

# DRILLING MUDS SINO MUD GROUP CATALOGUE



# COMPANY OVERVIEW

SINO MUD GROUP is one of the leading manufacturer of drilling fluids in the world supplying the Oil & Gas drilling market, Mineral Exploration drilling, Geothermal Drilling, Water Well Drilling, Horizontal Directional Drilling (HDD) and Foundation Drilling industries.

SINOMUD GROUP specialises in supplying high quality superior drilling fluids to Australia, Southeast Asia, Middle East, Russia, Latin America, Southern Africa, Eastern Africa, West Africa, Europe with very good feedback performance through our manufacturing facilities in China.

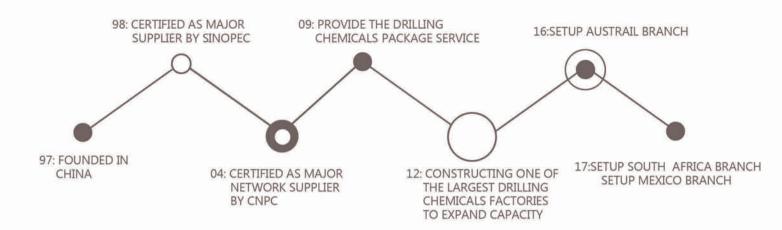








# COMPANY HISTORY



# Why Choose Us?

Research and Product Development in Australia.

Certified Manufacturing Facility in China.

Quality Certification: BV, INTERTEK, SGS, ISO

Powerful Drilling Fluids R&D with 12 Nation Patents.

High Quality, Internationally accepted drilling fluids.

Sound Global Sale Network

# QUALITY CERTIFICATION









































SINO MUD GROUP supplies successfully into the following industries;

Oil and Gas
Mineral Exploration
Geotech & CBM(Coalbed Methane)
Geothermal
HDD ( Horizontal Directional Drilling )/TBM
Water Well Drilling
Rotary Drilling
Foundation Drilling

SINO MUD GROUP has specialised drilling fluid products for each drilling market.

#### Oil and Gas



Oilfield drilling is the process of drilling a hole in the ground for the extraction of a natural resource natural gas and petroleum, for the injection of a fluid from surface to a subsurface reservoir or for subsurface formations evaluation or monitoring. Drilling for the exploration of the nature of the material underground (for instance in search of metallic ore) is best described as borehole drilling, or 'drilling'.

### Mineral Exploration



Mining drilling is the process of drilling a hole in the ground for the extraction of a natural resource gold, copper, iron and nickel, for the injection of a fluid from surface to a subsurface reservoir or for subsurface formations evaluation or monitoring. Drilling for the exploration of the nature of the material underground (for instance in search of metallic ore) is best described as borehole drilling, or 'drilling'.

### Geotech & CBM (Coalbed Methane)



Geotechnology is a specialist geotechnical and environmental practice offering technical expertise to a range of clients, including governmental organisations, consulting engineers, industrial corporations and commercial developers.

CBM (Coalbed methane ) is a method for extracting methane from a coal deposit.

#### Geothermal



Geothermal Well Drilling is the process of drilling a hole in the ground for the extraction of a natural resource (geothermal energy and geothermal hot water), for the injection of a fluid from surface to a subsurface reservoir or for subsurface formations evaluation or monitoring. It is special drilling technology and used to explore and develop geothermal energy. Geothermal energy is used in springs, reservoirs, electricity generation and geothermal heat pumps.

### HDD (Horizontal Directional Drilling)



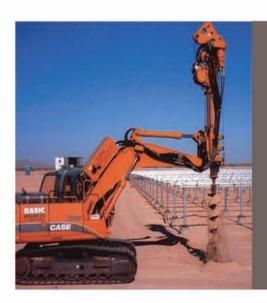
Horizontal Directional Drilling is a steerable trenchless method of installing underground pipes, conduits and cables in a shallow arc along a prescribed bore path by using a surface-launched drilling rig, with minimal impact on the surrounding area. Directional boring is used when trenching or excavating is not practical. It is suitable for a variety of soil conditions and jobs including road, landscape and river crossings.

### Water Well Drilling



Water Well Drilling is the process of drilling a hole in the ground for the extraction of underground water, for the injection of a fluid from surface to a subsurface reservoir or for subsurface formations evaluation or monitoring. It is a fast way to find water.

### Rotary Drilling



Rotary drilling is a construction process suitable for forming holes in building foundation projects. Widely used in municipal construction, highway bridges, high-rise buildings and other basic construction projects, with different drilling tools, adapted to the dry (short spiral), or wet (rotary bucket) and rock formation (core drill) holes.

# RECOMMENDED USAGE

### **Exploration Industry**

	Marsh Funnel Viscosity	Fluids Loss Rate		
10" 500m	50s-65s	Less than 15ml		
6" 500-1000m	50s-65s	Less than 13ml		
4" 1000-1500m	45s-55s	Less than 8ml		
	Mud Products Per 1000 Liter			
Sandstone	Shale	Unconsolidated Formation		
25-50 KG CX GEL 2-5 KG CX TROL 2-5 KG FIL 2-4 L Drill Lube 0.5-1KG POLYXCD	0-25 KG CX GEL 2-5 KG FIL 2-4 L Drill Lube 0.5-1 KG CHP OR 1-1.5KG SUPER POLY	12.5-25 KG CX GEL 1-1.5KG SUPER POLY 2-5 KG CX TROL 2-5 KG FIL 2-4 L Drill Lube 2-4 KG POLYXCD		

Remarks: This is only a rough guideline and please contact us to talk to our Technical Managers for further recommendations according to your ground conditions / rod and bit sizes and depths...

### **HDD Industry**

### Difficulty In Each Formation



- Bit Bailling
- Sticking and Swelling
- High Torque
- Tight Hole
- Reduce Viscosity



- Difficult to Move Cuttings
- Heavy Mud Loss
- Easily Collapse
- Stuck due to Gravel Sink
- Require High Flow Capacity



- Easily Collapse
- Little Sand Flow
- Stuck due to Sand Sink
- Mud Loss



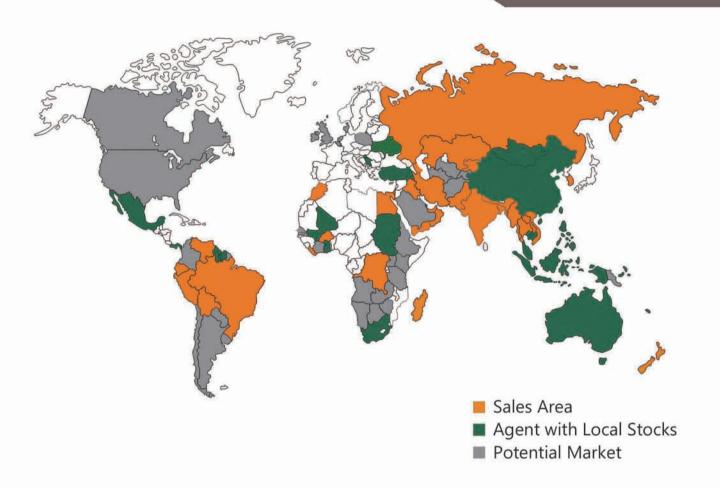
- Require High Flow Capacity
- Difficult to Move Cuttings
- High Torque

# RECOMMENDED USAGE-HDD INDUSTRY

### PER 1000 LITER WATER

	CLAY I	ORMATI	ON (M	larsh Viscosi	ty 35s-45s	5)	
CLAY		Swelling/Sticky Clay					
25KG SUPER GEL 0.25-1L SUPER POLY 0.25-0.5L THN			25KG SUPER GEL 1L-4 L SUPER POLY 0.5L-2L THN				
Add 1-5 L THN with w				que and reduce e pipe stuck due			etime with maximum
	SAND	FORMAT	TION (	Marsh Visco	sity 40s-5	5s)	
Fine Sand	(	Coarse Sand Fine Sand Water				oarse Sand Below Water Table	
40 KG SUPER GEL 0.25-1L SUPER POLY 1KG CX TROL	0.25	KG SUPER ( -1L SUPER   .KG CX TRO	POLY	50KG SUPER GEL 1-1.5KG CX TROL 0.5-1L SUPER POLY		1 1	0KG SUPER GEL -1.5KG CX TROL -1.5KG POLYXCD 5-1L SUPER POLY
Add 1 KG CX TROL for additional filtrate control Add 2-4 L of DRILL LUBE in high torque situations							
GRAVEL FORMATION (Marsh Viscosity 55s-70s)							
Gravel		Cobbl		e	Sand, Gravel, Clay Or Shal		el, Clay Or Shale
1-1.5KG CX TROL 1-:		50KG SUPER GEL 1.5KG CX TROL 1.5KG POLYXCD		50KG SUPER GEL 1-2L SUPER PLOY 1-1.5KG CX TROL 1-2L THN			
Add 1 KG of FIL to reduce loss of returns							
ROCK FORMATION (Marsh Viscosity 55s-70s)							
Solid Rock (Shale)		l Rock Shale)		ock/Clay Mixture	Rock/Sar Mixture		Fractured Rock
50 KG SUPER GEL 0.5-1L SUPER POLY		50-70 KG SUPER GEL		KG SUPER GEL SUPER PLOY	50KG SUPER 0.5-1L SUP POLY		50KG SUPER GEL 1-2KG POLYXCD 1-2L DRILL LUBE
Add 1KG POLYXCD for large diameter or longer bores  Add 2-4 L of DRILL LUBE in high torque situations  May use PLUG as the swelling LCM material							

# AGENT AND STOCK



#### Our Sale Network:

Australia: Australia

Asia: Mongolia, Malaysia, Philippines, Singapore, Indonesia

Africa: Burkina Faso, Mali, Ghana, Cote d'Ivoire, Sudan, South Africa

South America: Mexico, Panama, Guyana, Suriname

Europe: Turkey, Ukraine, Serbia

# PROJECT PORTFOLIO

#### IN AUSTRALIA (DIAMOND CORE DRILLING)







IN AFRICA (DIAMOND CORE DRILLING)









IN SOUTHEAST ASIA MALAYSIA (COALBED METHANE DRILLING)







IN MEXICO (WATER WELL DRILLING, GEOTHERMAL DRILLING)







# PRODUCT CROSS REFERENCE

PRODUCT CROSS REFERENCE					
PRODUCT NAME	SINO MUD	AMC			
VISCOSIFIERS	CX BEN /CX GEL/SUPER GEL	AUS BEN/AUS GEL/AUS GEL XTRA			
	SUPER POLY	LIQUI POL/EZEE MIX			
	CHP	CR650			
	CX TROL	AUS TROL/EZEE TROL			
	VIS	EZEE PAC R			
	POLYXCD	XAN BORE			
	CX BIOVIS	BIO VIS XTRA			
FILTRATE CONTROL AGENTS	FIL	EZEE PAC L			
	CPL	CR650 LV			
	PLV	LIQUI POL LV			
CLAV & CHALE STAPILISEDS	PSH	SHALEHIB ULTRA			
CLAY & SHALE STABILISERS	CORE FIX	COREWELL			
FOAMING AGENTS & DETERGENT	FOAM PLUS	SUPERFOAM			
FOAMING AGENTS & DETERGENT	CX-DET	AMC DET			
	PLUG	AUS PLUG			
LOST CIRCULATION MATERIAL	FT	STICK UP			
	SEAL	MAGMA FIBER			
	DRILL LUBE	BIT LUBE			
	SUPER LUBE	SUPERLUBE			
	CX LRG	LIQUID ROD GREASE			
LUBRICANTS & CUTTING OILS	LINSEED SOAP	TUBE LUBE			
	ROD GREASE	ROD GREASE EXTRA TACKY			
	THREAD GREASE	THREAD GREASE			
	COPPER THREAD GREASE	COPPER COUPOUND			
	HAMMER OIL	HAMMER OIL			
THINNER	THN	LIQUID-SPERSE			
	SAND CURE	SAND FIX			
SPECIALTY PRODUCTS & CHEMICALS	BENTONITE PELLETS	BENTONITE PELLETS			
	GYPSUM	GYP SET			
FLOCGULANTS & DISSESSANTS	SAPP	SAPP			
FLOCCULANTS & DISPERSANTS	CX WATER WELL CLEAN	WELLCLEAN			
CELIENT O COOLINETING LOCATOR	FOAM PLUG A & B	ECO GRIP A&B			
CEMENT & GROUNTING ADDITIVE	CEMENT	POLAND CEMENT			

### **♦ VISCOSIFIERS**



#### CX BEN

API standard sodium bentonite

Dosage: 50.0 to 75.0kgPackage: 25kg/bag



#### CX GEL

High yeild premium grade bentonite

• Firm mud cake

Good suspension

Dosage: 30.0 to 50.0kgPackage: 25kg/bag



#### SUPER GEL

• Ultra high yield 325-mesh bentonite with dry polymer inside

Dosage: 15.0 to 25.0kgPackage: 25kg/bag



#### **ANTI-SALT GEL**

A premium-grade salt resistant bentonite, can be used in saltwater systems

Dosage: 0 to 70.0kg/m³
Package: 25kg/bag



· Eliminate swelling, bit bailing and sticking, high lubricity

Controls sticky clays and inhibits water sensitive, swelling formations.

Provides excellent cuttings encapsulation

• Improves wellbore stability, enhances slurry rheological properties

Can be used as foam stabilizer to enhance half-life in foaming based drilling fluids.

Dosage: 0.5 to 5.0 liters/m³ Package: 25kg/drum



### CHP/CHP PLUS

- Super high viscosity
- · Easily mix, improve lubricity
- Prevent the swelling and dispersion of shale and clay
- Increase the core recovery rate
- Enhances removal of drill solids
- Can be used to viscosify clear-water and low-solids drilling fluids
- Dosage: 0.2 to 1.0 kg/m³ Package: 15kg/drum



#### **CX TROL**

- Disperses readily in water, even with low shear
- Effective in fresh, salt and brackish water-based drilling fluids
- Efficiently improves filtration control, effective at low concentrations
- Encapsulates shale particles to inhibit swelling and dispersion
- Functions over a wide range of salinity, hardness and pH levels
- Compatible with other drilling fluid additives, environmental
- Dosage: 0.5 to 3.0kg/m³

Package: 15kg/drum



#### **VIS**

- Prevent hole collapse with strong mud cake
- Rapid increase in viscosity
- Controls fluid loss, inhibits hydratable, swelling shale
- Environmentally compatible Does not require a bactericide
- · Extends life of foam or stiff foam in air drilling
- Dosage: 1.4 to 5.7 kg/m³

Package: 25kg/bag



#### **POLYXCD**

- •Max hole cleaning and suspension properties
- •Improve the lifting capacity with only small increase in viscosity
- Stabilizes unconsolidated formations
- Prevents surging and swabbing
- Minimizes the potential for formation damage
- Dosage: 1.0 to 3.0 kg/m³

Package: 15kg/drum



#### **CX BIOVIS**

- High Viscosity
- Helps disperses easily in fresh water mud, and brines
- Provides excellent suspension without the need for clays
- Minimizes the potential for formation damage
- Environmental friendly
- Dosage: 3.0 to 8.0kg/m³
   Package: 15kg/drum

### FILTRATE CONTROL AGENTS



#### HIPOLY (HTHP GEOTHERMAL FILTRATION AGENT)

- Excellent in reducing fluids loss under 240°C (464F)
- Reduces differential sticking tendencies
- Used in hash environments
- Improves thermal stability of whole mud system
- Works well at any salinity, non-fermenting
- Dosage: 5.0 -15.0kg/m³ Package: 25kg/bag



#### FIL

- Strong thin mud cake, highly dispersible
- Reduce the fluids loss with minimum viscosity increase
- Supplements the properties of a bentonite base drilling fluid
- Improves core recovery and penetration rates
- Dosage: 2.0 to 5.5kg/m³
   Package: 15kg/drum



#### CPL

- Strong cutting encapsulation for non-relative solids
- High lubricity reduces torque
- · Eliminate swelling bit bailing and sticking
- Easily disperses in freshwater
- Works well with CX-DET
- Dosage: 0.6 to 1.8kg/m³ Package: 15kg/drum



#### **PLV**

- Controls fluid loss
- Easy to handle and mixes well in low shear environments
- Extremely stable suspension provides reliable properties
- Freeze/thaw cycle does not affect stability or performance of the product
- Produces a thin, slick, tough filter cake, reduces clean-up time
- Liquid product for easily mixing and rapid yield
- Dosage: 5.0 to 10.0liter/m³
   Package: 25kg/drum

### CLAY & SHALE STABILISERS



### PSH (Amined based shale inhibitor)

- Eliminate swelling, bit bailing and sticking
- Excellent shale inhibition
- · Reduces torque and drag, maintains cuttings integrity
- Compatible with most water based systems
- Dosage: 5.0 to 30.0kg/m³ Package: 25kg/drum



#### CORE FIX

- Provides superior core protection and side wall stabilization
- Prevent loose soils and cutting from dispersion.
- Does not require additional components to enhance properties
- Effective in diamond coring and hole drilling activities.
- Dosage: 1.5 to 3.0kg/m³
   Package: 15kg/drum

### FOAMING AGENTS & DETERGENT FOAM PLUS



- Generates instant high foam quality of exceptional stability
- Improves hole cleaning and increases penetration rates
- Reduces erosion, reduces air requirements and allows deeper drilling
- Reduces the tendency of softer clays to stick together
- Improves hole cleaning and increases penetration rate
- Economical, produces stable foam at low concentrations
- Dosage:Air drilling: 0.1- 0.2kg/m³
   Mist Drilling: 1.0-2.0kg/m³
   Stiff foam drilling: Mix CHP, 1-2 kg/m³ or VIS, 2-4 kg/m³, FOAM PLUS, 10-15 L/m³
   Package: 25kg/drum



#### CX-DET

- Disperse the build up of drilled solids in the bit and diamond drill rods
- Clean the drill bits and prevent the bit bailing
- Reduce sticking tendencies and torque caused by swelling clay
- Improves penetration rates in clays and shale
- Dosage: 5.0 to 9.0liters/m³ Package: 25kg/drum

### LOST CIRCULATION MATERIAL



#### **PLUG**

- Seal large and fine fractures
- Extremely high expansion rate
- Excellent in low pressure environments
- Easy to drill out
- Compatible with most of drilling mud
- Dosage: 12.0 to 24.0kg/m³
   Package: 15kg/drum



#### FT

- Enables quick response to loss of circulation
- Effective in consolidates sands, gravels, fractured and cavernous vulgar formations
- Mixes easily with minimum shear in fresh water
- Compatible with other lost circulation materials, especially with seal
- High temperature and high pressure tolerant
- Dosage: 5.0 to 10.0liters/m³ Package: 25kg/drum



#### SEAL

- Easy to use
- Very economical
- Environmentally safe
- Acid soluble
- Compatible with most of mud chemicals and systems
- Dosage: 6.0 to 24.0kg/m³
   Package: 25kg/bag

### Lubricants & Cutting Oils



#### **DRILL LUBE**

- · Biodegradable vegetable oil based
- Reduce the friction and torque
- High lubricity
- Improve drilling speed and penetration rates
- Reduce drilling tool wear and extend the bit lifes
- Dosage: 10.0 to 25.0liters/m³
   Package: 25kg/drum



#### SUPER LUBE

- Low dosage
- Can be used in all types of water base drilling fluids
- Effective lubricant for torque and drag reduction
- Will not adversely affect mud properties, reduces bit and stabilizer balling
- Be compatible with common water-base fluid additives
- Thermally stable at temperatures up to 302 °F / 150°C
- Dosage: 3.0 to 8.0liters/m³
   Package: 25kg/drum



#### **CX LRG**

- Reduce vibration, torque and frictional drag
- Prevent corrosion and minimises stuck pipe
- Improves productivity, run length and core recovery
- Adheres to the rod under virtually any condition, increases drilling efficiencies
- Stable at high pressures and temperature
- Dosage: 1.0 to 2.0liter (hole depths 0-500m); 2.0 to 4.0liter (500-1500m);
   Min 5liter (Min 1500m) Package: 25liter/drum



#### LINSEED SOAP

- Facilitates longer coring runs in broken formations
- Good adhesion and lubricating properties
- Environmentally friendly contains no hydrocarbons
- Minimizes wear of the inner tube and core lifter
- Dosage: 5.0liters/m³ Package: 18kg/drum



#### ROD GREASE

- Suitable for severe rock drilling operations
- Variety of anti-seize application
- Improves productivity, increases drilling efficiencies
- Adheres to the rod under virtually any condition
- Excellent resistance to water washout
- Reduces rotational torque and vibration
- Dosage: 1.0 to 5.0kg for 100m Package: 17kg/drum



#### THREAD GREASE

- Suitable for severe rock drilling operations
- Protection against seizure caused by high temperatures and corrosion
- Excellent mechanical stability, resistance to water washout
- Effective in harsh acid, alkaline and salt conditions
- Package: 17kg/drum



#### COPPER THREAD GREASE

- A unique multi-purpose anti-seize compound to provide protection against corrosion
- Variety of anti-seize applications
- Excellent mechanical stability, excellent resistance to water washout
- Effective in harsh acid, alkaline and salt conditions
- Outstanding storage stability
- Package: 17kg/drum



### Hammer Oil / Hammer Oil with Molly

- Outstanding Anti-Wear protection
- Provide long term lubricity and corrosion protection, super adhesion
- Excellent thermal stability & oxidation resistance
- Superior protection against rust & corrosion
- Excellent water compatibility, resists fling-off and cracking
- Excellent extreme pressure lubrication
- Package: 18 liter/drum



#### **THINNER**



#### THN

- Prevents excessive viscosity development in bentonite
- Immediate thinning action
- More cost-effective than traditional thinners
- Reduces gel strength to drop out solids
- Thermally stable in excess of 177°C
- Reduce pumping costs
- Package: 25kg/drum

### ◆ SPECIALTY PRODUCTS & CHEMICALS



#### FOUNDATION POLYMER FP

- Readily dispersible and does not form "fish eyes"
- Act as water thickener, stabilization, anti-seepage, and anti cave-in. Soil stabilization
- Protect shafts from cave-in
- Helps prevent balling on the bit, stabilizers and bottom hole assembly
- Can be used to viscosify clear-water and low-solids drilling fluids
- Dosage: 0.5 to 1.5kg/m³ Package: 25kg/bag



#### SAND CURE

- Support hole stability and minimise associated problems
- Control fluid loss
- Improve drilling efficiency and recover rate
- Environmental and compatible with other WBM
- Used for drilling, especially for loose sands, cobbles and gravels
- Dosage: 2.0 to 4.0kg/m³ Package: 15kg/drum



#### BENTONITE PELLETS

- Is environmentally responsible
- Easy to use, do not need to require any mixing equipment
- Provide an impermeable flexible barrier
- Used for the sealing of water, monitoring and piezometer wells
- Dosage: added as hole condition

Package: 25kg/bag



#### **GYPSUM**

- Reduce drilling time while waiting for cement
- Avoid contamination and to wipe residue from the rods.
- Control setting time
- Easy mixing and pumping
- Cement in the surface shell
- Improve lost circulation condition
- Package: 25kg/bag



#### SODA ASH

- Soda Ash (Na2CO3) is the common name for sodium carbonate
- Used to precipitate Calcium in make-up water or while drilling anhydrite stringers.
- Removes calcium in most drilling fluids at small dosage
- · Effective flocculants for spud mud
- Increase pH
- Package: 25kg/bag

### FLOCCULANTS & DISPERSANTS



#### CX WATER WELL CLEAN

- · Quickly act in the muds
- Useful with low dosage
- •Remove the calcium and magnesium ions from hard water
- •Reduce the pH of the cement contaminated fluids
- •Used to clean the well after the well screens have been run and set
- Dosage: 3.0 to 5.0kg/m³
   Package: 15kg/drum



#### SAPP

- Used as a calcium scavenger and pH reducer
- Used to treat cement-contaminated mud
- Used as a low-cost, fast-acting dispersant in low-weight freshwater drilling fluids.
- Effective at low concentration levels
- Effective in controlling free calcium in low pH drilling fluids
- Utilized as a clay dispersant to reduce bit balling
- Package: 25kg/bag

### CEMENT & GROUNTING ADDITIVE

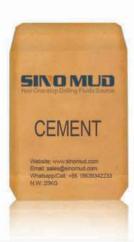






#### FOAM PLUG A&B

- Used for plugging cavities in thief zones
- Stabilize loose unconsolidated surface formations
- · Application for cementing in and sealing collar pipe
- Package: 1kg/tin



#### CEMENT

- Used in construction projects and concrete product applications
- With sulfate resisting properties
- Commonly used for foundation and grouts and other applications
- Reduces the possibility of expansive products forming
- Package: 25kg/bag

Remarks: This is only a guideline so please talk to one of our Mud Specialist for further information

# TEST EQUIPMENT



#### Marsh Funnel Viscometer

Marsh funnel is an apparatus used to measure the viscosity of drilling fluids for daily. Adopting the API standard, determine the viscosity of drilling fluids with the time required for a given volume of drilling fluids pouring out from the funnel.



#### Sand Content Kit

Sand content kit is a simple and reliable apparatus for measuring sand content of drilling fluids effectively and accurately. The method that screen decomposes is used to decide the content of sand.



#### Mud Balance

Mud Balance is mainly used to measure the density of drilling fluids and other fluids. It has been widely applied in the oil fields, geological exploration and laboratories for analysis and measurements of fluid density.



#### **API Filter Press**

API Filter Press can measure fluid loss under certain pressure and in a period of time. It also can measure mud cake thickness.



#### Six Speed Viscometer

The six-speed rotary viscometer can be used to measure various parameters, plot the rheological curves according to the measured values for multi-points, determine the flow pattern of fluids in the process of flowing, choose suitable calculated equations and analyze the rheological parameters of in-situ drilling fluids.



#### pH Test Paper

The pH test paper can be used to test pH

# PRODUCT PACKAGE

# ◆ 15kg/drum









# 25kg/drum









# ♦ 55gal/drum







# PRODUCT PACKAGE

# 25kg/bag









### Jumbo bag









### ◆ 1000L/IBC TANK









#### **HEAD OFFICE**

35 IVOR PLACE LOWER GROUND, LONDON, ENGLAND SALES@SINOMUD.COM WWW.SINOMUD.COM

#### **AUSTRALIA BRANCH**

SALES@SINOMUD.COM

#### **MEXICO BRANCH**

SALES@SINOMUD.COM

#### **SOUTH AFRICA BRANCH**

SALES@SINOMUD.COM

#### TRADING COMPANY

HONG KONG DRILLING CHEMICALS TRADING LIMITED HOLLYWOOD PLAZA,610, NATHAN ROAD, KOWLOON, HK SALES@SINOMUD.COM

#### **FACTORIES**

SINO MUD GROUP PUDONG INDUSTRIAL ZONE, HENAN PROVINCE, P.R.C SALES@SINOMUD.COM











