

BEM **Shale Shaker**



 **Xi' an • China**

energy

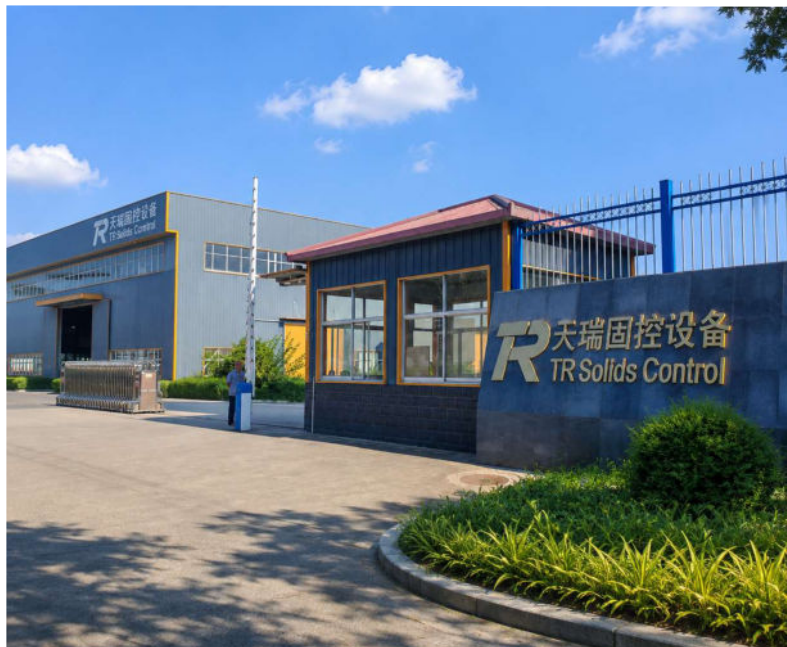


Q1

Registered
Manufacturer

About Us

- Established in December 2010, TR Solids Control is a professional manufacturer specializing in the R&D, production, sales and technical service of solids control equipment and mud recovery systems.
- Headquartered in Xi'an Economic and Technological Development Zone, the company covers an area of over 40 acres and employs 350-450 skilled professionals, including a dedicated R&D team of experienced engineers and technical experts.
- TR Solids Control has established a global presence, delivering reliable solutions to over 60 countries and regions across North America, South America, Europe, Asia, the Middle East and Africa.



About Us



Production Capacity

- Our company operates a modern manufacturing base covering a total area of approximately 35,000 square meters, including 22,000 square meters of standardized industrial workshops. We have established independent blanking, machining, welding, assembly, finished product inspection and warehousing & logistics centers, realizing a full-process closed-loop production system from raw material warehousing to finished product delivery.
- We have established a comprehensive quality control system, equipped with high-precision testing equipment such as coordinate measuring machines, ultrasonic flaw detectors, hardness testers and dynamic balance testing machines. All products are inspected in full accordance with international standards.

Company Qualification



BEM Shale Shaker

Introduction



- The balanced elliptical motion shale shaker combines the conveyance efficiency of linear motion with the screening precision of elliptical motion, widely used in primary solids control for oil, gas, and geothermal drilling. Its unique excitation mechanism generates a consistent elliptical path across the entire screen surface, balancing solids transport with fine particle separation.
- The vibration motor drives the screen box to produce elliptical motion: the long axis conveys cuttings toward discharge while the short axis drives perpendicular vibration, promoting liquid and fine particle penetration through the mesh — delivering screening performance superior to either pure linear or conventional elliptical shakers.



TRPS584 BEM Shale Shaker



BEM Shale Shaker

Operating Principle



- The balanced elliptical shaker is driven by two vibration motors through a precision transmission mechanism, generating fully parallel, phase-consistent elliptical motion across the entire screen surface. Unlike conventional elliptical shakers, this synchronized translation eliminates uneven separation caused by phase variation at different screen positions.
- The long-axis component continuously conveys solids toward the discharge end, while the short-axis component drives periodic perpendicular vibration, loosening and pushing fine particles and liquid phases through the mesh into the collection tank below. The combined motion delivers both high-efficiency cuttings discharge and superior screening in a single unit — equally suited for drilling fluid solids control and drill cuttings dewatering.



BEM Shale Shaker

• TRPS584 Series BEM Shale Shaker Features & Benefits

1

Dual-Effect Motion

Long-axis conveys solids; short-axis screens fines — combining linear efficiency with elliptical precision.

2

Uniform Full-Screen Separation

Fully parallel vibration eliminates localized variance, ensuring consistent screening across the screen surface.

3

Resists Blinding

Handles high-density, high-viscosity mud; continuous vibration prevents fine-mesh screen blinding.

4

Integrated Cuttings Drying

Adjustable angle and intensity enable effective dewatering, reducing waste volume for compliant disposal.

5

Flexible Parameter Adjustment

Vibration intensity and deck angle freely adjustable to suit varying mud and formation conditions.

6

High Liquid Recovery

Superior screening maximizes fluid recovery, reducing mud loss and overall solids control costs.

Applicable Conditions



Oil/Gas Drilling



Cuttings Drying

BEM Shale Shaker

Model	TRPS584
Vibration Motion	Balanced Elliptical
Motor Power	2.2kW + 1.0kW
Vibration Intensity	≤7.5G
Amplitude	6.0~7.2mm
Capacity	140m³/h
Adjustable Angle	-3°~+3°
Screen Size	585×1165mm
No. of Screens	4
Electrical	380V/50Hz , 460V/60Hz
Noise Level	<85dB
Explosion-Proof Standard	ExdIIBt4 / IEC EX / ATEX
Certifications	UL / ATEX / BV / IADC / JAS-ANZ / API
Overall Dimensions	2950×1950×1500mm
Theoretical Weight	1500kg
Note	Tested at mud density 1.2g/cm³, viscosity 45s, 60-mesh screen





Xi'an Tianrui Petroleum Machinery Equipment Co., Ltd., established in 2010, is a modern manufacturer of solids control equipment certified to both API Q1 and ISO 9001 standards.

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