DRILLING PACKAGES

» WHY BUY A COMPLETE PACKAGE?

• IT’S EVERYTHING YOU NEED - WHETHER YOU ARE A START-UP, EXPANDING OR DIVERSIFYING
• METICULOUSLY ENGINEERED AND SPECIFIED TO WORK TOGETHER
• THE MOST AFFORDABLE WAY TO BUY EQUIPMENT
• A SINGLE FINANCE PACKAGE
• ONE DELIVERY DATE
• REDUCED RISK (FINANCIALLY, NON-COMPATIBILITY AND TO PRODUCTIVITY)

Leverage our decades of experience as experts in geothermal ground source drilling when specifying the most relevant package for your needs.

Our packages aren’t just about equipment sales, we provide consultation, training, support (pre and post purchase) along with a complete ecosystem of supplies and consumables.

We can even provide qualified access to drilling contracts as part of the wider GTD Drillers Co-operative.

CONTACT US AT INFO@GTD-DRILLING.COM WWW.GTD-DRILLING.COM

OUR COMPLETE DRILLING PACKAGES ARE UNIQUE TO THE INDUSTRY
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ABOUT GTD AND THE DIAMOND DRILLING PACKAGE

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 geothermal systems has historically been the cost of installation. Let’s be honest; it still is - but don’t let that put you off your quest for ground source geothermal operations, improving profits, scalability and competitive opportunities.

Whether you are an established business wanting to expand your capabilities, productivity and profitability 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 DIAMOND PACKAGE:

- GTD Desco 6500R Geothermal Drill Rig
- GTD Mud Guzzler SC1200C-2 - Shaker, Hydrocyclones & Decanter Centrifuge
- GTD Desco Tracked Carrier
- Large Portable Air Compressor - For Air Drilling
- Frame Generator
- Triplex Piston Mud Pump
- Sand Guzzler – Pit Pump
- GTD Double Hydraulic Loop Reeler
- Gertec Grout Pump
- 50 x 20’ (6.0m) BR50 thread drill rods
- Casing - 36 x 10’ (3.0m) 18 x 20’ (6.0m) & Racking
- Casing Tooling Pack
- Hydraulic Pipe Manipulator (Casing Grab)
- Ifor Williams / Big Tex Trailer
- Dual Water Tank System
- Comprehensive pack of drill bits and tooling
- Hoses and Fittings
- Extensive Spares and Consumables Package

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

Why 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.

WHO ARE GTD?

GTD are unique as we are dedicated manufacturers & suppliers of ground source geothermal 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... right now.

WHY BUY GTD EQUIPMENT?

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

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

The demand for Ground Source Heating and Cooling (GSHP) 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 current number of operational rigs.

• GTD Desco 6500R Geothermal Drill Rig
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• 50 x 20’ (6.0m) BR50 thread drill rods
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There is a seismic shift in the climate conscience of the public, planners and politicians. Ground Source geothermal drilling is on the right side of the argument and will continue to grow fraction 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!)
The unique built-in rod rack and automated handling system performs safely and efficiently, increasing productivity whilst reducing manual handling and risk of injury. The rod rack holds 800’ (240m) rods (3 1/2” (89mm) diameter, 20’ (6m) long with heavy duty 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 300HP! 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 and a dual centrifugal mud pumps, lifting dense geology with ease using high flow and pressure.

Mud pump options available on request. Doosan piston, triplex piston, centrifugal or a combination of both.

Our rigs drill down your costs, both in purchase price and increased productivity. How? By outperforming other manufacturers currently used in the ground source geothermal industry. A bold statement, but one that is backed up by fact and experience.

These rigs hold international performance records for the most distance drilled, both on a single day, week and over the course of a year. Scan the QR code and see the GTD Desco Rig breaking records in Holland.

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.

WHY A GTD DESCO DRILL RIG?

The answer is simple... productivity!

Scan to watch an international GTD customer breaking records in Holland.

4130

13,550 FT

(18,550 ft)

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

GET IN TOUCH AT INFO@GTD-DRILLING.COM

WWW.GTD-DRILLING.COM
GTD DESCORIG FEATURES & OPTIONS

ADJUSTABLE TABLE HEIGHT
+6’ / -3’ (+2m / -1m)

ADJUSTABLE HEAD SLIDES

TRIPLE CLAMPS
2 FIXED & 1 ROTATING
12½’ (320MM) OPENING

CAN BE USED AS A CASING EXTRACTOR (GIVING EXTRA PULL BACK)

HYDRAULIC LEGS TO LIFT, STABILIZE & LEVEL THE RIG

STEEL TRACKS WITH RUBBER PADS

ROD HANDLING WITH DUAL CONTROLS

AUTOMATED ROD RACK SYSTEM

CAN BE OPERATED BY THE LEAD DRILLER, SECOND MAN OR BOTH

HYDRAULIC CHAIN WRENCH & TABLE SPANNER

REMOTE CONTROL

CONTACT US AT INFO@GTD-DRILLING.COM
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DRILL RIGS 10

DRILL RIGS
SWITCHABLE & ADJUSTABLE HIGH / LOW ROTATION & TORQUE

MAIN WINCH & SANDLINE WINCH

RECO DRILL HEAD

EURO DRILL HEAD

WELDER & GENERATOR

AUXILIARY HYDRAULICS

USEFUL FOR POWERING SAND GUZZLERS, GROUTERS, LOOP REELERS ETC.

CONFIGURED FOR DUAL CENTRIFUGAL MUD PUMPS

SINGLE OR MULTI STAGE

DUPLEX HIGH PRESSURE PISTON PUMP OPTIONS

MIST PUMP FOR AIR DRILLING & PRESSURE WASHER

SCAN TO WATCH A VIDEO SHOWCASING ALL THESE GTD DESCO FEATURES AND OPTIONS

CONTACT US AT INFO@GTD-DRILLING.COM WWW.GTD-DRILLING.COM
Mud Recycling equipment is essential to the drilling operation and is a key component, increasing productivity. We have designed and engineered the GTD SC1200C-2 system to work perfectly with the GTD DESCO 6500R geothermal rig.

**KEY BENEFITS**

- Removes low gravity solids for greater drilling efficiency
- Reduces water, mud, transportation and mud disposal costs
- Increases water storage capacity
- Reduces site footprint, site remediation and environmental management costs
- Improves on-site health and safety, reducing slips and hazards due to mess, mud and water
- Easy to transport “single unit” package

**200 GPM (45M³/H) CAPACITY**

- **HIGH G FORCE DOUBLE DECK SHALE SHAKER**
- **3 X HYDROCYCLONE DESILTERS**
- **DECANTER CENTRIFUGE**
- **SUBMERSIBLE FEED PUMP**
- **TANK AGITATORS**
- **1000+ GAL (4700 LITRE) TANK**

**GTD DIAMOND PACKAGE – GTD DESCO TRACKED CARRIER**

The tracked carrier is a versatile tool that can be used to transport the Mud Guzzler system, additional rods if drilling beyond 800' (240m), casing and any other auxiliary equipment.

Additionally, it acts as a hydraulic power pack that can power auxiliary equipment such as the triples piston pump, grouter and loop reeler.

- **26,880 LBS (12-TON) LOAD CAPACITY**
- **REMOTE CONTROL**
- **LEVELLING AND SELF-LOADING OUTRIGGERS/JACKS**
- **100HP DOOSAN DL04 ENGINE**
- **STEEL TRACKS WITH RUBBER PADS**
**GTD DIAMOND PACKAGE ➤ COMPRESSOR & GENERATOR**

**LARGE PORTABLE COMPRESSORS - C200TS-24 - C270TS-9**

The TurboScrew compressors with their unique patented bi-turbo technology provide class-leading diesel efficiency, the lowest weight of 7,700lbs (3,500 kg) and super-clean performance.

For any driller, having your own compressor is essential. The uncertainties of different geologies mean that sometimes water (mud) drilling isn’t possible and the only option is to swap to air drilling. The GTD Decoe 650H is equipped so that you can swap between the two instantaneously.

**GENERATOR - PRAMAC GSW65P - 65kVA- DIESEL GENERATOR**

The generator’s primary function is to supply the power to the Mud Guzzler Drilling fluid recycling system. It has the added advantage of providing your own power source for any auxiliary equipment.

- **Prime power 60.52 kVA**
- **Perkins diesel engine**
- **3 Phase**

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**GTD DIAMOND PACKAGE ➤ PUMPS**

**TRIPLEX PISTON MUD PUMP**

90% of the time, centrifugal pumps are more than adequate for drilling most geologies and most depths. However, for that extra deep hole and dense geology, such as heavy clays, a high-pressure piston pump is necessary.

The package includes a 265 GPM @ 580 PSI (1000lpm @ 40 bar) horizontal reciprocating single-acting triplex piston pump. Capable of adjustable flow rates and pressures (up to 1,450 PSI / 100 bar) from the same pump making them adaptable for all types of applications. Featuring high wear resistance with ceramic liners. The pump can be powered by the rig or the tracked carrier.

**SAND GUZZLER - PIT PUMP**

Robust and proven pit pump for return cuttings and drilling fluid back to the Mud Guzzler recycling system. Powered by the Aux connections on the drill rig.

- **18” (254mm) land Guzzler with 3” (76mm) outlet**
- **Fittings and hose kit with Q/R fittings**
HYDRAULIC LOOP REELER

Robust and adjustable for all loop sizes and both free spinning and hydraulic. Powered by the rig, tracked carrier, telehandler or excavator.

- Double reels for double loops and grout pipe
- Hydraulic-driven for controlled entry and retrieval
- Free spinning for non-restricted unrolling
- Light weight alloy wheels for ease of manual handling
- Extendable drums for all loop sizes
- Removable base for ease of moving into a location
- Three methods of lifting: forklifting, excavator quick hitch, and lifting eye

GTD DIAMOND PACKAGE ➤ HYDRAULIC LOOP REELER

MAKE LIFE EASY WITH A GEOThermal GROUTER

Chosen for its consistent and reliable batch mixing that can be used with either premixed or component part grout, bulk or 55 lbs (25kg) bags.

- Capacity 660 gal/h (3m³/h)
- Mix volume 33 gal (150 litres)
- Hydraulic-driven
- Powered from either the drill rig or tracked carrier

SIMPLIFY YOUR GROUTING OPERATION WITH A READY MIXED DRY GROUT AND A CONTINUOUSLY OPERATING MIXING PUMP
A trailer is an essential tool for any drilling contractor and due to the nature of the industry, we specifically supply the most robust on the market. This model is picked to work in conjunction with the water tank system, and can be used for general haulage of supplies and consumables.

Water supply can be a challenge for a drilling operation and without a good supply, it can stop productivity in its tracks. Therefore, we have developed a way to mitigate this issue.

Two 2,200 gal (10,000ltr) tanks mounted on their own frame with auto-fill points and delivery pump system. This can be deployed prior to arrival so that when you arrive with the main equipment on-site you have a large buffer of water to immediately start drilling, top up/ fill your drilling fluid recycling system, use for flushing the hole when at depth and for mixing up the grout.

Our drill rods are made by our partner John Lawrie. We use our own (BR50) thread that is designed to work perfectly on an 3½” (89mm) rod diameter, engineered for both strength and maximum flow. Featuring extra thick walls for longevity; a luxury afforded as no manual handling is required with the GTD DESCO 6500R.

Continuing with the same exacting standards as our rods, the casing is made specifically by our partner John Lawrie. We have engineered them to be extra strong to reduce the risk of crush damage which in turn, extends the life of the product.

- BR50 Thread
- 20’ (6m) long
- 3½” (89mm) diameter
- 50 lengths
- Long tool joints
- 10mm gauge
- 4 x spanner flats
- Stillage for extra rods
- Single start rope thread
- 6” (152mm) Diameter
- 26 x 10’ (3m) long lengths
- 18 x 20’ (6m) long lengths
- Friction Welded
- 3/8” (10mm) gauge
- 3 x 10’ (3m) rack stillages
- 2 x 20’ (6m) rack stillages

TRAILER – IFOR WILLIAMS / BIG TEX

A trailer is an essential tool for any drilling contractor and due to the nature of the industry, we specifically supply the most robust on the market. This model is picked to work in conjunction with the water tank system, and can be used for general haulage of supplies and consumables.
CASING ACCESSORIES

The Diamond package comes supplied with all the necessary tooling for any drilling techniques used.

As with all our equipment, it is tried and tested and developed with our ‘drillers co-operative’.

Due to the complex nature of different geologies, casing can sometimes be required. The amount of casing necessary can vary from 10’ (3m) of surface casing, down to casing a complete hole. Although the package includes casing slings, where possible a hydraulic casing grab makes light work when projects require large amounts of casing. Check out the video opposite to see it in action.

HYDRAULIC CASING GRAB

A comprehensive selection of all the drill bits required for all types of geology.

All bits come with our own BR50-developed thread to match the rods for unrestricted flow.

The Diamond package comes supplied with all the necessary tooling for any drilling techniques used.

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All bits come with our own BR50-developed thread to match the rods for unrestricted flow.

A huge selection of spares that will enable you to service equipment up to 3 years (based on recommended 500hr services)

Included tablet computer with full factory Doosan licenced diagnostic program
IN THE PRESS

GTD DESC0 6500R, COVER STORY OF THE GEO DRILLING INTERNATIONAL MAGAZINE

READ ALL ABOUT IT IN THE FULL ARTICLE PUBLISHED IN DEC 2021 - SCAN QR CODE

WHAT SOME OF OUR GLOBAL CUSTOMERS ARE SAYING

“MEGA RIG – DOES EXACTLY WHAT IT SAYS ON THE TIN!”
ACE DRILLING SERVICES (UK)

“GTD EQUIPMENT HAVE ENABLED US TO SET NEW STANDARDS IN PRODUCTIVITY NEVER ACHIEVABLE BEFORE!”
GEOTECH BV (HOLLAND)

“THE TRACKED MUD UNIT IS AN ABSOLUTE GAME CHANGER”
AW SYNERGY (UK)

“I CAN NOW SEE WHY THIS RIG HAS BROKEN SO MANY RECORDS IN EUROPE. THE ROD HANDLER IS A DREAM!”
QC GEOTHERMAL (USA)

“If you are diversifying into geothermal drilling like us, GTD really are the only choice. They continue to support us all the way”
FUTURE DRILLING SERVICES (UK)

“The 6500R makes light work of the changing & challenging geology across France”
SYNERGIE FORAGE (FRANCE)