# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABOUT GTD</td>
<td>4</td>
</tr>
<tr>
<td>DRILL RIGS</td>
<td>6</td>
</tr>
<tr>
<td>MUD CLEANING &amp; RECYCLING SYSTEMS</td>
<td>12</td>
</tr>
<tr>
<td>TOOLING</td>
<td>26</td>
</tr>
<tr>
<td>PUMPS</td>
<td>34</td>
</tr>
<tr>
<td>DRILLING PACKAGES</td>
<td>40</td>
</tr>
<tr>
<td>LOOP REELERS &amp; WEIGHTS</td>
<td>44</td>
</tr>
<tr>
<td>GROUT &amp; GROUTERS</td>
<td>48</td>
</tr>
</tbody>
</table>
ABOUT GTD

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.

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.

WHY 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

WHO ARE GTD?

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, fine-tuned 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.

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

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:

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 world (Greta you can borrow that line if you fancy)

Looking to improve, expand or set up a new ground source drilling operation?

The demand for Ground Source Heating and Cooling (GS&H) 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.

• 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 PROVIDE:
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 perform 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 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 240m, lifting heavy London clays with ease. (optional duplex piston pump for drilling beyond 240m)

**WHY 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 manufacturers 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 mean 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

GTD6500R DRILL RIG

- 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*

- HYDRAULIC JACKS & OUTRIGGERS
- Ground clearance 600mm
- Width 3000mm
- Load pads

*ANCILLARIES*

- Winch
  - 20M / 5 ton (12mm)
- Wireline
  - 300m x 6mm

*CRAWLER BASE*

- Crawler model
  - Doosan Solar 75
- Crawler type
  - Steel with rubber pads
- Crawler speed
  - 2.5 km/h

*AUTOMATED ROD RACK & HANDLING SYSTEM*

- 89mm x 6.0m x 40 (BR50 thread, 250mm tool joints)
- 240m capacity

*WORKING TABLE & HYDRAULIC CLAMP*

- Triple Clamps - one rotating
- Max. diameter
  - 320mm
- Hydraulic rod spanner
  - 89mm
- Hydraulic breakout chain wrench

*DIMENSIONS & WEIGHT*

- Length-transport
  - 12.5M
- Width
  - 2.5M
- Height-transport
  - 3.1M
- Weight
  - 18.5 ton

*DRILL HEAD & ROTATION*

- Rotary head with side shift
- Swivel & Shock Absorber (Ф60mm)
- Two motors - Series and Parallel Flow
- High speed low torque
  - 1: 0~180rpm
- Low speed high torque 2nd
  - 0~90rpm

*ENGINE*

- Model Doosan DL08 - Tier4
- Rated power 292HP
- Fuel capacity 300L

*FEED SYSTEM*

- Head travel
  - 7.5M
- Pull-up capacity
  - 16 ton
- Pull-down capacity
  - 6 ton

*CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792 INFO@GTDGROUP.CO.UK*
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.

Specifications:
- **Model**: GTD5500R
- **Engine**: Doosan DL06 - Tier 4
- **Rated Power**: 192 HP (141.2kW)
- **Fuel Capacity**: 300L
- **Pull-up Capacity**: 11 ton
- **Pull-down Capacity**: 6 ton
- **Height-transport**: 2.6m
- **Weight**: 14.5 ton
- **Crawler Speed**: 2.5 km/h
- **Drill Pipe & Casing**: Ф89mm x 4.5m, Max. Diameter 304mm
- **Winch**: 20m / 5 ton (12mm)
- **Number of Hydraulic Jacks & Outriggers**: 4
- **Ground clearance**: 1450mm
- **Width**: 3000mm
- **Working Table & Hydraulic Clamp**: Double Clamps - one rotating
- **Max. Diameter**: 304mm

Contact us for package details +44 (0) 1580 388792 / INFO@GTDGROUP.CO.UK
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 47-76μm. With smaller 4" ‘Desilter’ cones separating down to 20-25μm.

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.

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792 INFO@GTDGROUP.CO.UK
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

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK
EXAMPLE MUD CLEANING & RECYCLING SYSTEMS:

**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

**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

**ADJUSTABLE SHAKER DECK HEIGHT**

- FOR EASE OF SET UP AND CONTROL

**2 X 2.2KW VIBRATION MOTORS, ADJUSTABLE G FORCE ≥8.0G**

**2.6M2 SHAKER AREA**

**ADJUSTABLE SOLIDS SHOOT**

**20KVA GENERATOR**

**CONTROL PANEL**

**PUMPED OUTLET BACK TO RIG**

**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**

**MUD RECYCLING MUD RECYCLING**

**CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK**

**CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK**
EXAMPLE MUD CLEANING & RECYCLING SYSTEMS:

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 separable pumps feed both the hydrocyclones and centrifuge.

The system is mounted on top of a 25-ton crawler with steel 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 1200lpm. This capacity is dependent on the screens mesh size and solid content of your fluids. The separation point is down to 2 - 5 micron.

GTD SC1200C - TRACK MOUNTED MUD RECYCLING UNIT

DIMENSIONS & WEIGHT

Length-transport: 4.1M
Width: 2.4M
Height-transport: 3.2M
Weight: 12,500 KG

GENERATOR

Model Pramac Perkins
Rated power 100kVA
Fuel capacity: 209 ltr

DECANTER CENTRIFUGE

Bowl length: 930mm
Bowl diameter: 250mm
Capacity: < 5m³/h (22gpm)
Max bowl speed: 4500rpm
Main Motor: 11kw
Helper Motor: 4kw

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

HYDRAULIC POWER PACK

Electric motor: 35kw
Operating pressure: 250 bar
Operating flow: 53lpm (14gpm)

CONTROL PANEL

Stainless steel with VFD’s and soft starts
Remote control

HYDROCYCLONES

Triple 4” Desilter Hydrocyclones
Capacity: 70m³/h (308gpm)
Separation point: 15-45um

SUBMERSIBLE PUMP

Capacity: 100m³/h (440gpm)
Lift: 28m
Motor: 15kw

SUBMERSIBLE MIXERS

Power: 0.75kw
Quantity: 2 Mixers
Capacity: 3.2m³/min

CRAWLER BASE

Track width: 450mm
Crawler type: Steel / rubber pads
Crawler speed: 2.5kph

MUD TANK

Dimensions: 3m x 2.4 x 1m
Capacity: 5730m³ / 1260 gal

HYDRAULIC OUTRIGGERS

4 x Hydraulic Stabilizers
Ground clearance: 1000mm
Width: 2.4m

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

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

BACK TO CONTENTS
EXAMPLE MUD CLEANING & RECYCLING SYSTEMS:

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.

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.

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.

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

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.

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

TOTAL UNIT

- Length 3,340mm (10.93ft)
- Width 1,370mm (4.49ft)
- Height 1,945mm (6.3ft)
- Tank Volume 3m³
- Unit Capacity 26 Gpm / 100 Lpm
- Total Power 21kw

CENTRIFUGE - VFD

- Bowl Length 670mm (26”)
- Bowl Diameter 220mm (9”)

FEED PUMP

- Model NETZSCH / Seepex
- Motor 3kw
- Flow 6m³ / h

SUBMERSIBLE TANK MIXERS

- Capacity 2 x 3.2 m³ / min

FEED PUMP

- Model NETZSCH / Seepex
- Motor 3kw
- Flow 6m³ / h

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK
EXAMPLE MUD CLEANING & RECYCLING SYSTEMS:

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 rig 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 – 5μm. Although not essential all the time, in some conditions it’s almost impossible to live without them.

Our largest 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.

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

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:

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792  INFO@GTDGROUP.CO.UK
GTD TOOLING

➤ DRILL BITS
➤ RODS
➤ CASING
OUR DRILL BITS

NON CORE PDC

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

- All sizes 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.

OUR BEST SELLERS:

STEPPED  ROUNDED  JUNK SLOT
OUR DRILL BITS

ROCK ROLLERS

Open bearing Tungsten 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

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK
**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 thick for extra strength and longevity
- 4 x Spanner flats

**CASING**

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 clink. This is safe, quick and eliminates manual handling.

With a GTD rig it’s 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 move and set up, all in one day.

---

**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).**
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

CE, SGS ISO9001/ISO 14001, Noise Certificate

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

PISTON PUMPS
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)

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

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK
CENTRIFUGAL PUMPS

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 13Bar 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.

GTD STOCK CAPRARI AND NOV MISSION MAGNUM

PUMPS, HYDRAULIC MOTORS AND CONNECTIONS.

200lpm - 1200lpm
280 bar
74hp - 490hp
Track, skid or trailer mounted

CLEAR WATER PERFORMANCE
CHARTS AVAILABLE ON REQUEST

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

PUMPS

GTD HAVE A FULL RANGE OF HYDRAULIC POWER PACKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP3500</td>
<td>1800kg</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
<tr>
<td>PP4500</td>
<td>2100KG</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
</tbody>
</table>

ENGINE

Model: Doosan D24 - Teir 4
Power: 74hp
Fuel capacity: 150 Liters

HYDRAULIC SYSTEM

General: 2 pumps, open loop
Tank capacity: 100 Liters
Operating pressure: 280 Bar
Control valves: 2 x Magura/Orlik

HYDRAULIC PORTS

1” 1 port
3/4” 2 ports

GTD PP3500

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

PUMPS

CLEAR WATER PERFORMANCE
CHARTS AVAILABLE ON REQUEST

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

PUMPS

GTD HAVE A FULL RANGE OF HYDRAULIC POWER PACKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP3500</td>
<td>1800kg</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
<tr>
<td>PP4500</td>
<td>2100KG</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
</tbody>
</table>

ENGINE

Model: Doosan D24 - Teir 4
Power: 74hp
Fuel capacity: 150 Liters

HYDRAULIC SYSTEM

General: 2 pumps, open loop
Tank capacity: 100 Liters
Operating pressure: 280 Bar
Control valves: 2 x Magura/Orlik

HYDRAULIC PORTS

1” 1 port
3/4” 2 ports

GTD PP4500

CLEAR WATER PERFORMANCE
CHARTS AVAILABLE ON REQUEST

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

PUMPS

GTD HAVE A FULL RANGE OF HYDRAULIC POWER PACKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP3500</td>
<td>1800kg</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
<tr>
<td>PP4500</td>
<td>2100KG</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
</tbody>
</table>

ENGINE

Model: Doosan D24 - Teir 4
Power: 74hp
Fuel capacity: 150 Liters

HYDRAULIC SYSTEM

General: 2 pumps, open loop
Tank capacity: 100 Liters
Operating pressure: 280 Bar
Control valves: 2 x Magura/Orlik

HYDRAULIC PORTS

1” 1 port
3/4” 2 ports

GTD PP3500

CLEAR WATER PERFORMANCE
CHARTS AVAILABLE ON REQUEST

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK

PUMPS

GTD HAVE A FULL RANGE OF HYDRAULIC POWER PACKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP3500</td>
<td>1800kg</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
<tr>
<td>PP4500</td>
<td>2100KG</td>
<td>1.4m</td>
<td>2.5m</td>
<td>1.5m</td>
</tr>
</tbody>
</table>

ENGINE

Model: Doosan D24 - Teir 4
Power: 74hp
Fuel capacity: 150 Liters

HYDRAULIC SYSTEM

General: 2 pumps, open loop
Tank capacity: 100 Liters
Operating pressure: 280 Bar
Control valves: 2 x Magura/Orlik

HYDRAULIC PORTS

1” 1 port
3/4” 2 ports

GTD PP4500

CLEAR WATER PERFORMANCE
CHARTS AVAILABLE ON REQUEST

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792       INFO@GTDGROUP.CO.UK
DRILLING PACKAGES
EMERALD DRILLING PACKAGE

- GTD5500R Geothermal Drill Rig
- GTD H2200 Mud Recycling system - shaker & hydrocyclones
- 48 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

OPAL DRILLING PACKAGE

- GTD6500R Geothermal Drill Rig
- GTD H2200 Mud Recycling system - shaker & hydrocyclones
- 48 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

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

CONTACT US TO DISCUSS PACKAGE DETAILS +44 (0) 1580 388792 INFO@GTDGROUP.CO.UK
LOOP REELER AND WEIGHTS
Weight is required to counteract 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.

GTD WEIGHS ARE DESIGNED & PRODUCED IN-HOUSE

THIS MEANS WE CAN DELIVER FROM STOCK BUT ALSO PRODUCE BESPOKE PROJECT SPECIFIC WEIGHTS ON-DEMAND
GROUT & GROUTERS
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.

- 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
- Easy to pump

ThermoGrout is certified by KIWA complying to the BRL 5078 standard

Available in 1000kg bulk bags or 25kg bags

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
TALK TO US
+44 (0) 1580 388792
BECAUSE BROCHURES MAKE TERRIBLE LISTENERS!