

## BRANDT™ TUNDRA™ MAX Land Mud Chiller



WHEN THE HEAT'S ON, OUR MOBILE SOLUTION KEEPS YOUR MUD CHILLED

Elevated and fluctuating down hole temperatures and pressures can negatively impact mud properties, hole cleaning, critical down hole measurements and tool life, as well as increase overall mud costs and non-productive time. These problems are especially pronounced on land rigs or land drilling operations where water is not readily available as a chilling medium and mud chillers must be designed to effectively dissipate drilling fluid heat within a closed-loop cooling circuit.

Capitalizing on our highly effective offshore mud chillers, BRANDT has developed a fully automated land mud chiller in response to Operators' requests for a cooling mechanism that would meet the distinct requirements of land-based high-pressure, high-temperature (HPHT) drilling.

Our mobile, fully automated land mud chiller relies on specially designed twin-plate pack heat exchangers and proven air-blast

as well as chiller technologies to continuously chill drilling fluid in a single pass. Due to its innovative design, efficient chilling is achieved even with elevated ambient temperatures and without the need for an external water source.

As down-hole temperatures rise, the TUNDRA MAX land mud chiller effectively reduces and stabilizes synthetic, diesel, and water-based drilling fluid temperatures, which lead to:

- Reduced NPT by eliminating trip time required to change out or protect subsurface tools.
- Improved accuracy of subsurface measuring tools.
- Improved drilling fluid performance and reduced costs associated with chemical additives.
- Reduced HSE risks associated with high temperature returns.
- Extended life for both surface and subsurface equipment.

FEATURES	BENEFITS
Fully automated	Easy to set up and operate - reduced manpower
Trailer mounted	Transportation and operation ease. Trailer or ground mount operation.
Environmentally sustainable closed loop operation	Does not require continuous precious water resources
High performance chilling	Reducing fluid temperatures up to 65°F (36°C)
Hybrid chilling with air blast and industrial chiller technologies	Enables efficient cooling even under severe ambient temperature conditions
Accurate daily reports from PLC data recorder	Reliable daily reporting
Power saver mode	Reduced kW power consumption

\*Achievable outlet temperature dependent on ambient conditions, drilling fluid inlet temperature, fluid type and fluid properties.

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## Specifications and Dimensions

Dimensions without trailer (L x W x H)	32 ft x 8 ft x 9 ft 4 in (9754 mm x 2438 mm x 2845 mm)
Dimensions with trailer (L x W x H)	48 ft x 8 ft 6in x 12 ft 4 in (14,630 mm x 2591 mm x 3759 mm)
Operating weight*	43,200 lb (19,595 kg)
Applicable muds	Capable of cooling OBM or WBM systems
Mud weight range	9.0 ppg to 19.00 ppg (1.08 sg – 2.2 sg)
Optimal process range	350 gpm to 500 gpm (1300 l/m to 1800 l/m)
Inlet temperature range**	Up to 250°F (121°C)
Achievable outlet temperature range***	100°F to 152°F (38°C to 67°C)
Ambient working temperature range	10°F to 131°F (-15°C to up to 55°C) ****
Power requirements	<= 200 kW Economy Mode On <= 300 kW Economy Mode Off 460 V, 3-phase, 450 A
<p>*Excludes trailer. For more information about the weight including the trailer please contact your local NOV representative.  **200°F to 250°F (93°C to 121°C) intermitting load.  ***Achievable outlet temperature dependent on ambient conditions, drilling fluid inlet temperature, fluid type and fluid properties.  ****Continuous operation from 125°F to 131°F (52°C to 55°C). Unit will be fitted with high ambient kit.</p>	



To learn more about how our totally automated land mud chiller can help keep your drilling fluid in optimum condition, contact your nearest WellSite Services - FluidControl representative.