

Drilling Waste Management System



 **Xi'an • China**

energy



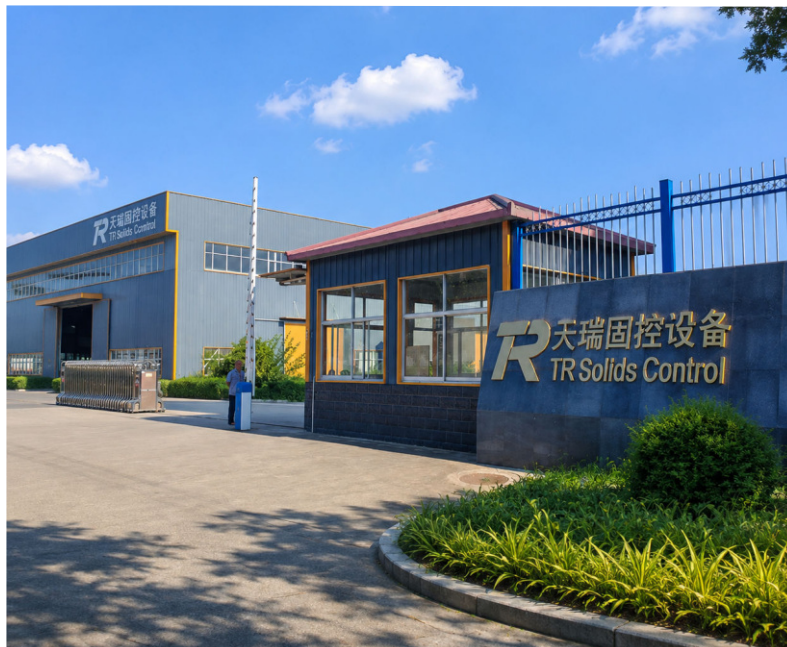
Q1

Registered
Manufacturer

Xi'an Tianrui Petroleum Machinery Equipment Co., Ltd.

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

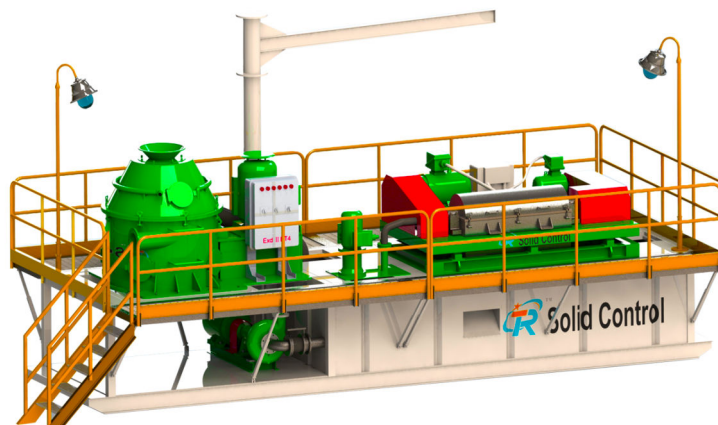


Oil Based Mud Treatment System

Introduction



- The TR Oil-Based Mud Treatment System is designed for the reduction, recycling, and environmentally compliant treatment of oil-based drilling waste. Widely used in oil & gas, shale gas, and CBM drilling, it combines efficient solid-liquid separation and thermal desorption technology to recover oil, water, and solids from waste drilling fluids and cuttings.
- The system typically includes cuttings conveyors, storage units, thermal desorption equipment, oil and gas recovery systems, exhaust gas treatment units, and an electrical control system. Standard and customized configurations are available for different drilling conditions and processing capacities.
- Featuring a modular design, intelligent control, and efficient thermal desorption, the system delivers high recovery efficiency, reliable operation, low maintenance, reduced disposal costs, and an efficient, environmentally friendly solution for oil-based drilling waste treatment.



Oil Based Mud Treatment System

Operating Principle

- The TR Oil-Based Mud Treatment System combines mechanical conveying, cuttings drying, centrifugal separation, and mud recovery to continuously treat oil-based drill cuttings and waste drilling fluids.
- Waste cuttings are conveyed to the cuttings dryer, where high-speed centrifugal force separates drilling fluid from the solids. The dried cuttings are collected for transportation and compliant disposal, while the recovered liquid is pumped to a high-speed variable-frequency decanter centrifuge to remove fine solids. The purified drilling fluid is returned to the mud circulation system for reuse, and the separated solids are collected for disposal.
- The system improves drilling fluid recovery, reduces residual oil on cuttings, lowers disposal costs, and provides an efficient, reliable, and environmentally friendly solution for oil-based mud treatment.



Oil Based Mud Treatment System

TR OBM Treatment System Features&Benefits

1

High Recovery Efficiency

Efficiently recovers drilling fluids and reduces fresh mud consumption.

Lower Residual Oil Content

Minimizes oil on cuttings, reducing waste volume and disposal costs.

2

3

Reliable Continuous Operation

Provides stable, continuous performance for long-term drilling operations.

Modular Design

Flexible configurations adapt to different drilling capacities and site conditions.

4

5

Intelligent Control

Automated operation with real-time monitoring for easy maintenance.

Eco-Friendly & Cost-Effective

Reduces waste, increases resource recovery, and lowers overall operating costs.

6

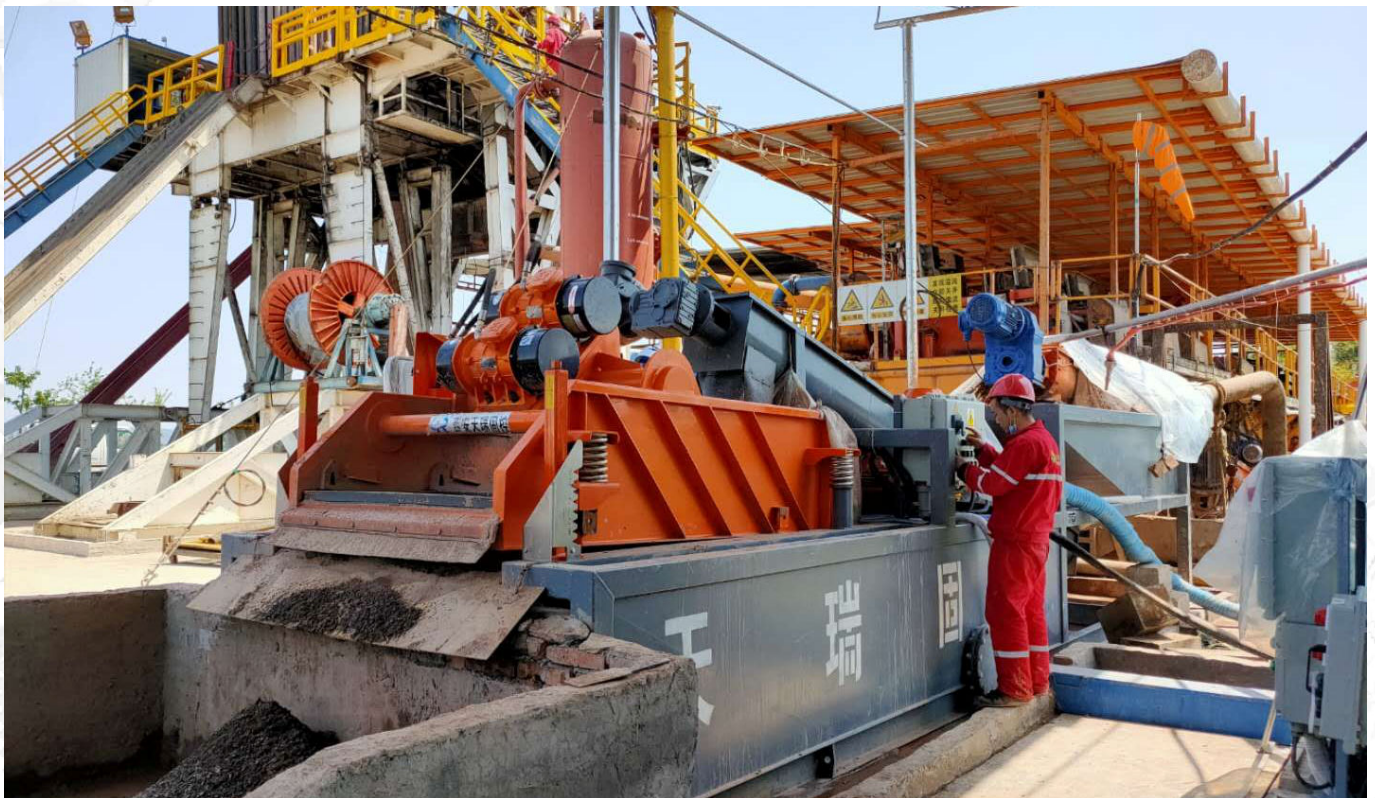
No.	Equipment	Qty.	Model
1	Vertical Cuttings Dryer	1 Set	TRCD930C
2	Screw Conveyor	1 Set	LS450-11
3	Screw Conveyor	1 Set	LS450-4
4	High-Speed Decanter Centrifuge	1 Set	TRLW355N-1
5	Centrifuge Feed Pump	1 Set	80YZ50-20B
6	Mud Tank	1 Set	9mx2.2mx1.3m

Water Based Mud Treatment System

Introduction



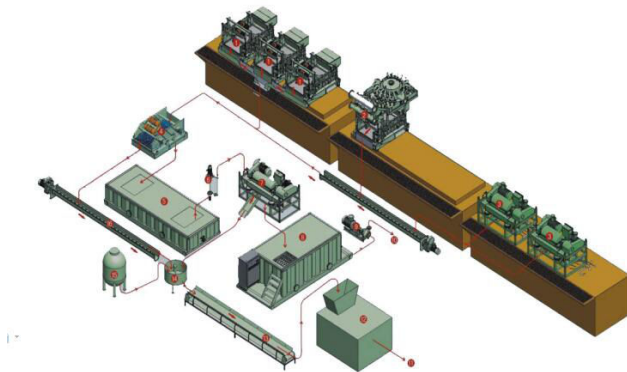
- The TR Water-Based Mud Treatment System is designed for the recycling and environmentally compliant treatment of water-based drilling waste. Widely used in oil & gas, shale gas, CBM, geothermal, and HDD drilling, it treats waste drilling fluids, cuttings, and sludge through efficient multi-stage solid-liquid separation, maximizing mud recovery and minimizing waste.
- The system includes shale shakers, conveying equipment, agitators, a chemical dosing unit, decanter centrifuges, slurry tanks, and an electrical control system. Standard and customized configurations are available for various applications.
- Featuring a modular design, high-efficiency separation technology, and intelligent control, the system delivers reliable operation, low maintenance, reduced disposal costs, improved mud recycling, and an efficient, environmentally friendly drilling waste management solution.



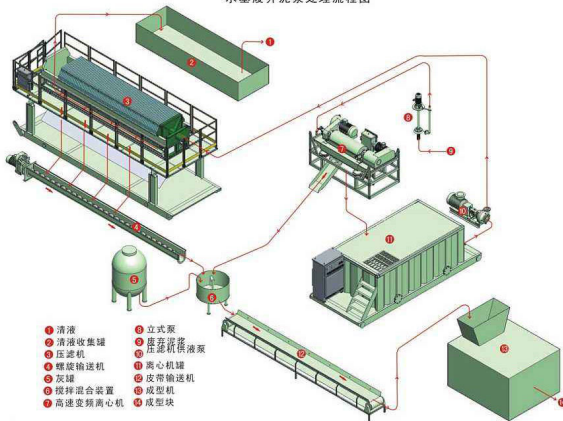
Water Based Mud Treatment System

Operating Principle

- The TR Water-Based Mud treatment System combines multi-stage solid-liquid separation, chemical conditioning, and mechanical dewatering to continuously treat waste water-based drilling mud. Waste mud is first collected and fed to the shale shaker, where coarse drill cuttings and large solids are removed. It then enters the conditioning tank, where flocculants and coagulants are automatically added to enhance solid-liquid separation.
- The conditioned slurry is processed by a decanter centrifuge or other high-efficiency separation equipment to produce low-moisture solids for collection, transportation, and disposal. The recovered liquid is either returned to the mud circulation system for reuse or sent to downstream treatment units, depending on site requirements.
- Waste mud is processed through mud collection, shale shaking, chemical conditioning, centrifugal dewatering, and solid-liquid separation, reducing waste volume, improving mud and water recovery, lowering transportation and disposal costs, and providing an efficient, reliable, and environmentally friendly drilling waste management solution.



水基废弃泥浆处理流程图



Water Based Mud Treatment System

TR WBM Treatment System Features&Benefits

1

High-Efficiency Waste Treatment
Multi-stage solid-liquid separation reduces waste volume and moisture for environmentally compliant disposal.

Resource Recovery
Recovers drilling fluids and water, maximizing recycling while reducing fresh mud consumption.

2

3

Automatic Chemical Dosing
Intelligent dosing improves separation efficiency and ensures stable treatment performance.

Modular Design
Flexible configurations adapt to different drilling capacities, site conditions, and environmental requirements.

4

5

Intelligent Control
Integrated control system enables automated operation, real-time monitoring, and reliable performance.

Lower Costs & Eco-Friendly
Reduces transportation, disposal, and treatment costs while supporting green drilling operations.

6

No.	Equipment	Model	Qty.	Function
1	Screw Conveyor	LS450-14	1 Set	Material Conveying
2	Drying Shaker	TRZS854	1 Set	Coarse Sscreening
3	Agitating Tank	9000×2100×1800mm	1 Set	Slurry Storage
4	Flocculation Tank	9000×2100×1800mm	1 Set	Slurry Flocculation
5	Mud Agitator	TRJBQZ11	6 Sets	Agitation
6	Chemical Dosing Unit	1000×1000×1100mm	1 Set	Chemical Dosing
7	Mud Agitator	TRJBQZ2.2	1 Set	Agitation
8	Filter Press Feed Pump	65ZJ	1 Set	Slurry Transfer
9	Filter Press	PXG250/1250	1 Set	Solid-Liquid Separation
10	Filtrate Collection Tank	8000×2350×2150mm	1 Set	Filtrate Storage



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.

Address: Baihualin Financial Innovation Center, Xi'an City, Shaanxi Province, China

Factory Address: No.2 Huochang Road, Yangling District, Xianyang City, Shaanxi Province, China

Website: www.xatrsy.com

Email: sales@trsolidscontrol.com

Phone: +86-029-86332919

Fax: +86-029-86332919

PO Box: 710016

