

Double-Deck Shale Shaker



 **Xi' an • China**

energy

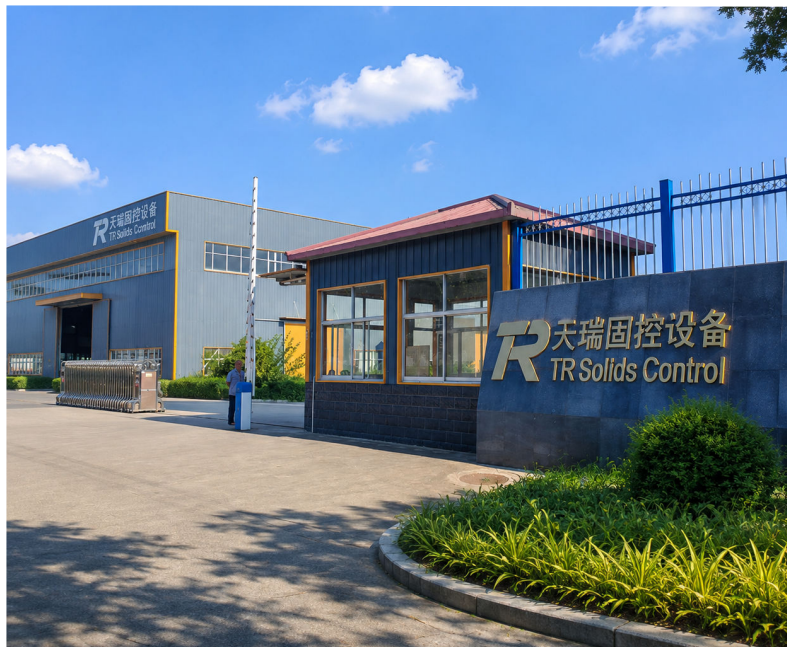


Q1

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



Double-Deck Shale Shaker

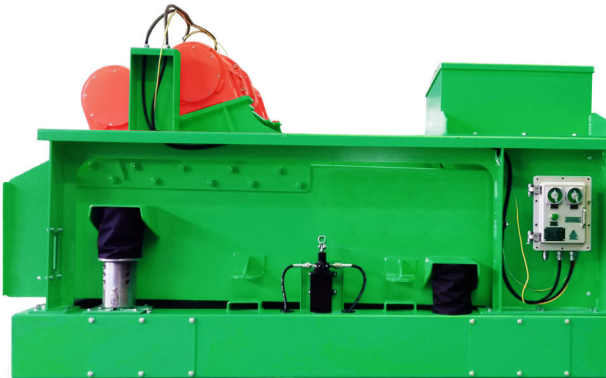
Introduction



- A dual-deck shaker uses two screen decks and multiple discharge outlets to split material into three size grades (coarse, medium, fine) in a single pass — doubling the throughput of standard single-deck units.
- Engineered by Tianrui Petroleum for drilling fluid solid-liquid separation. A coarse-over-fine deck layout separates coarse particles on top and fines below; a flow deflector and anti-impact baffle shield the lower ultra-fine screen from direct impact, extending screen life and capacity.
- 2 × 3.5 kW high-power vibrator motors
- 16 modular screen panels (¼ the size of conventional panels) — larger filtration area, lower replacement cost
- 6+ m² filtration area | up to 180 m³/h capacitySeparates solids from 15–425 microns
- Replaces shaker + desander — true 2-in-1 separation



Double-Deck Shale Shaker



Operating Principle

- Twin counter-rotating exciters generate continuous force that drives the screen box in a circular, linear, or elliptical trajectory. Frequency and amplitude adjust to material properties, keeping particles mobile across the screen. Symmetric damping springs isolate vibration and absorb shock, ensuring smooth operation with minimal load on the frame and foundation.
- Feed enters evenly at the top deck. Vibration carries material toward the discharge end: oversize particles roll and advance along the screen, exiting as coarse product, while undersized particles pass through to a diversion layer below. This layer evenly redistributes the material across the second deck's feed end, preventing buildup or uneven loading. On the lower deck, fine screening continues – mid-size particles are retained and discharged as medium product, while material passing through the bottom screen is collected as fine product.



Top Deck

Coarse Particles ($>$ top deck aperture) $\rightarrow$ Coarse outlet

$\downarrow$ Passes through screen



Diversion Layer

Passes through screen

Evenly distributes material that passed through the top deck onto the feed end of the lower deck



Lower Deck

Medium Particles ($>$ bottom deck aperture) $\rightarrow$ Medium outlet

$\downarrow$ Passes through screen
Fine Particles ($<$ bottom deck aperture) $\rightarrow$ Fine outlet

Double-Deck Shale Shaker

TRZS6316 Double-Deck Shale Shaker Features & Benefits

1

Large Dual-Deck Screen

6.2 m² screening area in under 3 m — max capacity, compact footprint.

Anti-Loosening Fasteners

Thread-locked bolts prevent vibration-induced loosening.

2

3

Hydraulic Angle Control

Fast, precise deck-angle adjustment for any material or condition.

Pneumatic Screen Clamp

Air-bladder tensioning — lock and release instantly, no tools needed.

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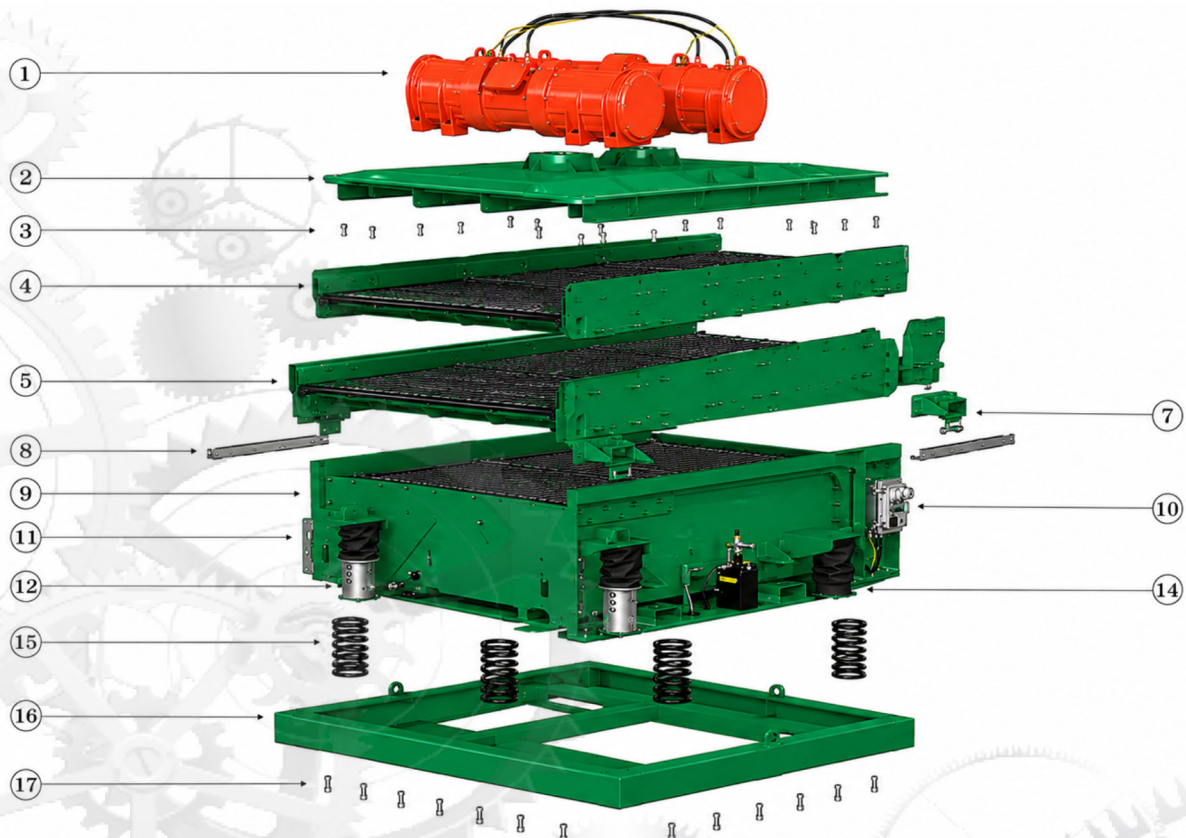
All-Around Splash Guard

Full-perimeter sealing keeps mud splash to a minimum.

Superior Unit Capacity

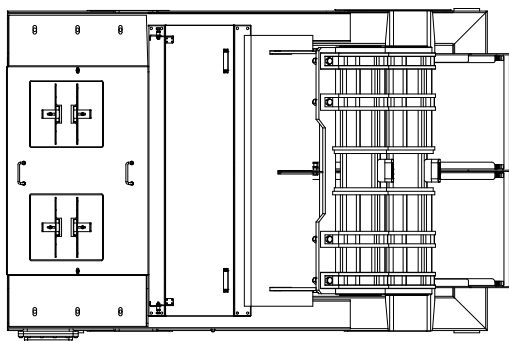
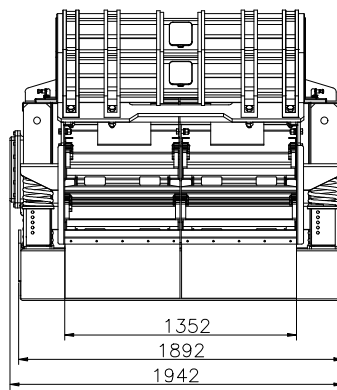
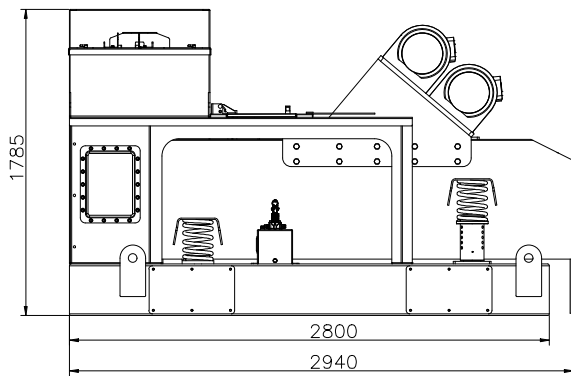
Large flow-through area maximizes liquid and solids throughput, compact frame.

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Double-Deck Shale Shaker

Model	TRZS6316
Vibration Trajectory	Translational ellipse
Motor Power	2×3.2Kw
Capacity	180m ³ /h
Exciting Force	80KN
Double Amplitude	≥7.2mm
Adjustment Angle	0° ~ +3°
Tilt Adjustment Method	Hydraulic
Throw Index	7.5g
Screen Panel Size	650*630mm
Number of Screens	16 panels
Screen Type	Modular frame screens
Screen Fixing Method	Integrated wedge-block clamping
Filtration Area	6.4m ²
Overall Dimensions	2940x1942x1785mm
Weight	3250kg



						Outline Drawing			Xi'an Tianrui Petroleum Machinery Equipment Co., Ltd.
Mark	Place No.	Change document No.	Sign	Y M D					
Designer			Standardization		Stage Marker	Weight	Proportion		6316 Shale Shaker
Proofreader							1:1		
Technology			Credits	Date					TRZS6316-00



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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