RDS External Fed Drum Screen

Operation Instruction

WASTEX

1. Introduction 1.1 Description

RDS Drum Screen is the equipment that is continuous and effective screening suspended solids from wastewater. It is mainly in Wastewater and industrial pretreatment screening process. In some wastewater treatment, it is can be removed from 30 to 60% of organic or inorganic suspended solids. Through the equipment, it can greatly reduce the processing load on the following process.

1.2 The advantages

①.The equipment is not only inexpensive but also it can reduce the processing load of the wastewater substantially;

②.Stable and reliable, require less maintenance costs;

③.The fluid is suitable particularly for the wedge through the drumhead, clogging hardly occurs;

④.Good quality stainless steel, never corrosion;

⑤.Can automatic continuous operation and automatic unloading slag;

⑥.Adopts the design of drum filter has big filter area, therefore in the same capacity, compact structure, cover an area of small, less energy consumption;

⑦.Fully enclosed design, to prevent potential secondary pollution.

2. Main structure and working principle

The machine consists of a rotary drum grid, the drive mechanism, unloading mechanism, recoil piping, seal assembly, inspection door assembly, chassis and other components. The driving mechanism of the gear motor is Nord brand. Working principle: The wastewater (the raw water) cross the surface drum grid into it, and flows out from the bottom of the drum grid. Suspended solids in the wastewater is remained on the surface rotational drum, It turn with the surface rotational drum from influent to discharge end of the other side, the discharge mechanism shovel it.

3. Equipment installation and commissioning

3.1 Equipment installation

①.Equipment foundation should be strictly in accordance with the design requirements of size and level of degree. Otherwise it will affect the performance and life of equipment.

The levelness of the foundation : ≤3mm

② .Connecting the pipes on request, and prepare sealing and preservative treatment

③.Connecting the power on request, the machine turn counterclockwise from the influent to the discharge DO NOT REVERSE!

④ .Test all kinds of fasteners is loose or not, checking for loose fasteners; No mutual interference and stuck phenomenon between the main parts

⑤.Please lubricate all lubricating points correct.

⑥.No abnormal vibration and noise; No abnormal fever with motor and speed reducer.

3.2 Trial run

Check the installation and connection correct, Access to clean water, run equipment 10 minutes and review of the equipment. And then pass into wastewater. Take samples for laboratory test with the filtrate and the residue. After confirm compliance with engineering design requirements, to officially put into use.

4. Common faults and trouble-shooting

Faultconditions	Faultcauses	Treatmentmeasures
Motordoesnotrotate	Power supply is Abnormal: 1.Defaultphase; 2.Thermalrelay disconnected.	1.Terminal screws loose, contact pointcorrosiondisconnection maintenance; 2.Resetthermalrelay;
	Electric leakage poor insulation: 1.Water enter draw-in box; 2.Water immersion Internal motor.	1.Dry draw-in box; 2.Repairorreplacemotor；
	Abnormal motor reducer: 1.Bearing damage; 2.Gear wear,Damage.	1.Bearing replacement or full replacement; 2.Replace the gear
Theelectrical malfunctioning	Electrical connection failure or corrosion Electrical components burned;	Overhaul circuit and electrical components
Motor rotates, but the device does not rotate, power transmission components abnormal	Flat key is cut	Replace the flat key
The amount of processing is reduce	Drum grid is blocked	Open the solenoid valve and clean the surface drum; manually increase the motor speed;
The shaft does not rotate	The bearing wear,Sintering or damaged.	Replacethebearings

Abnormalnoise, distortion,etc. abnormal	1.Lubricating oil is too little; 2.Drum is stuck; 3.Motor reducer loose; 4.Scraping residue plate distortion;	1.Add or replace lubricating oil; 2.Adjust the relevant parts; 3.Tightening relevant connections 4.Replace the scraping residue board;

5. Operation and maintenance:

- The operator should carefully study this manual and < Motor reducer manual >, Strictly abide by the relevant matters;
- Orderofoperations:

  Starting up: Open Device → Check → Pass into the sewage

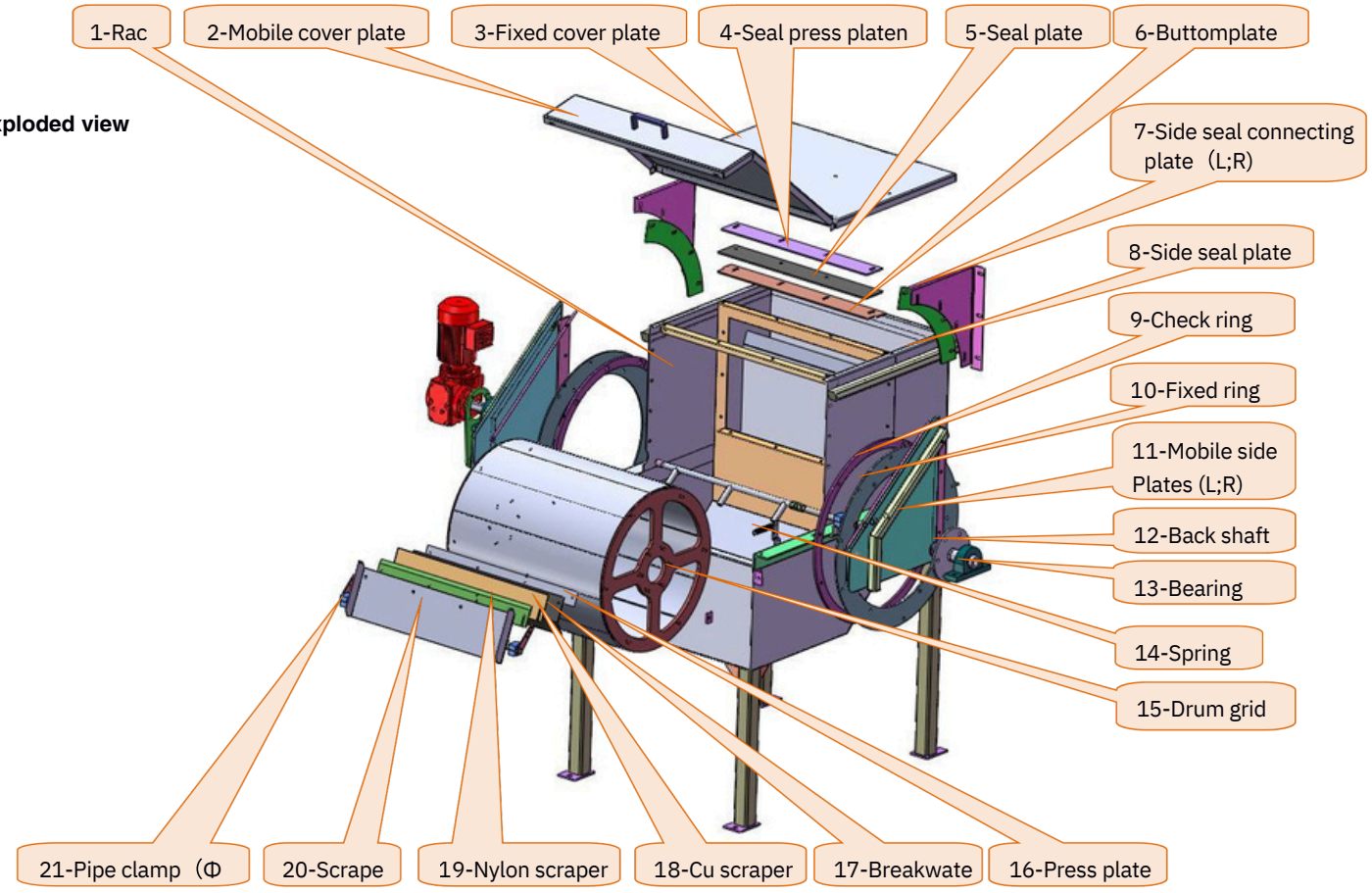
  Shutdown: Close sewage → Shut down the Device
- Once found the problem，in a timely manner to adjust the space between rotary drum side seal, drum seal and the skimming board with the rotary drum. After confirm compliance with engineering design requirements, Can be used normally.
- Must not arbitrary put rubbish or foreign bodies in equipment!
- Gear motor maintenance according to the manual
- In use process should be regularly check and clearing up the rubbish，Keep the equipment and the surrounding environment clean，At the same time to maintain normal ventilation, eliminate peculiar smell.
- It is not within the scope of repair whoever caused the problems by violation of the operation.
- Lubrication

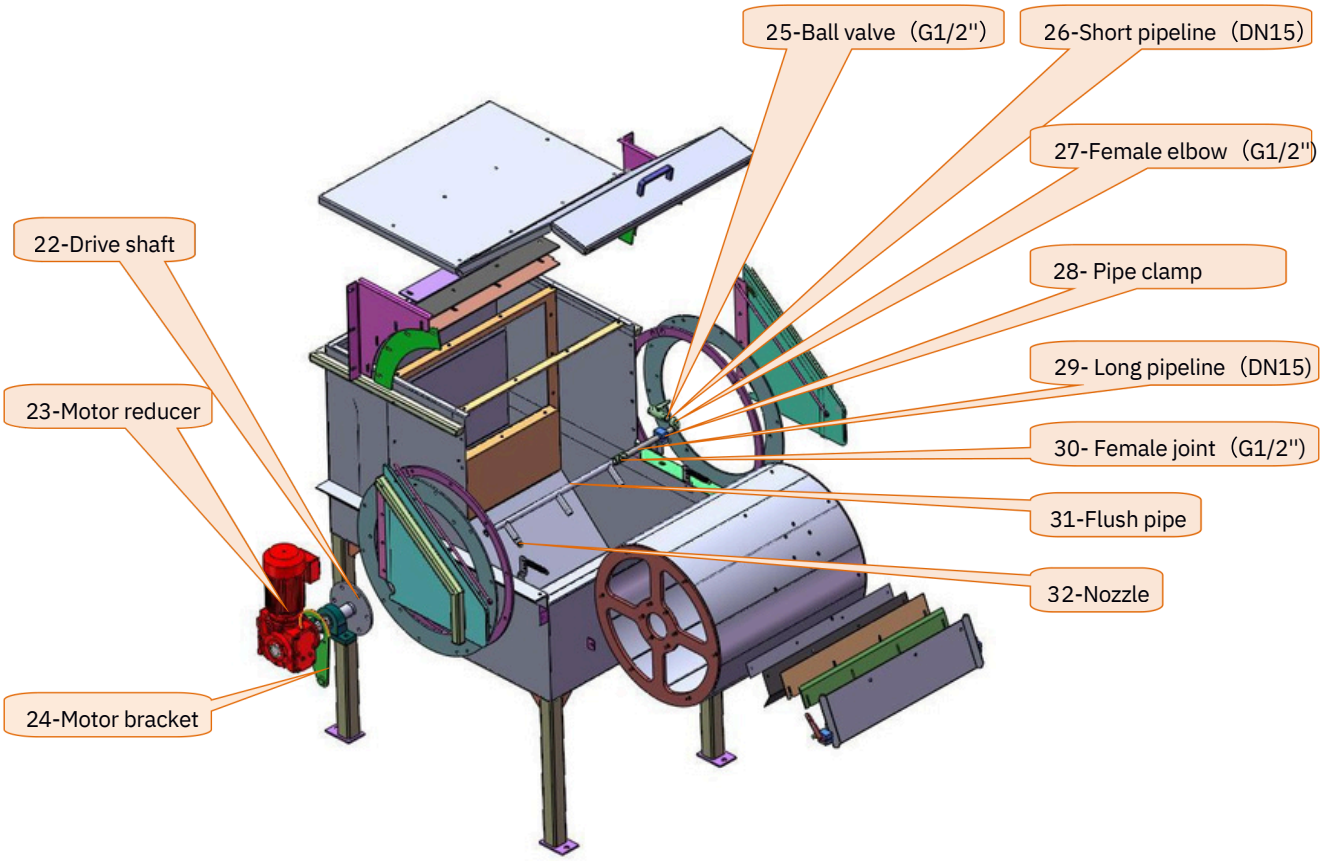
Lubricating point	Lubricate(change oil)cycle	Types of lubricating oil	Oilmass	Remark
Bearings	*6months*	Calcium-based grease	*10ml*	

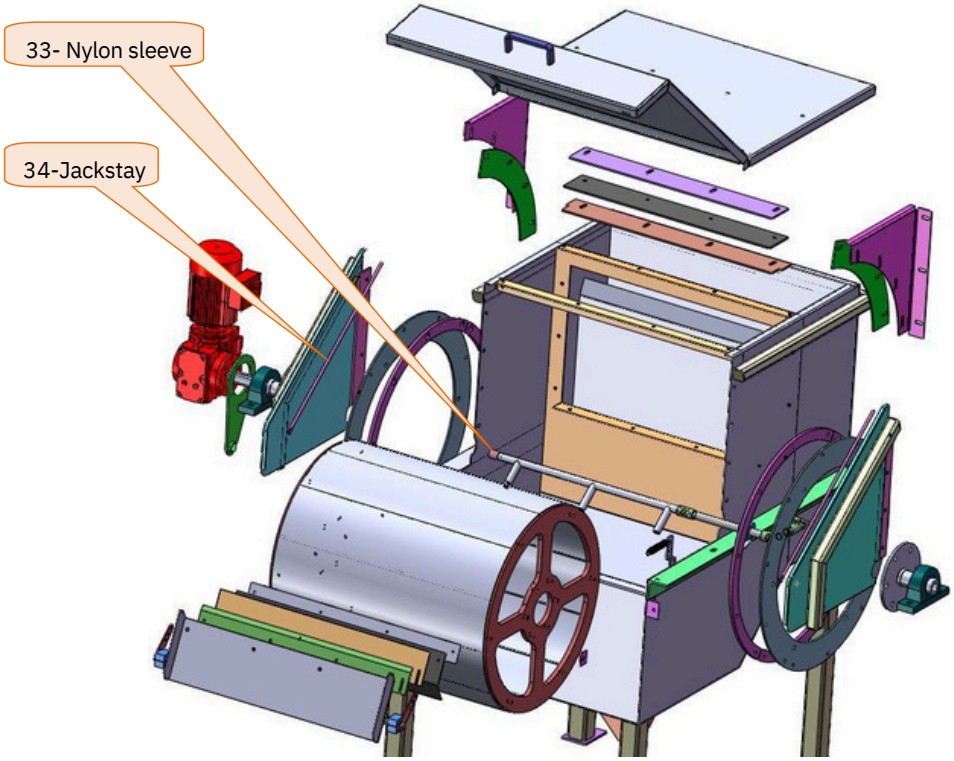
6. Wearing parts list

No.	Name	Qty.	Remark
1	Skimming board	1 piece	6 months
2	Side seal plate	2 pieces	12 months
3	Water seal plate	1 set	6~12 months

7. Exploded view




25-Ball valve（G1/2"）
26-Short pipeline（DN15）
27-Female elbow（G1/2"）
28- Pipe clamp
29- Long pipeline（DN15）
30- Female joint（G1/2"）
31-Flush pipe
32-Nozzle
22-Drive shaft
23-Motor reducer
24-Motor bracket


33- Nylon sleeve
34-Jackstay

Great Oriental Corporation Co., Ltd.
02 408 8661-2
062 665 9797 / 088 790 4383
061 175 4646

saleteam1@gotcorp.co.th
saleteam2@gotcorp.co.th
www.gotcorp.co.th
www.wastex.co.th