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FACT SHEET

**Boart Longyear
DELTABASE 525**

**GEOTECHNICAL
AND EXPLORATION
DRILLING RIG**

**GEOMECH AFRICA
LEVEL 1 - B-BBEE**

www.geogroup.co.za



About The DeltaBase 525 Multipurpose Drill

This compact and lightweight drill rig is capable of multiple drilling methods. It offers drill speeds of up to 740 rpm and pullback of 38kN. With versatility and strength at the forefront, it also offers a large drill head providing increased torque and speed. Meeting many site challenges head-on.

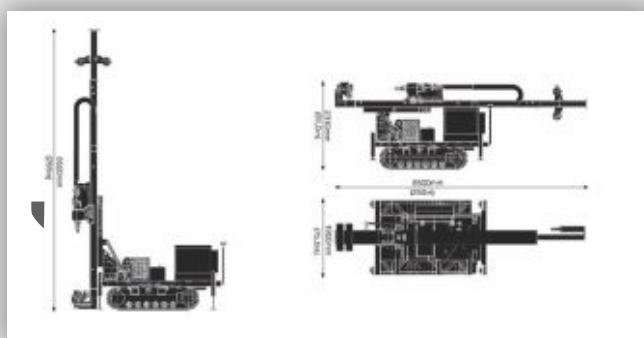
Dimensions and Weights

Crawler Mounted Drill Rig Weight:

Standard 6 500 kg (RC option 7500 kg)

Consists of:

- 4DEUTZ BF4L914 Power Unit Grp. -4.3 litre
4 cylinder (D914L04 as option)
- Hydraulic Module
- Main Hoist c/w Cable
- Hydraulic Mast Raising (independant)
- Lower Mast Assembly
- Rotation Unit Group
- Crawler Frame
- Battery
- Levelling Jacks (hydraulic) - 4
- Operator Controls
- Holding Clamp and Breaking Clamp



Crawler Chassis Steel Tracks

Axis distance: 1715 mm

Length: 1900 mm

Width of track shoes: 300 mm

Max. ground pressure: 0.053 MPa

Weight: 1035 kg

Max. Driving speed: 1.5 km/h

Max. Climbing ability: 60% (30°)

** Dimensions and weights may vary depending on options and should be checked before crating or lifting.*

Technical Specifications

PRIME MOVER

| STANDARD | DEUTZ BF4L914 air cooled Diesel |
|--------------------------|---------------------------------|
| SWEPT VOLUME | 4,31 litre |
| POWER MAXIMUM | 72,4 kW |
| RATER RPM | 2300 rpm |
| SPECIFIC FUEL ONSUMPTION | 225 g/kWh |

BOART LONGYEAR DELTABASE 525

Technical Specifications

| ROTARY HEAD DD52 2 GEAR WITH VARIABLE DISPLACEMENT MOTOR | | | DRILL MAST AND FEED SYSTEM WITH FEED CYLINDER | | | |
|--|--|---|---|--|--|-----------|
| | | RPM | Torque (Nm) | TOTAL LENGTH | 6,30 m | |
| 1ST GEAR | | 48 - 250 | 4890 - 977 | FEED STROKE | 4 m | |
| 2ND GEAR | | 140 - 740 | 1859 - 371 | FEED SPEED: UP DOWN | 12,5 m/min 18 m/min | |
| ROTATION MOTOR | | Danfoss hydraulic motor (variable/reversable - remote pilot) | | FAST FEED SPEED: UP DOWN | 31 m/min 51 m/min | |
| MECHANICAL TRANSMISSION 1ST GEAR RATIO | | 7,68:1 | | PULL DOWN FORCE | 34 kN | |
| MECHANICAL TRANSMISSION 2ND GEAR RATIO | | 2,92:1 | | PULL BACK FORCE | 55 kN | |
| BORE INSIDE DIAMETER | | 62 mm | | DRILLING INCLINATION | 45 degrees below horizontal to 90 degrees vertically down | |
| FLOATING SPINDLE INSIDE DIAMTER | | 30 mm | | WINCH MAIN HOIST TYPE BRADEN BG 6 | | |
| FLOATING SPINDLE STROKE | | 60 mm | | LINE PULL - BARE DRUM - FULL DRUM | 31,1 kN 23,1 kN | |
| DRIVE FLANGE | | 60,32 mm A.P.I. | | ROPE SPEED @ 60L/MIN - BARE DRUM - FULL DRUM | 29 m/min 36 m/min | |
| SIDE SHIFT | | 500 mm Stroke hydraulic | | FOR CABLE DIAMETER14MM | 35 m | |
| NOTE: The hydraulic motor ratings are at max. and min. displacement, prime mover at 2200 rpm. | | | WINCH OPTION MAIN HOIST TYPE SH220 | | | |
| REVERSE CIRCULATION FLUSHING ATTACHMENTS (OPTIONAL) | | | LINE PULL | | | 20 000 N |
| HYDRAULIC SYSTEM | | | ROPE SPEED @ 50 L/MIN FOR CABLE Ø 12 MM | | | 44 m/min |
| PRIMARY PUMP PARKER BENT AXIS - FIXED DISPLACEMENT | | | MAST EXTENSION FITTED ONTO STANDARD MAST TO PULL 6 M ROD LENGTHS | | | |
| MAX FLOW | | 66 lpm @ 2200 rpm | | LENGTH OF RODS | | 2 x 3 m |
| MAX PRESSURE | | 25 MPa | | TOTAL WEIGHT | | 140 kg |
| SECONDARY PUMP - CASAPPA GEAR PUMP | | | WIRELINE HOIST | | | |
| MAX FLOW (1ST) | | 59 lpm @ 2200 rpm | | LINE PULL | | 6500 N |
| MAX FLOW (2ND) | | 48 lpm @ 2200 rpm | | ROPE SPEED @ 59 L/MIN | | 100 m/min |
| MAX PRESSURE (1ST) | | 17,5 MPa | | FOR CABLE DIAMETER 6 MM | | 250 m |
| MAX PRESSURE (2ND) | | 17,5 MPa | | OPTIONAL CABLE DIAMETER 5 MM | | 350 m |

Drilling Systems

The figures in these tables have been calculated, based on field experiences, and may be reasonably expected. Actual drilling capacity will depend on in-hole tools and conditions, drilling techniques and equipment used.

Accessories

- Crawler with steel tracks
- Rob and break-out clamps - 220 mm
- Centraliser for 220 mm rod clamps
- Drill pipe storage
- Night lights
- Connecting flange 2 7/8 API thread
- Connecting flange HQ thread
- Connecting flange NQ thread
- Connecting flange NWY thread
- Jaws plates for BW casing
- Jaw plates for NW casing
- Jaw plates for HWT casing
- Tool box

Technical Specifications

STANDARD DRILLING SYSTEMS

| CORE DRILLING | CORE BARREL | HOLE DEPTH |
|---|-------------------|------------------|
| | NQ/NQ2" /NV/NV/2" | 310 m |
| | HQ/HV | 220 m |
| | PQ/PV | 145 m |
| | SQ | 90 m |
| REVERSE CIRCULATION DRILLING | 140 m | 101,6 mm RC Pipe |
| | 160 m | 88,9 mm RC Pipe |
| ROTARY DRILLING (TRICONE) HOLE DIAMETER 216 MM | 175 m | |
| AUGER DRILLING HOLE DIAMETER - 150 MM | 15-20 m | |

OPTIONAL DRILLING PACKAGE SPT (STANDARD PENETRATION TEST) AUTO HAMMER

| IMPACT RATE | 1-30 bpm |
|------------------|----------|
| LENGTH OF TRAVEL | 762 mm |
| HAMMER WEIGHT | 63 kg |
| TOTAL WEIGHT | 180 kg |



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The GeoGroup

GeoGroup comprises of a group of companies, each a leader in its own field, providing a range of services to the geotechnical, civil, mining and energy industries.

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About Geomech Africa

Geomech Africa (Pty) Ltd is an industry leader in the geotechnical investigations in Southern Africa. Certified as a **Level 1 B-BBEE** contributor. Providing drilling and testing services to the minerals exploration market, as well as geotechnical and civil industries in and around Southern Africa and Africa.

Geomechanics has long-term policies of developing operational/maintenance staff and upgrading equipment, to ensure that geotechnical investigations conducted for our clients are accurate, timely, cost effective and easily interpreted.

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