

And the winner is

Before the installation, the drill was using 22.9gal/h of fuel. After running the Sandvik CMS for five weeks, the rig was only using 16.9gal/h – a reduction of 26.2%. This cut translates to significant savings of around 24,000gal of fuel, US\$108,000 and more than 300t of carbon emissions (based on 4,500 hours of operation and US\$4/gal) annually – on fuel alone. More savings are expected from increasing the engine life.

“Changing out steels is when it really makes a big difference,” Kelly Rice, the Cloud Peak Energy drill mechanic who works on the D75KS, notes. “And the tram times – it saves a lot of fuel. It also helps you start in cold weather. It makes a big difference and takes a load off the engine. Once it fires, it’s a lot easier to run.”

Gilbertson adds: “The CMS saved about 500,000gal of fuel between overhauls.

“As part of our environmental stewardship programme, we work to reduce fuel use and emissions. The Sandvik CMS will help us do both.”

Cloud Peak Energy bought two new Sandvik rigs for 2013 with Sandvik CMS installed.

“With this customer trial, we wanted to prove that the CMS could consistently produce significant savings for our customers,” Ken Stapylton, vice president for rotary and HP DTH drilling, Sandvik Mining, comments. “We will continue to collaborate with customers to ensure we are bringing industry-leading products to market that make mining operations safer, cleaner and more efficient.”

The Sandvik CMS provides a solution to the inherent inefficiencies of rotary blast-hole drills that have a direct connection between the engine and compressor. The system isolates the compressor and eliminates the need to maintain pressure when the machine is not drilling. This reduces the load on the engine, saving a significant amount of fuel and reducing wear and tear. ♥

Dando's rig debut

UK company releases new compact edition to the family

Dando Drilling International has added to its exploration drilling rig models with the Coretec 9000.

The Coretec 9000 is a new wire-line core drilling rig designed for surface exploration drilling to depths of 1,200m and with a pullback capacity of 9,000kgf.

The compact and robust Dando Coretec 9000 has been designed specifically for deep wire-line core drilling and it can collect quality core samples while operating on a small footprint.

The machine combines a long stroke of 4m with a traditional chuck and clamp arrangement, enabling the rig to fill a 3m core barrel in one pass.

“The Coretec 9000 has been launched as a lightweight, compact and cost-effective solution for core drilling to great depths in remote areas of limited space,” Martin Fitch-Roy, managing director of Dando Drilling International, states.

Carrier options on the rig are crawler-mounted as standard but it can be supplied on a heavy-duty commercial 4 x 4 truck, trailer-mounted, or skid-mounted on customer’s own support vehicle/structure for different terrain and access requirements.

The engine is a CAT C4.4 turbo diesel engine 100hp (135hp is available as an option).

Optional equipment includes a mast extension – a detachable and foldable mast section that can be fitted to allow the pulling of 6m drill rods/ core barrels. There are three track options: triple grouser; single grouser; and rubber plate.

The coring pump is a standard hydraulically driven duplex pump with a maximum flow rate of 146L/min. The maximum discharge pressure is 700psi.

Dando manufactures hydraulic top-drive mineral exploration drilling rigs from 6,000kgf to 18,000kgf pullback capacity.

The Coretec 9000 is Dando’s sixth commercial model offering to this sector.

The Mintec range, which includes Mintec 6, Mintec 6000, Mintec 9000, Mintec 12.8, and Mintec 18, is capable of performing several types of drilling, including wire-line core drilling, reverse circulation and rotary air blast. ♥

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Computer-generated image of Dando's Coretec 9000 wire-line core drilling rig

Rig specifications

Mast dimensions	Working mast height using main winch: 5,500mm	Working mast using the rotary head: 3,600mm	Mast dump to 45°
Mast capacity	Pullback: 9,000kgf	Pulldown: 3,250kgf	Hook load (max): 6,000kgf
Main winch	Single line pull: 3,000kg Double line pull: 6,000kg	Max speed: 41m/min	Drum capacity: 57m of 10mm wire rope
Wire-line winch	Maximum single line pull: 1,000kg	Max speed: 120m/min	Drum capacity: 1,150m of 4.76mm (3/16in) wire rope. Other options available
Drilling depth capacity*	BQ (6kg/m) drill rod = 1,200m		
	NQ (8.0kg/m) drill rod = 900m		
	HQ (11.6kg/m) drill rod = 620m		
	PQ (17.4kg/m) drill rod = 414m		

*Based on 50% of drill string weight in dry hole

