... City / Country: .....  
Tel/Fax: ..... E-mail / Website: .....

#### Basic information

Preferred device: ☐ Rotary drum screen with internal inflow ☐ Pressure filter  
☐ Rotary drum screen with external inflow ☐ Static screen

Filter's selectivity [mm] .....

Filtered medium: ..... Date of sending the sample to examinations : .....

Character of pollutions ..... Suspension on the inlet to the filter [mg/dm<sup>3</sup>]: .....

Cleaning system: ☐ Run by the operator ☐ Device's protection: ☐ No  
☐ Full automatic of steering ☐ Yes (Kind of protection) .....

Device using currently : ..... Selectivity of using device .....

Pump in installation : ☐ Not planned  
☐ Yes (parameters) .....

#### Description of the filtration's problem

#### Medium parameters and conditions of buildings

Flow capacity [m <sup>3</sup> /h]: Min: ..... Max: .....	Inlet : Diameter [mm]: ..... Kind of material: .....
Working pressure [BAR]: Min: ..... Max: .....	Outlet : Diameter [mm]: ..... Kind of material: .....
Working temperature [°C]: Min: ..... Max: .....	Ventilation pipeline: Diameter [mm]: ..... Kind of material: .....
Surrounding temperature [°C]: Min: ..... Max: .....	Overflow pipeline : Diameter [mm]: ..... Kind of material: .....

#### Constructional and exploitation requirements

Material of filtration insert: ☐ Carbon steel  
☐ Stainless steel  
☐ Other (kind of steel) .....

Material of filter housing: ☐ Carbon steel  
☐ Stainless steel  
☐ Other (kind of steel) .....

Date / authorized person's signature / company's stamp

\*I agree to teleaddress data processing for marketing and trading purposes.