PRODUCT DATA SHEET



AEON

RAPTOR 4D BENTONITE

DIESEL-DRIVEN BENTONITE & SLURRY PUMP

AUCKLAND / WELLINGTON / CHRISTCHURCH

ISSUE 11/2026

270 m³/h	35 m	100 mm	1650 kg
MAX. FLOW	MAX. HEAD	SOLIDS HANDLING	DRY WEIGHT

FEATURES & COMPETITIVE ADVANTAGE

The AEON Raptor 4D Bentonite is a 4-inch, diesel-driven screw-impeller pump developed for bentonite, slurry and other solids-laden mixtures. It pairs 100 mm solids handling with hard-wearing, externally adjustable wear parts and automatic vacuum priming, backed by Condor's hire and service network across New Zealand.

KEY FEATURES

- **Screw impeller**
  Built for viscous, solids-laden bentonite and slurry; passes solids up to 100 mm.
- **Automatic self-priming**
  Dry claw vacuum pump draws up to 9.0 m max. vacuum.
- **Adjustable wear parts**
  HidroHard suction liner adjusted externally to restore performance as it wears.
- **Optional central flushing**
  Fast, easy clean-down between jobs to keep the pump at peak performance.
- **Low noise**
  63 dB at 10 m in the silent canopy.
- **Clean, compliant power**
  Hatz 3H50TICD three-cylinder diesel, Stage V / Tier 4f.

IDEAL FOR

- HDD & DIRECTIONAL DRILLING
- PILING
- DIAPHRAGM WALLS
- TUNNELLING
- SLURRY TRANSFER
- DESILTING & SUMPS

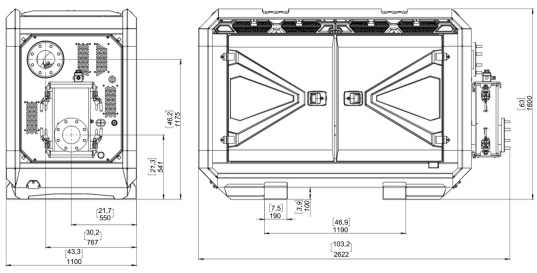


MOVING BENTONITE ON SITE

GENERAL SPECIFICATIONS

Model	**AEON Raptor 4D Bentonite**
Drive	**Diesel**
Connection size	**4 in × 4 in**
Frame L × W × H	**2622 × 1100 × 1601 mm** 103.22 × 43.31 × 63.03 in
Dry weight	**1,650 kg** 3,638 lb
Fuel tank capacity	**270 L** 70 US gal
Sound level	**63 dB @ 10 m** @ 33 ft

DIMENSIONS

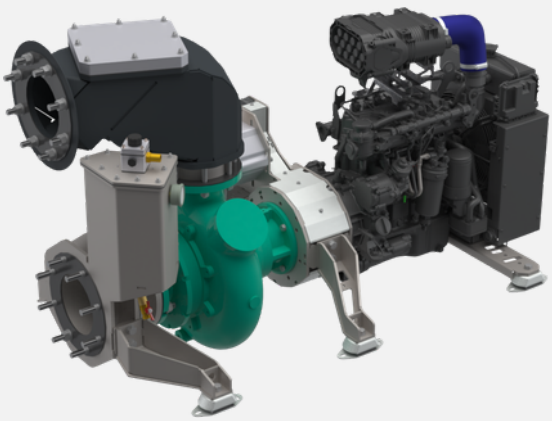


Frame L × W × H: 2622 × 1100 × 1601 mm · inches in brackets

PUMP TECHNICAL SPECIFICATION

PUMP PERFORMANCE

Max. flow	**270 m³/h** 1,189 US gpm
Max. head	**35 m** 115 ft · 50 psi
Impeller type	**Screw impeller**
Solids handling	**100 mm** 3.94 in
Max. liquid temperature	**40 °C** 104 °F



PUMP END & DRIVETRAIN

MATERIALS OF CONSTRUCTION

Casing	**GG25 (0.6025)**
Impeller	**RL03 (1.4122)**
Suction liner	**HidroHard** Externally adjustable
Wear ring	**Hidrolex**
Shaft	**1.4021 stainless steel**
Shaft sealing	**WC / SiC / NBR**
O-rings	**NBR**

Suction liner is adjustable by external regulation screws — restore performance as it wears without dismantling the pump.

PRIMING SYSTEM

Pump type	**Dry claw vacuum pump**
Air handling capacity	**60 m³/h** 35 CFM
Max. vacuum	**9.0 m** 30 ft
Float box	**Hot-dip galvanised steel**
Non-return valve	**Ductile iron GJS-400**
Check valve ball	**NBR rubber**



DRY CLAW VACUUM PRIMING PUMP

BUILT FOR BENTONITE

Bentonite pumping presents a unique set of challenges. High viscosity, suspended solids and abrasive material punish standard dewatering pumps. The AEON Raptor Bentonite range is developed specifically for bentonite, slurry and other solids-laden mixtures in demanding construction and drilling applications.

THE CHALLENGE & THE ANSWER

01 HIGH VISCOSITY

A **screw impeller** suited to thick, viscous media keeps bentonite moving, while **automatic vacuum priming** (9.0 m max. vacuum) gets flow started without manual priming.

02 SUSPENDED SOLIDS

100 mm solids handling lets cuttings, spoil and debris pass straight through the pump end.

03 ABRASIVE WEAR

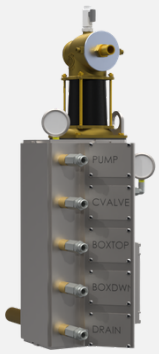
A **HidroHard suction liner**, **Hidrolex wear ring** and **WC / SiC mechanical seal** stand up to abrasive slurry, and the liner is adjusted externally to restore performance as it wears.

04 SETTLING & BUILD-UP

An optional **central flushing system** makes clean-down quick and easy, keeping the pump running at peak performance between jobs.

WHAT IT HANDLES

Bentonite drilling fluid	**HDD, piling, diaphragm walls**
Slurry & spoil-laden water	**Tunnelling and excavation**
Sludge	**Settlement ponds, sumps, desilting**
Solids-laden water	**Construction site pumping**



CENTRAL FLUSHING SYSTEM · OPTIONAL

ENGINE & FRAME OPTIONS

ENGINE OPTIONS

STANDARD **Hatz 3H50TICD**

Emission standard	**Stage V / Tier 4f**
Cylinders	**3**
Displacement	**1.464 L** 89.34 cu in
Bore × stroke	**84 × 88 mm** 3.31 × 3.46 in
Max. power	**18 kW @ 2000 rpm** 24.1 hp
Variable speed	**1500 – 2100 rpm**
Combustion system	**Direct injection, Bosch off-highway common rail**
Exhaust after-treatment	**cEGR, DOC, DPF**

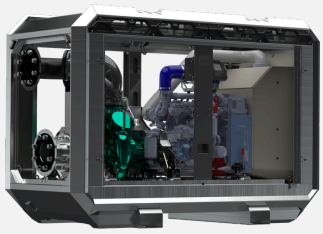


HATZ 3H50TICD DIESEL ENGINE

FRAME OPTIONS



SILENT CANOPY



OPEN CANOPY

Canopy type	**Stackable**
Material	**Hot-dip galvanised steel**
Dimensions L × W × H	**2622 × 1100 × 1601 mm** 103.22 × 43.31 × 63.03 in
Lifting	**Single lifting point**
Forklift pockets	**Installed**

Both canopy options share the same frame dimensions. Sound level quoted for the silent canopy.

CONTROL PANEL OPTIONS

CONTROL PANELS



STANDARD

AEONPUMP control panel

- AEONPUMP software
- Automatic level control
- Dual float switch

OPTIONAL

Add-ons

- ○ Hydrostatic level sensor
- ○ Online telemetry
- ○ Light Assistant

AEONPUMP TECHNOLOGY

WIRELESS

Online telemetry and remote access can be added to any unit — check status, location and alarms from the app or desktop.

DURABILITY

Components and materials are selected for long service intervals and a long working life.

ENERGY EFFICIENT

Hydraulics and drivetrain designed to cut fuel burn, running costs and CO_2 emissions.

MODULAR DESIGN

Frame sections can be changed with little effort, so servicing and repairs are fast.

EASY CONTROL

A clear, user-friendly control panel, backed by remote data collection and control via the AEONPUMP app.

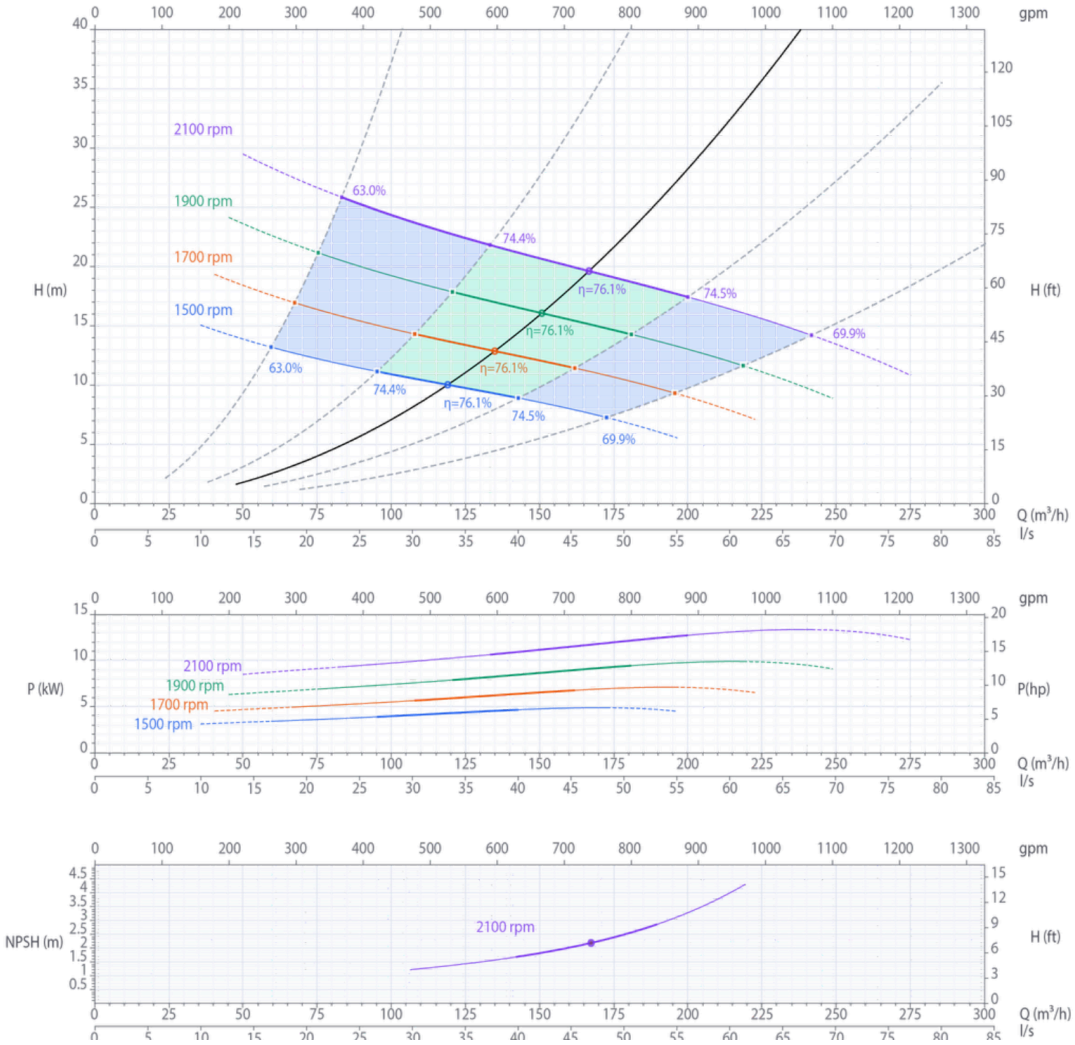
HIGHLY COMPATIBLE

Multiple pumps can be linked to run in sync, giving flexible modular pumping systems.

PUMP PERFORMANCE CURVES

CURVES AT SPEEDS **A** 2100 rpm **B** 1900 rpm **C** 1700 rpm **D** 1500 rpm

Head (m / ft) | Shaft power P (kW / hp) | NPSH required (m / ft) | Efficiency η (%)



Pump power P includes mechanical seal friction and bearing frame losses, from a run-in bearing frame. Testing according to ISO 9906:2012.

HIRE · SALES · SERVICE

NEED BENTONITE PUMPING ON SITE?

Talk to the Condor team about the right pump, pipework and set-up for your job.

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