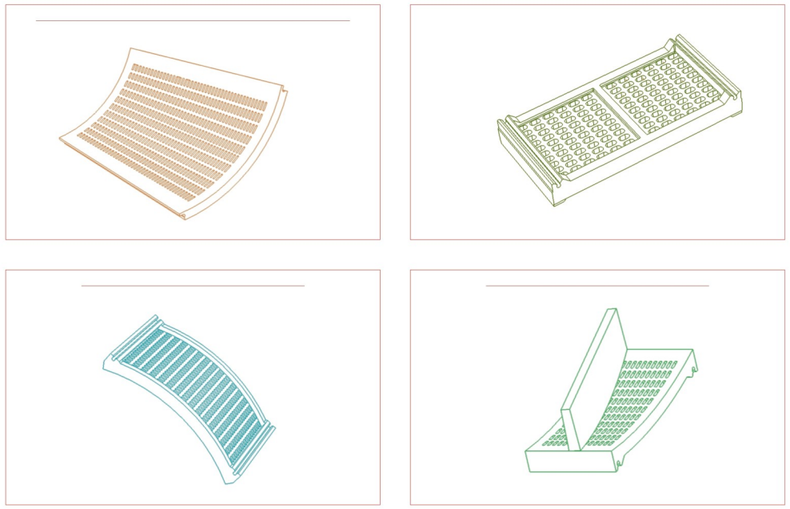
Features

Trommel screens manufactured by Naipu have combined characteristics of those trommels around the world with the technology uniquely developed by the Company, resulting in a product with features such as:

1. high screening efficiency, less blockage;
2. simple structure, less space demanded, easy installation and maintenance, no designated driver or power source needed.

shapes of holes in various sieves

staggered round holes	staggered hexagon holes	square holes	staggered square holes	rectangular holes staggered at bottom	rectangular holes staggered at sides	straightly-arranged rectangular holes
mostly applied and accurate, suitable for screen-separating of regularly-shaped particles square holes			when thicker screen wires are used, the precision rate drops due to high hole-opening rate and high throughput rectangular holes		it has the highest hole-opening rate, but has a poor precision rate, if used by shifting it by 90 degrees, the precision rate will be improved, owning to the long holes and the vibration of screen wires, blockage does not tend to occur long three-weft holes	
round	triangle	equilateral triangle	grizzly type	guide-track type	angled arrangement	loose rod arrangement
long service life, high precision, easy to be blocked; poor efficiency and low conveying capacity.	High precision, high efficiency, poor capacity in anti-blockage and conveying, and holes enlarged after wears.	Conveying capacity increases with the increasing of the height of rods, and the efficiency slightly drops when the rods become straight at both sides, and blockage gets worse.		Normally it is combined with a grizzly in order to protect the rods and reduce the wear.	It can be used on any horizontal screen so as to increase the conveying capacity.	It can reduce blockage, but has a poor precision rate.



Structure of Screen Panel

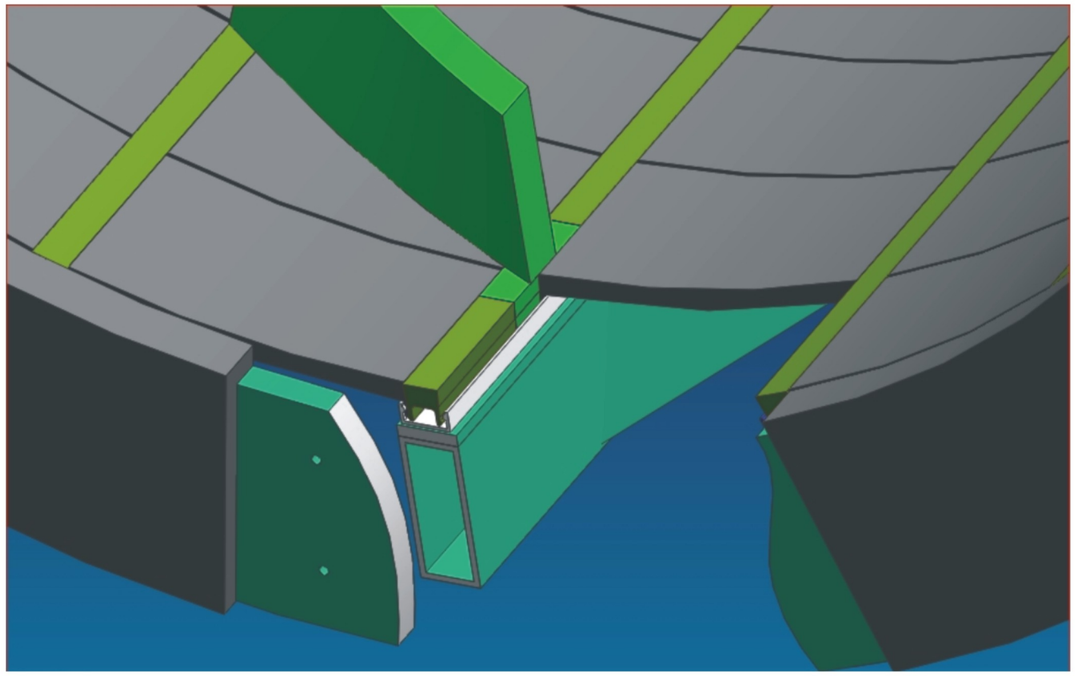


Illustration of Screen Panel Installation

3. Trommel screen panels and bafflers are made of high abrasion resistant rubber or polyurethane. Different apertures and shapes can be made on the panels according to clients' requirements. Materials and designs are optional per customer's requirements, with their service life lasts one year or two.
4. Screen panels are inlaid. No bolts are used, making the installation and disassembling easy and reliable. Frame bars are stainless steel made, requiring no replacement for a long time. It is a structure with the least frequency of screen panel replacement around the world at present.
5. Low maintenance cost.

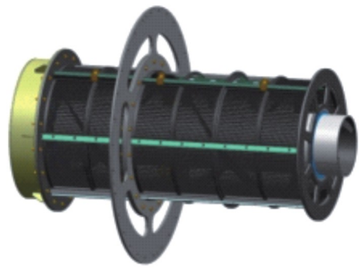
A Quick Reference List

Model of Grinder	Specification of Trommel	Client
Ø7.9x13.6m ball mill	Ø 3500x3605 мм	SINO Iron, WA, Australia
Ø7.32x10.68m ball mill	Ø 3000x3940 мм	Dashan Concentrator, JCC, China
Ø5.5x8.8m ball mill	Ø 3000x3605 мм	Vargem Grande, Vale, Brazil
Ø7.32x12.5m ball mill	Ø 2300x3741 мм	TaiSteel, Taiyuan, China
Ø9.15x5.03m SAG mil	Ø 3000x3605 мм	Mt. Wulugetu Mining Co., China Gold Group, China
lØ8.5x4.0m SAG mill	Ø 2300x3741 мм	Dongguashan Concentrator, Tongling Copper, China

Form of Structure

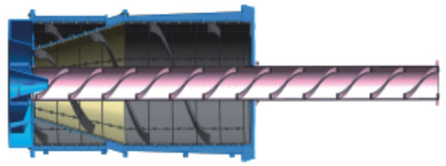
Rubber trommel screens consist of metal frames and rubber or polyurethane screen panels.

Naipu engineers rubber trommel screens with various structures suitable for ore dressing processing per clients' requirements.

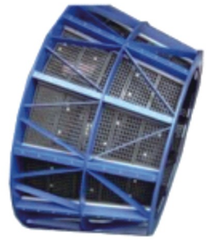


Pre-classifying Reverse Spiral Trommel

Cylindrical Trommel



Double-deck Mass and Size Classifying Trommel



Outer Circulating Conical Trommel

Application Instruction

1. Cylindrical trommels and outer circulating conical trommels are mainly used for mass classifying, coarse particle separation and scats removal at mill discharge ends, so as to improve hydrocyclone's classification efficiency and pump's service life.
2. A Pre-classifying Reverse Spiral Trommel is used at grate mill or AG mill discharge end for discharge classification so as to control feed size into the mill in the second stage and to meet the metallurgical requirements.
3. A Mass and Size Classifying Trommel can both remove scats and control feed size into the mill in the next stage, with middlings returned for regrinding.

Data Sheet for Trommel-attached Mill:

Different operators have different process conditions, operating parameters and targeted figures for mineral processing, so they may require trommels with certain parameters. Naipu is professional and may find an optimal solution to meet a client's process conditions, operating parameters and throughput.

The client is to provide his operating parameters as follows regarding his grinding mill (for details refer to Data Sheet for Trommel-attached Mill.

Data Sheet for Trommel-attached Mill

Name of grinding mill			
RPM		Material passing rate(tph)	
Throughput(tph)		Material Bulk Density (t/m^3)	
Screening sizing(mm)		Ore hardness	
Slurry density (%)		Screen service life required by client(month)	
Mating Measurements: (Discharge Trunnion, Discharge Cone Assembly)