

DRILLING DOWN THE COST PER METRE

THE GTD BROCHURE SPRING 2022

DRILLING DOWN THE COST PER METRE SCAN OR CODE TO ACCESS THE

SCAN QR CODE TO ACCESS THE MOST UP TO DATE ONLINE BROCHURE





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GTD GROUP 2022

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GROWTH OPPORTUNITIES IN GROUND SOURCE DRILLING

LOOKING TO IMPROVE, EXPAND OR SET UP A NEW GROUND SOURCE DRILLING OPERATION?

The demand for Ground Source Heating and Cooling (GSHC) drilling specialists is growing exponentially. Sources indicate that the sector is currently operating at under 1% of the potential market share.

Local and International Government Net Zero Carbon targets, combined with significant legislation changes, are creating expansion opportunities and accelerating demand way beyond the capacity of the current number of operational rigs.

GD

There is a seismic shift in the climate conscience of the public, planners and politicians. Ground Source drilling is on the right side of the argument and will continue to grow traction as the cleanest, greenest and most sustainable energy source for 'Climate Control' in every sense of the word! (Greta you can borrow that line if you fancy!)



GTD'S EQUIPMENT IS DESIGNED SPECIFICALLY FOR THE GROUND SOURCE DRILLING INDUSTRY ALLOWING THE HIGHEST OPERATIONAL EFFICIENCY

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Projects are getting bigger and boreholes are getting deeper, with this in mind each component you'll find in this brochure has been carefully considered, designed and developed to reduce strain on your equipment and your personnel whilst increasing productivity.

One of the most significant barriers to ground source systems has historically been the cost of installation. Let's be honest; it still is - but doesn't have to be! GTD can drill down the cost per metre for ground source operations, improving profits, scalability and competitive opportunities.

Whether you are an established business wanting to expand your capabilities, capacity and productivity or looking to explore the prospect of a new start-up operation, GTD is here to help you with access to a complete ecosystem of equipment, supplies and support.

WHY BUY GTD EQUIPMENT?

GTD equipment is designed & engineered by geothermal ground source drillers and engineers specifically for the industry.

Each individual component has been specified to work together as a complete balanced drilling system, finetuned for optimum drilling potential - after all productivity is king.

GTD can help you achieve the most metres possible in every hour of the 256 working days we have in the UK.

WHO ARE GTD?

GTD are unique as we are dedicated manufacturers & suppliers of ground source drilling equipment, but also operators who have a vast experience in UK & European ground source drilling as well as more recent operations in North America, Africa & Asia. We understand the balance required between cost and capability, to ensure that you have the right equipment ...at the right price ...right now.

GTD PROVIDE:

- Complete turn key drilling packages
- Training and development
- Operating procedures and operational assistance
- Access to large scale contracts
- Access to loan equipment pool (compressors etc.)
- Supervision and management support
- Service and maintenance
- National and regional advertising & promotion

GTD DRILL RIGS





GTD6500R DRILL RIG

GTD6500R DRILL RIG

The GTD6500R has been designed and engineered specifically for geothermal drilling & complex geology. Suitable for both domestic and commercial drilling. It can drill beyond 400m and can perform mud, air and hammer drilling.

The unique built-in rod rack and automated handling system performs safely and efficiently, increasing productivity whilst reducing manual handling and risk of injury. It comes complete with 240m rods (BR50 thread, 6m long with 10mm wall thickness and extra-long tool joints). The increased rod length and internal diameter vastly reduce wear and tear on the rig and ancillaries whilst increasing productivity.

It is fitted with the powerful, world-renowned Doosan DL08 engine, producing a 292 BHP! This is one powerful rig, and is capable of supplying the mud pump and auxiliary pit pump without compromising the drilling capability.

It comes complete with a triplex piston pump & dual Caprari centrifugal mud pump capable of drilling down beyond 200m, lifting heavy London clays with ease. (Optional duplex piston pump for drilling beyond 200m)



- 292 BHP (TIER 4)
- 16 TON PULL BACK
- 6 TON PUSH DOWN
- TRIPLE CLAMPS
- 40 X 6.0M RODS
- AUTOMATED ROD HANDLING
- DUAL MUD PUMP
- TRIPLEX PISTON MIST PUMP
- WIRELESS REMOTE CONTROL
- WINCH
- WIRELINE
- BREAKOUT CHAIN WRENCH
- HYDRAULIC ROD SPANNER
- SAFETY CAGE
- WELDER / 7.5KW GENERATOR

GTD6500R DRILL RIG

VHY GTD DRILLING RIG?

The answer is simple... productivity!

Quite literally, our rigs drill down your cost per metre, both in purchase price and increased productivity. How? By outperforming other manufactures currently used in the ground source industry. A bold statement, but one that is backed up by fact and experience*.

These rigs hold the record for the most metres drilled, in the UK and Europe, both on a single day and over the course of a year. The long rod length, automated handling system and powerful engine means they are fast and capable. It is purposefully designed to simplify its operation, maintenance and fixes. The net result is less downtime and higher productivity.

* DON'T BASE YOUR DECISION ON SPECS ALONE, COME & SEE THE RIG IN ACTION...

CALL NOW +44 (0) 1580 388792

SEE A BRIEF WALK AROUND VIDEO OF THE GTD6500R RIG FRESH OFF THE PRODUCTION LINE. SCAN QR CODE OR VISIT WWW.GTDGROUP.CO.UK/GTD6500R



IMENSIONS & WEIG	нт		
ength-transport		12.5M	
/idth		2.5M	
eight-transport		3.1M	
leight		18.5 ton	
NGINE			
odel		Doosan DL08 - Tier4	
ated power		292HP	
uel capacity		300L	
RILL HEAD & ROTATION			
otary head with side shift			
wivel & Shock Absorber (Φ60mm)			
wo motors - Series and Parallel Flow			
igh speed low torque	n speed low torque 1 st : 0~180rpm		
ow speed high torque	speed high torque 2 nd : 0~90rpm		
EED SYSTEM			
ead travel		7.5M	
ull-up capacity		16 ton	
ull-down capacity		6 ton	

WORKING TABLE & HYDRAULIC CLAMP				
Triple Clamps - one roating				
Max. diameter 320mm				
Hydraulic rod spanner	89mm			
Hydraulic breakout chain wrench				
DRILL PIPE & CASING				
Drill pipe length	Ф89mm X 6.0М			
Max. diameter 304mm				
HYDRAULIC JACKS & OUTRIGGE	RS			
Ground clearance 600mm				
Width 3000mm				
Load pads				
CRAWLER BASE				
Crawler model	Doosan Solar 75			
Crawler type Steel with rubber pads				
Crawler speed 2.5 km/h				
AUTOMATED ROD RACK & HANE	LING SYSTEM			
89mm x 6.0m x 40 (BR50 thread, 250m 240m capacity	ım tool joints)			
ANCILLARIES				
Winch 20M / 5 ton (12mm)				
Wireline 300m x 6mm				



GTD5500R DRILL RIG

GTD5500R DRILL RIG

The GTD5500R is our compact model and capable of both domestic and commercial drilling. It can drill beyond 200m in all conditions with ease and can perform both mud or air drilling.

This model also features our unique rod rack and automated handling system which performs safely and efficiently, increasing productivity whilst reducing manual handling and risk of injury. It comes complete with 180m rods (BR50 thread, 4.5m long with 10mm wall thickness and extra-long tool joints).

It is fitted with the powerful, world-renowned Doosan DL06 engine, producing a 192 BHP which is capable of supplying the mud pump and auxiliary pit pump.

It comes complete with a Triplex piston mist pump & twin stage centrifugal mud pump capable of drilling down beyond 200m, lifting heavy London clays with ease.

DIMENSIONS & WEIGHT				
Length-transport		9.2M		
Width		2.3M		
Height-transport		2.6M		
Weight		14.5 ton		
ENGINE				
Model		Doosan DL06 - Tier4		
Rated power		192HP (141.2kW)		
Fuel capacity		300L		
DRILL HEAD & R	OTATION			
Rotary head with side shift (For ease of handling & alignment of rods/casings)				
Swivel & Shock Absorber Φ60mm				
Two motors - Series	and Parallel Flow			
Bullshaft		3-1/2 API IF		
Max . RPM	1 st : 0~200	2 ND : 0~100		
Max . Torque 1 ST : 350kg.M		2 ND : 700kg.M		
FEED SYSTEM				
Head travel		5.5M		
Pull-up capacity		11 ton		
Pull-down capacity		6 ton		
i un down capacity				

WORKING TABLE & HYDRAULIC CLAMP				
Double Clamps - one roating				
Max. diameter	Max. diameter 304mm			
DRILL PIPE & CASING				
Drill pipe length	Ф89mm X 4.5M			
Max. diameter	304mm			
HYDRAULIC OUTRIGGERS				
4 x Hydraulic Jacks & Outriggers				
Ground clearance	1450mm			
Width 3000mm				
WINCH				
Winch 20M / 5 ton (12mm)				
CRAWLER BASE				
Crawler model	Doosan Solar 55			
Crawler type	Steel type with rubber pads			
Crawler speed 2.5 km/h				
ROD RACK & FEEDER				
Integrated Rod Rack Handling & Feeder System	89mm x 4.5m x 40 BR50 thread rods			

- 192 BHP (TIER 4)
- 11 TON PULL UP
- 6 TON PULL DOWN
- DOUBLE CLAMPS
- 40 X 4.5M RODS
- AUTOMATED ROD HANDLING
- CENTRIFUGAL MUD PUMP
- TRIPLEX PISTON MIST PUMP
- WIRELESS REMOTE CONTROL
- WINCH
- BREAKOUT CHAIN WRENCH
- SAFETY CAGE



DRILL RIGS

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GTD MUD CLEANING & RECYCLING SYSTEMS



GTD MUD CLEANING & RECYCLING SYSTEMS

GTD DESIGN AND MANUFACTURE A COMPLETE RANGE OF MUD RECYCLING EQUIPMENT, FROM SIMPLE SHAKER UNITS TO FULL OIL & GAS FIELD SYSTEMS.

Skid, trailer, track or vehicle mounted

Self powered, electric or hydraulic

Off the shelf items or completely custom to your needs

Complete after sale service, including on site training



WE LOVE TALKING DIRTY, ISN'T IT TIME WE HAD A CONVERSATION ABOUT HOW MUD RECYCLING UNITS WILL DRILL DOWN YOUR COST PER METRE!

MUD RECYCLING SYSTEMS EXPLAINED: 3 MAIN STAGES

1. SHAKER

Removes the largest material and majority of the solids from the drilling fluids. The bigger the shaker screen area the larger volumes of flow it can handle.



2. HYDROCYCLONE

The size of the cone diameter defines the separation point. The smaller the cone the finer it can separate. Typically they are divided into Desander and Desilter. Usually a cone diameter of more than 6" is called Desander, we use 8" and 10" cone desanders to separate solid-phase particle size $47-76\mu$ m. With smaller 4" 'Desilter' cones separating down to 20 -25 μ m.



3. CENTRIFUGE

For barite recovery and fine / ultra fine solids separation. Essential when drilling through clays where the constant circulation of fluids breaks down the solids into fine / ultra fine material.

GTD MUD CLEANING & RECYCLING SYSTEMS

HOW TO SPEC YOUR MUD RECYCLING SYSTEM:

1. CAPACITY

This is probably the most important factor when choosing/specifying a system. Let us know how much fluid you are pumping down the hole and we can match a system to your needs.

2. FUNCTIONALITY

There are so many different options, and each user has their own specific requirements. We offer bespoke equipment tailored to your exacting needs. From lightweight trailer mountable units, remote control tracked units, containerised and vehicle mounted systems.

3. DIMENSIONS

Often the biggest constraint when picking a system is size and weight. We pride ourselves on finding solutions to best match your needs with efficient, purposeful design and engineering.



OUR CLEAN, GREEN, **TRACKED MUD CLEANING MACHINE**



SKID? ... TRAILER? ... TRACKED? ... OR A BESPOKE SYSTEM? OFTEN THE BIGGEST CONSIDERATION WHEN SPECIFYING A SYSTEM IS SIZE AND WEIGHT...





...WE PRIDE OURSELVES ON **DELIVERING SOLUTIONS**

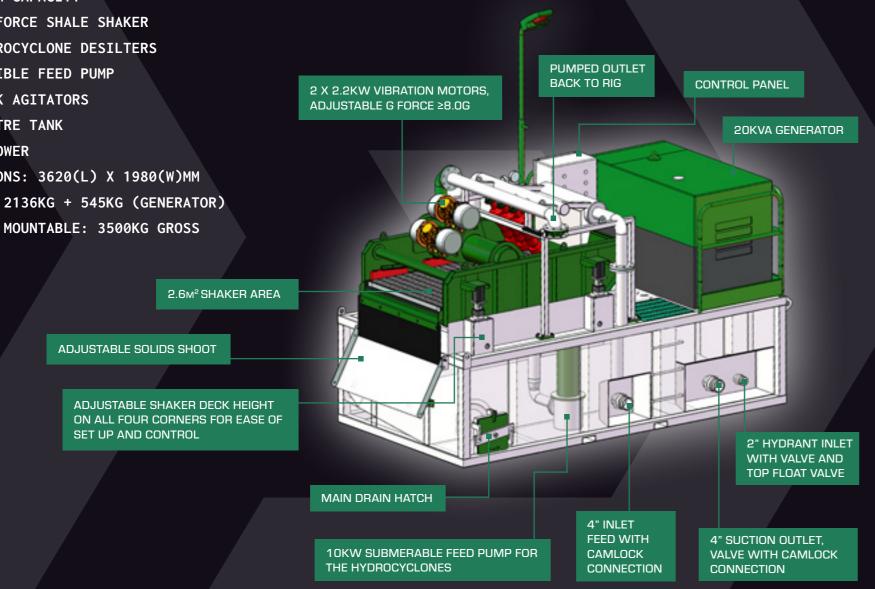






GTD SC2300 - TRAILER MOUNTABLE MUD RECYCLING UNIT

- 2300 LPM CAPACITY
- HIGH G FORCE SHALE SHAKER
- 3 X HYDROCYCLONE DESILTERS
- SUBMERSIBLE FEED PUMP
- 2 X TANK AGITATORS
- 6000 LITRE TANK
- <20KW POWER
- DIMENSIONS: 3620(L) X 1980(W)MM
- WEIGHT: 2136KG + 545KG (GENERATOR)
- TRAILER MOUNTABLE: 3500KG GROSS



MUD RECYCLING

EXAMPLE MUD CLEANING & RECYCLING SYSTEMS:

CONTROL PANEL

VENTURI

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MUD MIXER

GTD SC1200 - TRAILER MOUNTABLE MUD RECYCLING UNIT

- 1200 LPM CAPACITY
- HIGH G FORCE DOUBLE DECK SHALE SHAKER
- 3 X HYDROCYCLONE DESILTERS
- SUBMERSIBLE FEED PUMP
- 2 X TANK AGITATORS
- 4500 LITRE TANK
- 10KW POWER
- DIMENSIONS: 3620(L) X 1980(W)MM
- WEIGHT: 1980KG + 545KG (GENERATOR)
- TRAILER MOUNTABLE: 3500KG GROSS

20KVA GENERATOR

2 X 1.2KW **VIBRATION MOTORS.** ADJUSTABLE G FORCE ≥7.5G ADJUSTABLE SHAKER DECK HEIGHT FOR EASE OF SET UP AND CONTROL DOUBLE DECK HIGH G-FORCE SHAKER

3 X HYDROCYCLONE

DESILTERS

ίTι

PUMPED OUTLET

BACK TO RIG

GTD SC1200C - TRACK MOUNTED MUD RECYCLING UNIT

GTD's tracked, drilling mud recycling units are a three-stage separating system that comprises of a high G-force double deck shaker, three hydrocyclone desilters and a decanter centrifuge.

The equipment is combined on a 5.73m³ (1260gal) tank with sloped floor and internal tank mixers. Two submersible pumps feed both the hydrocyclones and centrifuge.

The system is mounted on top of a 25-ton crawler with steels tracks and rubber pads. Hydraulic legs are fitted to all four corners for levelling and lifting. The unit is powered by a 100kVA diesel engine generator.

The electric powered hydraulic tracks can be utilised as a hydraulic power pack when not being used for tracking, providing auxiliary hydraulics for ancillary equipment such as pit pumps.

The maximum capacity of the unit is approximately 12001pm. This capacity is dependent on the screens mesh size and solid content of your fluids. The separation point is down to 2 -5 micron.

SHAKER				
Capacity		70m³/h (308gpm)		
Upper screen area		0.68m2		
Lower screen area 1.35m2				
Motors		2 x 1.2kw		
G - Force		7.5 G		
HYDROCYCLONES				
Triple 4" Desilter Hydrocyclones				
Capacity 70m³/h (308gpm)				
Separation point 15-45um				

ISN'T IT TIME YOU GOT YOUR MUD RECYCLING UNIT ON TRACK?

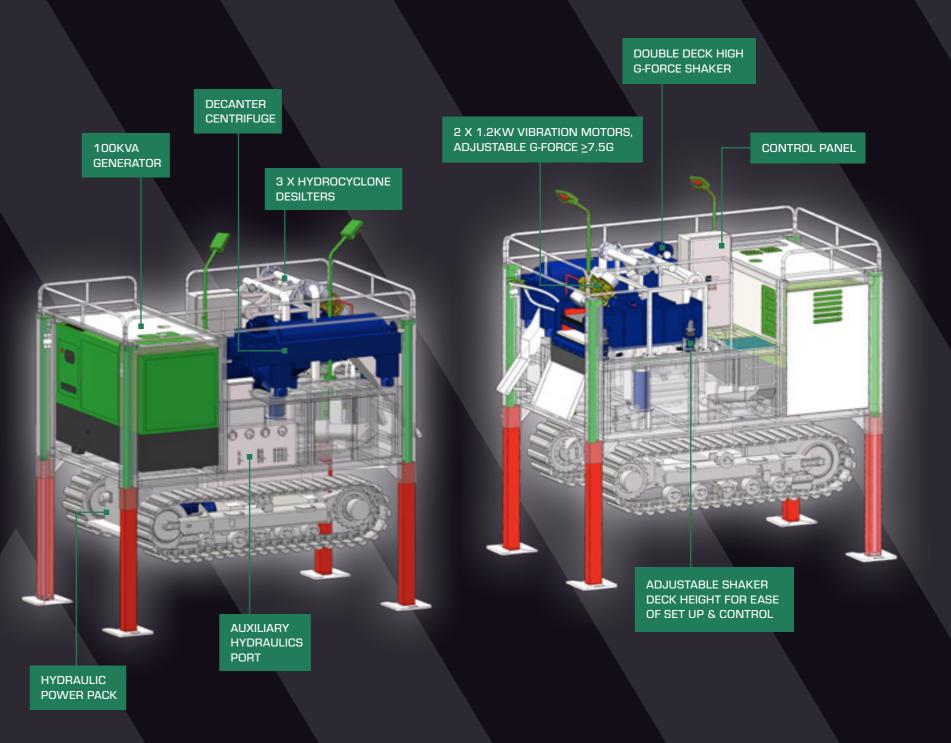


DECANTER CENTRIFUGE] r
Bowl length		930mm	7 L
Bowl diameter		250mm	1 L
Capacity		<5m ³ /h (22gpm)	1 L
Max bowl speed		4500rpm	1 [
Main Motor		11kw	
Helper Motor		4kw	1 L
HYDRAULIC POWER PACK			1 [
Electric motor		35kw	1 [
Operating pressure		250 bar	1
Operating flow		53lpm (14gpm)	16
SUBMERSIBLE MIXERS			
Power	0.75kw		
Quantity	2 Mixers		1 [
Capacity 3.2m³/min		min	1 F
CRAWLER BASE	-		
Track width	450mm		
Crawler type	Steel / rubber pads		1 [
Crawler speed	2.5kph	1	T
	Bowl length Bowl diameter Capacity Max bowl speed Main Motor Helper Motor HYDRAULIC POWER PACC Electric motor Operating pressure Operating flow SUBMERSIBLE MIXERS Power Quantity Capacity CRAWLER BASE Track width Crawler type	Bowl length Bowl diameter Capacity Max bowl speed Main Motor Helper Motor HYDRAULIC POWER PACK Electric motor Operating pressure Operating flow SUBMERSIBLE MIXERS Power 0.75kw Quantity 2 Mixe Capacity 3.2m ³ / CRAWLER BASE Track width 450mm Crawler type Steel /	Bowl length 930mm Bowl diameter 250mm Capacity ≤5m³/h (22gpm) Max bowl speed 4500rpm Main Motor 11kw Helper Motor 4kw HYDRAULIC POWER PACK Electric motor Electric motor 35kw Operating pressure 250 bar Operating flow 53lpm (14gpm) SUBMERSIBLE MIXERS Power 0.75kw Quantity 2 Mixers Capacity 3.2m³/min CRAWLER BASE Track width 450mm Crawler type Steel / rubber pads

SUBMERSIBLE PUMP				
Capacity	100m ³	²/h (440gpm)		
Lift	28m			
Motor	15kw			
HYDRAULIC OUTRIGO	ERS			
4 x Hydraulic Stabilizers	5			
Ground clearance	1000r	nm		
Width	2.4m	2.4m		
MUD TANK				
Dimensions	3m x 3	2.4 x 1m		
Capacity	5730n	5730m ³ / 1260 gal		
CONTROL PANEL				
Stainless steel with VFD's and soft starts				
Remote control				
GENERATOR				
Model		Pramac Perkins		
Rated power		100kVA		
Fuel capacity		209 ltr		

Length-transport	4.11
Width	2.4M
Height-transport	3.2M
Weight	12,500

IMENSIONS & WEIGHT





GTD SC100C - SKID MOUNTED DECANTER CENTRIFUGE

The GTD-SC100C Decanter Centrifuge is designed and purpose-built for the removal of low gravity or small particle size solids in all solids control applications.

Unit effective capacity 6m3/h.v

MUD CLEANING EQUIPMENT CAN TRANSFORM YOUR DRILLING OPERATION

HOW DOES IT WORK?

Drill fluid is pumped to the Decanter Centrifuge tank from either the drill collar or upstream solids control equipment, such as the GTD-SC1200.

The fluid is then drawn up from the tank by the Progressing Cavity Pump or submersible, then fed into the high-speed centrifuge, which removes solids down to 2-5 microns before returning the cleaned drill fluid to the drilling process.

In tank submersible mixers keep the fluids circulating and solids in suspension.

TOTAL UNIT		FEED PUMP		
Length	3,340mm (10.93ft)	Model	NETZSCH / Seepex	
Width	1,370mm (4.49ft)	Motor	3kw	
Height	1,945mm (6.3ft)	Flow	6m³ / h	
Tank Volume	3m ³	FEED PUMP		
Unit Capacity	26 Gpm / 100 Lpm	Model	NETZSCH / Seepex	
Total Power	21kw	Motor	3kw	
CENTRIFUGE - VFD		Flow	6m³ / h	
Bowl Length	670mm (26")	SUBMERSIBLE TANK	MIXERS	
Bowl Diameter	220mm (9")	Capacity	2 x 3.2 m ³ / min	

KEY BENEFITS - GTD-SC150C

Removes low gravity solids for greater drilling efficiency

Reduces water, mud, transportation and mud disposal costs

Eliminates the cost of digging sumps

Reduces site footprint, site remediation and environmental management costs

Reduces wear and tear on drill components

Improves on-site health and safety, reducing slips and hazards due to mess, mud and water

Easily used in combination with other GTD equipment to provide enhanced mud recycling and cleaning





IMPROVING EFFICIENCY & PRODUCTIVITY

The unit's high speed decanting centrifuge is specifically adapted for drilling operations, generating huge G-forces, to remove solids down to 2-5 microns keeping drilling fluids in excellent condition.

This unit can be used independently or in combination with other solids control equipment. The GTD-SC100C can provide cleaning of the drilling fluids directly from the collar with process rates up to 100L/min.

In higher flow rate applications, the unit can provide additional low particle size removal as part of a bypass loop when paired with other equipment.

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DECANTER CENTRIFUGE

GTD have a full range of Decanter Centrifuges, with bowl diameter from 250mm up to 600mm, with processing capacity ranging from 5m³/h to 100m³/h.

For the geothermal drilling application our smallest centrifuge, with a 250mm bowl and ≤5m³/h capacity, is adequate for processing one rigs drilling fluids.

They are used in conjunction with the shaker and cones and reduce the build up of 'fines' in the fluid, capable of removing solids down to $2 - 5\mu m$. Although not essential all the time, in some conditions it's almost impossible to live without them.



Removes low gravity solids for greater drilling efficiency

Reduces water, mud, transportation and mud disposal costs

Eliminates the cost of digging sumps

Reduces site footprint, site remediation and environmental management costs

Reduces wear and tear on drill components

Improves on-site health and safety, reducing slips and hazards due to mess, mud and water

Easily used in combination with other GTD equipment to provide enhanced mud recycling and cleaning



Our larges centrifuge features a 600mm bowl diameter and ≤100m³/h capacity.

This unit was used as part of an aggregate wash plant in the UK. Complete with dosing unit,liquid tank and solids removal auger.



SOLIDS CONTROL EQUIPMENT

GTD DON'T JUST SUPPLY THE GEOTHERMAL DRILLING INDUSTRY...

WE ALSO SUPPLY THE FOLLOWING: CORE DRILLING, HDD, TUNNELLING, AGGREGATE, O&G, FOOD & DRINK, RECYCLING AND MANY MORE.

SOME OF OUR CLIENTS INCLUDE:

ENERGŬLD



Siltbuster

twma

GTD TOOLING >> DRILL BITS >> RODS >> CASING

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OUR DRILL BITS

NON CORE PDC

PDC bits in various body designs and sizes to cater for soft and medium formations

- All size available All types available All threads available
- 42CrMo4 body material offers high tensile properties with shock resistant properties, combined with good wear resistance.
- JET flush or WIDE flush options jet is required for clays and wide flush is great for sands.
- FLAT or CURVED face PDC cutters flat for speed and soft formations, curved for impact resistance and harder formations

PINK DRILL BITS PENETRAT RR



OUR BEST SELLERS:







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R



OUR DRILL BITS

ROCK ROLLERS

Open bearing Tungston Carbide Inserts (TCI) Tricone/Rollers

GTD stock and supplies VALCO ROCK BITS - these are by far the best rock rollers for geothermal ground source drilling. Large button that drill quickly and last. Featuring short, strong bodies and large, high quality bearings.

WE ARE NOT JUST HERE TO SELL BITS, WE ARE HERE **IF YOU NEED US TO HELP ADVISE ON THE** MOST EFFICIENT DRILL BIT FOR YOUR OPERATION TO INCREASE YOUR R.O.P AND **REDUCE COST**





RODS

As standard our rigs come with 89mm diameter rods with BR50 thread.

This thread has been selected as it offers one of the best combinations of strength and increased internal diameter on a 89mm rod.

Features:

- Extra long tool joints for added strength
- 10mm think for extra strength and longevity
- 4 x Spanner flats

OUR GTD5500R RIG COMES WITH 4.5M **RODS** AND ITS AUTOMATED ROD HANDLING SYSTEM CAN HOLD 40 RODS (180M).



OUR GTD6500R RIG COMES WITH 6M **RODS** AND ITS AUTOMATED ROD HANDLING SYSTEM CAN HOLD 40 RODS (240M).

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Due to complexity in geology casing of holes is inevitable. GTD supply temporary rope thread casing in varying lengths and diameters.

We recommend using 152mm diameter and matching the casing length to that of your rods/rig. i.e. 4.5m lengths for the GTD5500R and 6m lengths for the GTD6500R.

Features:

- Single start rope thread
- 10mm wall thickness

Using the main winch on the rigs, the casing is hoisted onto the drive head using a bespoke casing slink. This is safe, quick and eliminates manual handling.

With a GTD rig its possible (if the conditions allow) to drill & case to 120m and then drill on to 200m, install a loop, grout, remove the temporary casing and







GTD PUMPS
AIR COMPRESSORS
PISTON PUMPS
CENTRIFUGAL PUMPS
HYDRAULIC POWER PACK





AIR COMPRESSORS

GTD AIR COMPRESSORS ARE AVAILABLE EITHER SKID OR TRAILER MOUNTED

Our mobile diesel air compressors are equipped with high efficiency Cummins engines.

Our air compressors always meet the harsh environments of the drilling industry. Suitable for geothermal air drilling as well as water well drilling, oil & gas exploration, mining & DTH drilling etc.

To alleviate the cost of outlay, GTD has a growing fleet of rental equipment that is there for when you need it.

For drilling support, sales and equipment rentals call us now on +44 (0) 1580 388792



PUMPS

OUR AIR COMPRESSORS & PISTON PUMPS ARE AVAILABLE TO RENT OR PURCHASE



850F-24P (SKID-MOUNTED OPTIONAL)	605F/17P (SKID-MOUNTED OPTIONAL)
Two Stage	Two Stage
850/950CFM (24/27m3/min)	605/550CFM (17/15.5m3/min)
348/246.5Psi (24/17Bar)	290/246.5Psi (20/17Bar)
90	50
CUMMINS	CUMMINS
360HP/264KW	210/154
2000 (1800)/1350	2200/1350
6	6
600	180
4" & 2"	4" & 2"
215/75R16	7.00-16
4500	2500
4370*1860*2450	4250*2100*2150
80±5	76±3
	(SKID-MOUNTED OPTIONAL) Two Stage 850/950CFM (24/27m3/min) 348/246.5Psi (24/17Bar) 90 CUMMINS 360HP/264KW 2000 (1800)/1350 6 6 600 4" & 2" 215/75R16 4500 4370*1860*2450



The GTD Mud Pumps are horizontal reciprocating single-acting triplex piston pump (try saying that five times!), driven by a Cummins diesel engine.

Capable of adjustable flow rates and pressures from the same pump making them adaptable for all types of applications. High wear resistance as all pumps have ceramic liners.

Flows ranging from 100 - 2800 (L/min)



MODEL	FLOW (L/MIN)
GTD MP2800PP	2800
GTD MP2200PP	2200
GTD MP1500PP	1500
GTD MP1000PP	1000
GTD MP800PP	800
GTD MP600PP	600
GTD MP450PP	450
GTD MP400PP	400
GTD MP320PP	320
GTD MP100PP	100

LET'S TALK SHOP TO ESTABLISH WHAT'S BEST SUITED FOR YOUR DRILLING OPERATION & BUDGET

MODEL	GTD MP1000PP				
Stroke	140				
Cylinder diameter(mm)	115				
Gear shift	1	2	3	4	
Pump speed(r/min)	230	150	118	77	
Flow(L/min)	1000	650	515	335	
Pressure (Bar)	40	60	75	100	
Rated power (KW)	80				
Max. Water suction height (m)	2.5				
Inlet port	5" barb				
Outlet port	M64x2				
Outline size(mm)	3515*1704*1925				
Weight (kg□	3140				
Diesel engine	Cummins				
Torque (Nm)	611				
Diesel engine max. Power (Kw)	96				
Rotary speed(r/min)	1500				
Control method	Wireless remote control				



GTD STOCK CAPRARI AND NOV MISSION MAGNUM PUMPS, HYDRAULIC MOTORS AND CONNECTIONS.

Our rigs come as standard with either Caprari or Misson Magnum pumps.

For 95% of drilling operations/conditions a centrifugal pump is the pump to have. High performance, value for money and easy to replace with limited down time.

Capable of up to 15bar at dead end and a real life flow of 600/800 (L/min) of drilling fluids.

GTD drill 5 5/8" holes beyond 200m with these pumps, day in day out.





CLEAR WATER PERFORMANCE CHARTS AVAILABLE ON REQUEST





HYDRAULIC POWER PACK

GTD HAVE A FULL RANGE OF HYDRAULIC POWER PACKS

2001pm - 12001pm 280 bar 74hp - 490hp Track, skid or trailer mounted

			HYDRAULI	
GTD PP3500			1"	
DIMENSIONS & WEIGHT			3/4"	
Weight	1800kg			
Width	1.4m			
Length	2.5m			
Height	1.5m			
ENGINE				
Model	Doosan D24 - Teir 4			
Power	74hp			
Fuel capacity	150 Liters			
HYDRAULIC SYSTEM				
General	2 pumps, open loop	and the resolution of the second		
Tank capacity	100 Liters			
Operating pressure	280 Bar 🦯	and the second		
Control valves	2 x 90lpm/250bar	Π	1 1	
HYDRAULIC PORTS				
1"	1 port PO	WER PACK 3500		
3/4"	2 ports		-	

GTD PP4500		
DIMENSIONS & WEIGHT		
Weight	2100KG	
Width	1.4m	
Length	2.5m	
Height	1.5m	
ENGINE		
Model	Doosan D34 - Teir 4	
Power	110hp	
Fuel capacity	150 Liters	
HYDRAULIC SYSTEM		92.9
General	2 pumps, open loop	
Tank capacity	100 Liters	
Operating pressure	280 Bar	
Control valves	2 x 120lpm/250bar	
HYDRAULIC PORTS		POWER PACK 4500
1"	1 port	and the second
3/4"	2 ports	



DRILLING PACKAGES

DRILLING EQUIPMENT & SUPPLIES

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EMERALD DRILLING PACKAGE

GTD EMERALD DRILLING PACKAGE:

- GTD6500R Geothermal Drill Rig
- GTD M2300 Mud Recycling system shaker & hydrocyclones
- 40 x 6.0m BR50 thread drill rods
- GTD LR1 Double wheel loop reeler
- PFT Grouter
- Ifor Williams trailer
- Pramac GBW22P Generator
- Starter pack of drill bits and tooling
- Extensive spares and consumables package

TO DISCUSS PACKAGE DETAILS CALL +44 (0) 1580 388792



SCAN QR CODE FOR MORE INFO ON THE GTD EMERALD DRILLING PACKAGE



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OPAL DRILLING PACKAGE

GTD OPAL DRILLING PACKAGE:

- GTD5500R Geothermal Drill Rig
- GTD M1200 Mud Recycling system shaker & hydrocyclones
- 36 x 4.5m BR50 thread drill rods
- GTD LR1 Double wheel loop reeler
- PFT Grouter
- Ifor Williams trailer
- Pramac GBW22P Generator
- Starter pack of drill bits and tooling
- Extensive spares and consumables package

TO DISCUSS PACKAGE DETAILS CALL +44 (0) 1580 388792



ADOLT CTO AND THE OPAL DRILLING PACKAGE

SCAN QR CODE FOR MORE INFO ON THE GTD OPAL DRILLING PACKAGE



LOOP REELER AND WEIGHTS

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GTD WEIGHTS ARE DESIGNED & PRODUCED IN-HOUSE

THIS MEANS WE CAN DELIVER FROM STOCK BUT ALSO PRODUCE BESPOKE PROJECT SPECIFIC WEIGHTS ON-DEMAND Weight is required to counter act the buoyancy of the loop material. Ground conditions, tight boreholes diameters, viscosity of the borehole fluid, all add to loops not falling under their own weight.

GTD produce its own weights in-house and make them specifically to your weight requirements.

Their slim design with a conical end ensures smooth and easy installation. They can also be bolted together for additional weight if required.

GROUT & GROUTERS

48





SPECIALLY DEVELOPED FOR BACK FILLING BOREHOLES FOR BOTH HEATING AND COOLING ENERGY SYSTEMS

ThermoGrout[™] is used widely across Europe and is manufactured for reliable, flexible and consistent thermal conductivity and ease of injection.

Its unique formulation allows higher yields whilst achieving consistent high thermal conductivity. It exceeds the high and exacting standard required for geothermal conductivity, whilst also ensuring separation and low permeability between the geological layers.

THERMOGROUT IS CERTIFIED BY KIWA COMPLYING TO THE BRL 5078 STANDARD



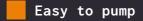


AVAILABLE IN 1000KG BULK BAGS OR 25KG BAGS Maximum performance, with a conductivity of your choice

No addition of chemical components, therefore environmentally friendly

Thermal Conductivity up to 1.8 W/m.K

Low Permeability



GROUTER

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SIMPLIFY YOUR GROUTING OPERATION WITH A READY MIXED DRY GROUT AND A CONTINUOUSLY OPERATING MIXING PUMP

Fill using bulk bags (1000kg) and eliminate manual handling. (25kg bags also available)

Consistent, continuous mixes with high conductivity

Simply set the water flow to match the desired conductivity



Length: 1050mm Width: 720mm Height: 1550mm Weight: 259kg

TALK TO US +44 (0) 1580 388792

BECAUSE BROCHURES MAKE TERRIBLE LISTENERS!



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