



DIAMOND CORING • CRAWLER MOUNTED • ALL HYDRAULIC

EXPLORATION DRILLING • TRACK MOUNTED

XDR 800_{HT}

Track mounted diamond core drill — twelve tonnes of pullback that folds into a 20 ft shipping container.

847 m

HOLE DEPTH IN HQ CORE

12,000 kg

PULL BACK, VARIABLE

5,880 N·m

DRILL HEAD TORQUE, LOW RANGE

20 ft

FOLDS INTO A SHIPPING
CONTAINER

EXPLORATION DRILL RIGS PTY LTD
REDBANK, QUEENSLAND, AUSTRALIA

TECHNICAL DATA
XDR.COM.AU

THE RIG

A full size drill, *in a container.*

Built in answer to requests for a compact but powerful diamond core drill. Folded down the 800HT packs neatly into a **20 ft shipping container**; unfolded it is a **twelve tonne pullback** top head drive with winching that out-performs many larger drills. Crawler mounted, for the ground a truck-mounted rig cannot reach.

9.5 m Square hollow section mast	3.5 m Head travel — 9.5 m of winch travel	10,000 kg Main winch, single line pull	240 bar Operating pressure — 3,500 psi
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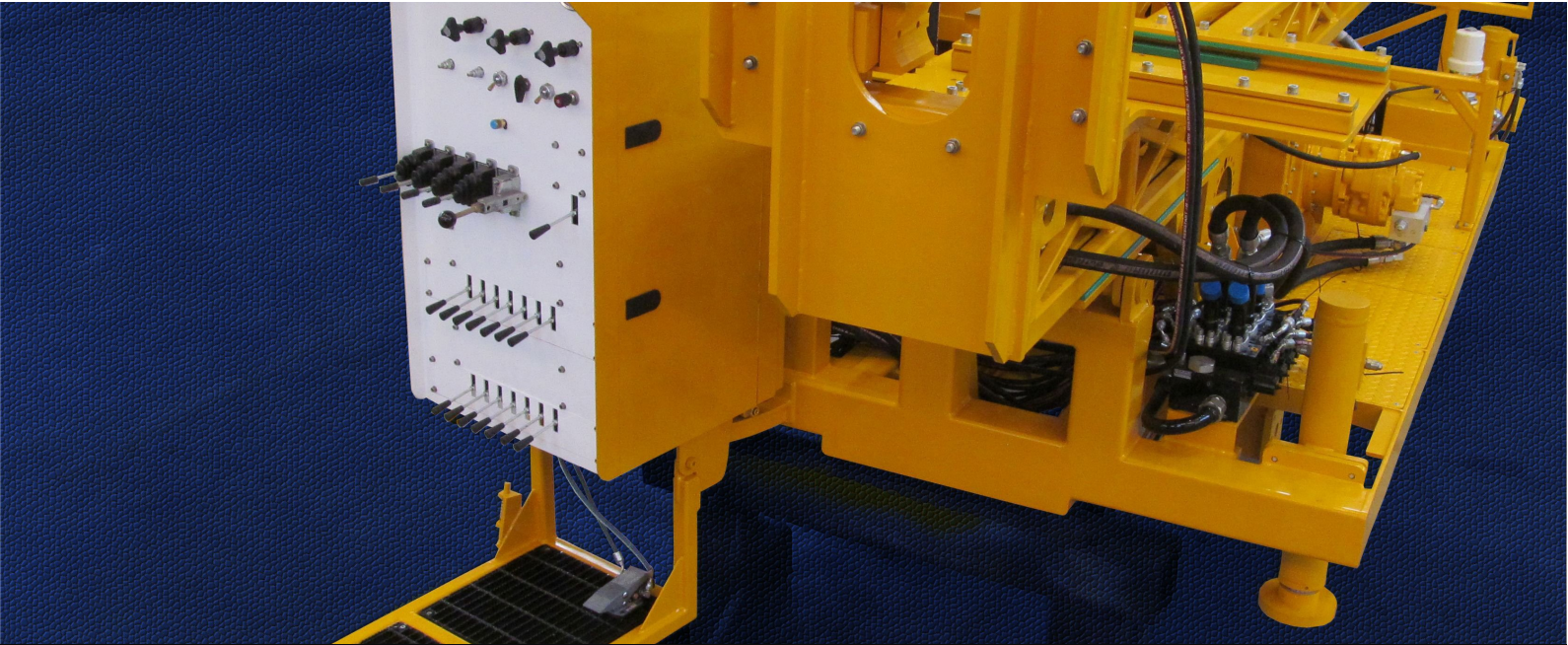
DRILLING CAPACITY — CORING, WIRELINE

ROD / CORE BARREL	ROD SIZE (MM)	CORE SIZE (MM)	HOLE DEPTH (M)
B	OD 55.6 ID 46.1	36.4	1,770 +
N	OD 69.9 ID 60.3	47.6	1,400 +
H	OD 88.9 ID 77.8	63.5	847

Depths depend on rock type, drilling technique, tools and overall conditions. The figures above are based on 90% of hydraulic efficiency.

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03	Control, engine and safety Hydraulic panel, Cummins engine, water pump, guarding	06
04	Transport and deployment 20 ft container, crawler mount, 3 metre rods	07



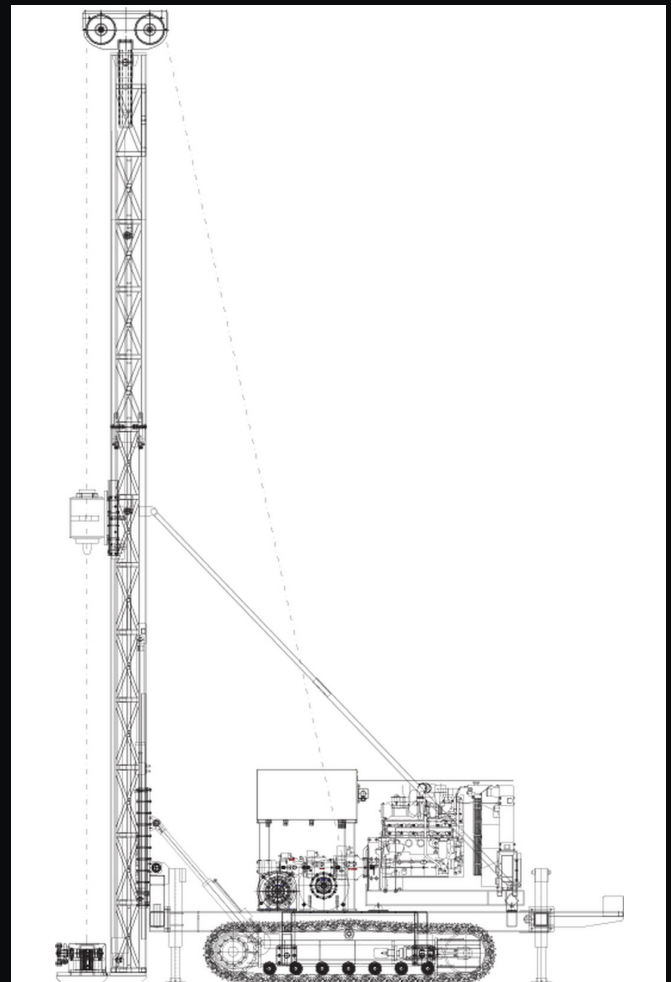
THE MACHINE

Folded down. *Ready to travel.*

A fully welded channel and RHS base with four levelling jacks, on crawler tracks. The mast is square hollow section, 9.5 m long, with 3.5 m of drill head travel on a hydraulic slide, 9.5 m of winch travel and full size XDR hydraulically operated tapered foot clamps.



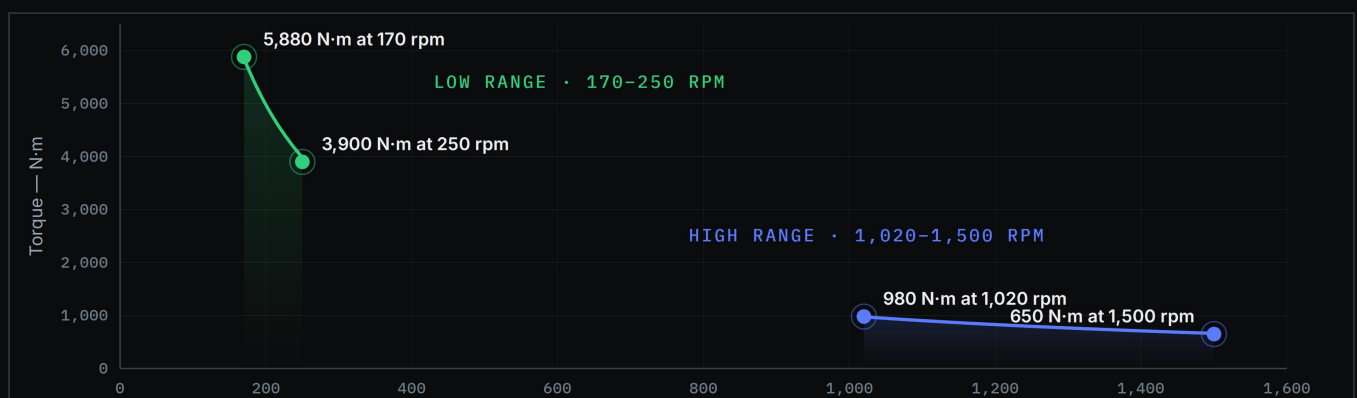
FOLDED DOWN – THE WHOLE RIG INSIDE A 20 FT CONTAINER ENVELOPE



GENERAL ARRANGEMENT – MAST ERECTED, CRAWLER MOUNTED

01 / MAST, FEED AND DRILL HEAD

EQUIPMENT	DESCRIPTION & SPECIFICATION – BASE RIG	NOTES
01 Base	- Fully welded structure — channel and RHS - Four levelling jacks - Crawler mounted	
02 Mast	- Square hollow section mast - Mast length 9.5 m - Drill head travel 3.5 m, on a hydraulic head slide 9.5 m of winch travel - XDR hydraulically operated full size tapered foot clamps	NOTE Takes 3 metre rods
03 Feed	- Variable feed pressure control - Pull back 12,000 kg, variable - Pull down 4,500 kg, variable	
04 Dump mast	1.5 metre mast dump - UHMWPE slides	
05 Drill head	- Two-speed floating hollow spindle drill head - Variable speed piston motor, pressure lubricated - Gears hardened and ground High range — 980 N·m at 1,020 rpm, 800 N·m at 1,250 rpm, 650 N·m at 1,500 rpm Low range — 5,880 N·m at 170 rpm, 4,780 N·m at 208 rpm, 3,900 N·m at 250 rpm - Handles N, H and P rod sizes	NOTE Speed and torque quoted at 100% efficiency



TWO-SPEED DRILL HEAD – ALL SIX SPECIFICATION POINTS SIT ON THE SAME CONSTANT-POWER CURVE. LOW RANGE TRADES SPEED FOR TORQUE

02 / WINCHES AND HYDRAULICS

EQUIPMENT	DESCRIPTION & SPECIFICATION – BASE RIG	NOTES
06 Main winch	- Capacity 10,000 kg single line pull - Winch limiter and wire rope overrun cut out - Planetary reduction gearbox; fail-safe brake complete with over-centre valve	
07 Wireline winch	- Capacity 1,400 m of 8 mm non-rotating rope, 18 × 7 construction - Radial piston motor - Planetary reduction gearbox complete with over-centre valve	
08 Pumps	1 × main pump — Kawasaki 140 cc, pressure compensated load sensing 2 × auxiliary Kawasaki pumps - GPM high pressure gear pump	
09 Valves	- AMCA APV22 proportional load sensing valve - Sauer Danfoss auxiliary valves - Operating pressure 240 bar (3,500 psi)	
10 Hydraulic tank, filtration and cooling	600 l tank capacity - Full flow filtration with Arlon return line filtration - All circuits 10 micron absolute - Combi cooler with the engine	

LOAD SENSING THROUGHOUT

The main pump, both auxiliaries and the proportional valves are all pressure-compensated load sensing. The pumps deliver only the flow the circuit asks for, so the rig is not burning engine power across a relief valve when the head idles — which shows up as fuel burn and oil temperature over a season.

03 / CONTROL, ENGINE AND SAFETY

EQUIPMENT	DESCRIPTION & SPECIFICATION – BASE RIG	NOTES
11 Control system	— Rig functions and gauges at the panel, including water flow and pressures — All engine controls, with shut down in the panel — Three emergency stops — one in the panel, three in total on the rig	NOTE Direct hydraulic control — no electronic control system to configure or fault-find
12 Engine	— Cummins Diesel QSB 6.7 litre custom pack — 250 hp at 2,200 rpm	
13 Water pump	— FMC John Bean L09-18HD-BCD — Variable speed, maximum 250 l/min at 70 bar	

14 / SAFETY AND FINISH

- Guarding to table with rotation shut off
- Guarding to all rotating items
- Enclosed pulleys
- Driller's operating platform
- Rig lighting
- Two-pack paint system

DIRECT HYDRAULIC CONTROL

Rig functions, gauges and engine controls sit on one panel, driven directly. There is no electronic control system between the driller and the machine, and nothing that needs a laptop to diagnose on a site a truck could not reach in the first place.



THE DRILLER'S PANEL ON THE DECK – GAUGES, LEVERS AND ENGINE CONTROLS IN ONE PLACE

It goes where the *truck stops*.

The 800HT was built in answer to a specific problem: ground that a truck-mounted rig cannot reach, and a drill that still has to move between countries without a heavy-lift bill.

Into a 20 ft container

Folded down, the 800HT packs neatly into a 20 ft shipping container — so a rig that works like a full size drill moves like a compact one, by road, rail or sea.

Crawler mounted

Purpose built for difficult terrain where access by a truck-mounted rig is not possible. The tracks go where the truck cannot follow.

Three metre rods

The 800HT is set up for 3 metre rods, with 3.5 m of head travel and 9.5 m of winch travel. The truck-mounted 800H handles 6 metre rods.

Support vehicle

The rig is normally sold in conjunction with a crawler mounted support vehicle. The support vehicle is not an XDR product.



FOLDED DOWN ON THE DECK — MAST, HEAD AND FOOT CLAMPS STOWED INSIDE THE CONTAINER ENVELOPE

WHY OPERATORS SPECIFY IT

Proven components, *watched functions.*

A full size drill, folded up

Twelve tonnes of pullback, 10,000 kg of main winch and full size tapered foot clamps — in a package that fits a 20 ft container.

Winching that punches above it

The winching capability is matched to the pullback, and out-performs many larger drills in the market.

Nothing to reboot

Direct hydraulic control. Every function on gauges and levers at the panel, with no electronic control system to configure or fault-find in the field.

Where the truck stops

Crawler mounted and purpose built for terrain a truck-mounted rig cannot reach, which is usually where the interesting ground is.

Casing runs easily

The hydraulic head slide makes running casing straightforward, and the two-speed floating spindle head gives variable speed and torque across N, H and P rod.

Proven components

Cummins, Kawasaki, Sauer Danfoss, AMCA and FMC John Bean — parts and consumables available in Australia and worldwide.

SUPPLIED BY

Exploration Drill Rigs Pty Ltd
27 General Macarthur Place
Redbank QLD 4301, Australia

ENQUIRIES

admin@xdr.com.au
xdr.com.au

TELEPHONE

+61 (0) 7 3381 5363

SCOPE

Any equipment not clearly specified in this document is not included in XDR's scope of supply.

These technical specifications are based on theoretical engineering calculations. Actual capacity will depend on specific drilling conditions and materials. Exploration Drill Rigs Pty Ltd reserves the right to change or modify designs and specifications without prior notice or obligation.

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