



# D45KS/D50KS

ROTARY BLAST HOLE DRILLS





# A HISTORY OF INNOVATION 1862 – PRESENT

Only one thing can take a company from a small town in Sweden to a worldwide operation. Innovation. With it, we've created a legacy of problem-solving with an unwavering commitment to quality.

**That means every Sandvik product is a product you can depend on.**



# SOLID PERFORMANCE IN MID-RANGE DRILLS

## BUILT TO LAST!

Rotary blasthole drills from Sandvik set the standard for productivity, durability, and cost effectiveness. These machines are built for continuous drilling in some of the harshest operating environments in the world. Proven designs, rigid lattice style masts, heavy duty pulldown chains, and durable power groups place these rigs in a class of their own. Choose the right Sandvik rig for your needs and count on it to perform for years to come.

### PROVEN DRILLS FOR DEPENDABLE OPERATION

The D45KS and D50KS are two of the most trusted mid-range diesel powered, self propelled crawler mounted blasthole drills. Based on the same platform, but with different standard configurations and well developed options, each machine is built for optimum performance in a broad range of mining applications. With their heavy duty frames and undercarriages, it is no wonder they have built such a reputation for longevity and solid performance. First pass capability is 8.7 m (28' 6").

### SANDVIK D45KS

The D45KS comes with high pressure air for down-the-hole (DTH) drilling, most commonly in gold mining or quarrying. The drill excels in most applications where DTH is used and maximum reliability is a requirement

- 165-222 mm (6 1/2 to 8 3/4") diameter holes
- Drilled depths up to 63 m (208')
- Pulldown 200 kN (45,000 lbf)
- Bit load up to 244 kN (55,000 lbf)

### SANDVIK D50KS

The D50KS comes with a low pressure compressor for rotary drilling. Thanks to its upgraded and heavy duty hydraulic system, the D50KS delivers the rotary horsepower for maximum productivity throughout its hole size range. It is often found in coal mining applications

- 152 to 229 mm (6" to 9") diameter holes
- Drilled depths up to 45 m (148')
- Pulldown 222 kN (50,000 lbf)
- Bit load up to 267 kN (60,000 lbf)



# KEY PRODUCT FEATURES

**01**

Rigid lattice style masts and heavy duty pulldown chains are part of the package that make Sandvik's D45KS and D50KS blasthole drills top performers in a class of their own. The angle drilling option is one of the many features that drive this performance in an impressive range of applications. The mast can be set in 5° increments, from 0° to 30° for drilling angle holes.

**02**

The effective handling of drill pipe contributes to shorter cycle times and more holes drilled.

**03**

Increasing the driller's comfort and functionality supports a safer environment and contributes to greater work output.

**04**

Sandvik hydraulic systems manage power operation with few moving parts, produce abundant power, work under extreme operating conditions, and are self lubricating.

**05**

Moving and set-up are important parts of the drilling cycle. To overcome the rugged terrain in a mining environment, Sandvik drills deliver top performance from strong, structurally sound undercarriages and heavy duty frames.

**06**

These drills have solid engine and compressor options that provide the right combination for each drilling condition. The engine and compressor range allows for optimized hole flushing and the most power for down-the-hole (DTH) drilling. Operating at lower speeds and load factors assures longevity. Additional factors like load sensing and fan speed controls add performance.

**07**

Operators need an open well-designed work deck area. These drills offer the quick access that keeps you up and running.

# D45KS/D50KS

01 ▶

02 ▶

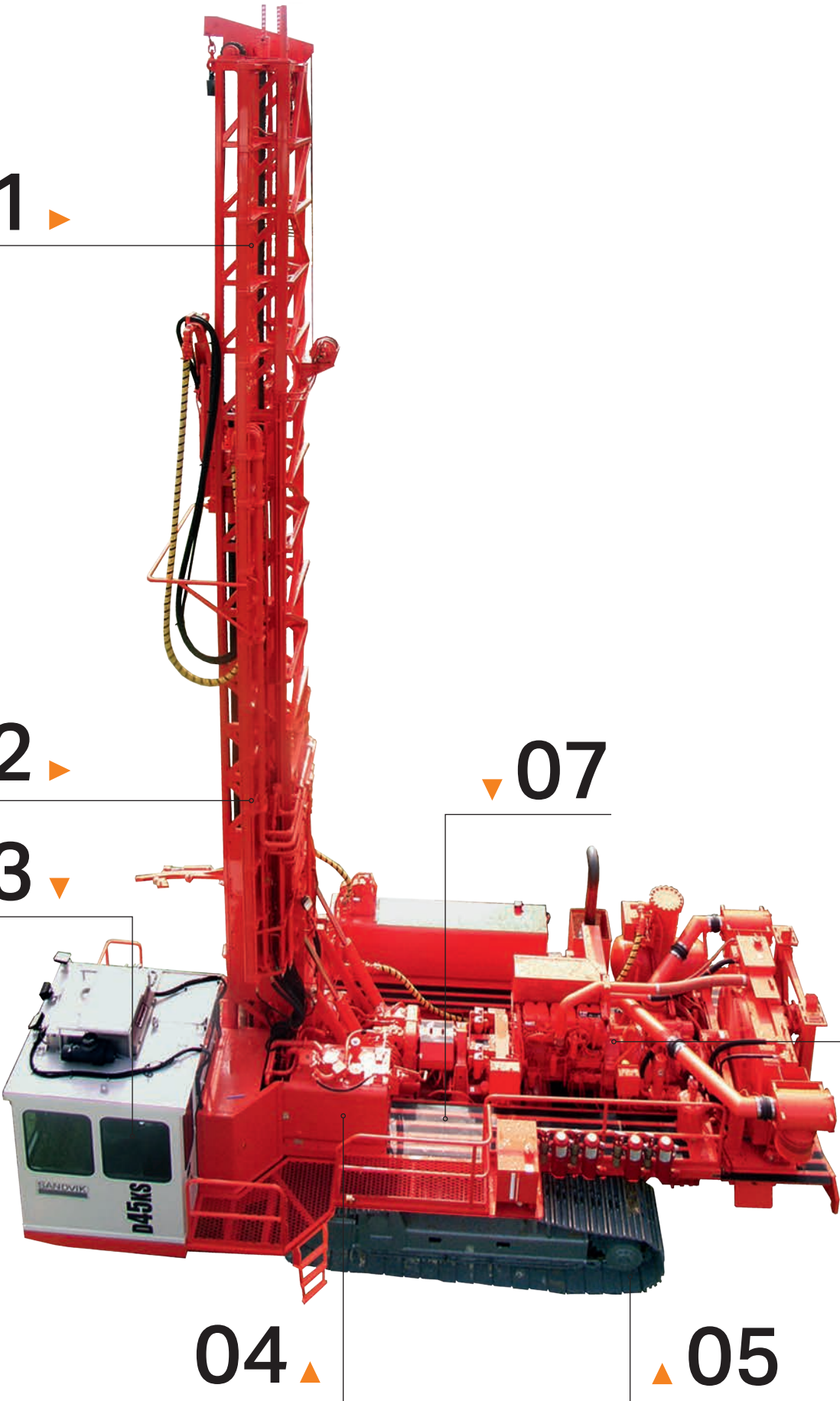
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# TURNING INHERENT ISSUES INTO INTRINSIC SOLUTIONS

**Innovation is more than our end goal. It's our state of mind. We don't just work towards it- we work within it.**

This mindset has powered Sandvik since our founding in 1862. Precise solutions are the natural byproduct of constant improvement. To that end, we've created a patented Compressor Management System (CMS) to tackle two of the primary issues facing drillers today – increasing productivity and reducing environmental impact.

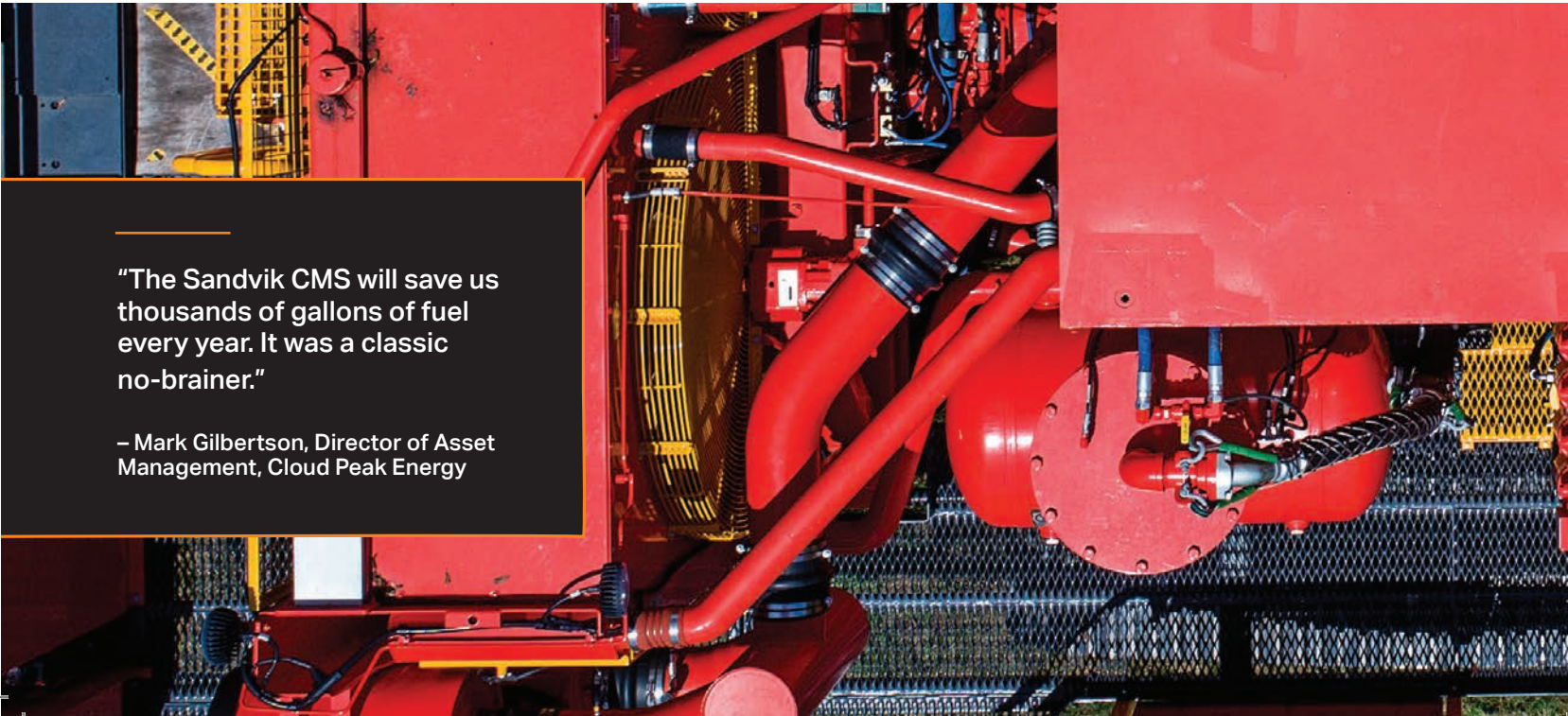
## VALUE IN EVERY MODE

**Start-Up:** CMS holds the inlet butterfly closed to allow the engine to crank, start, and accelerate to low idle, making the drill much easier to start.

**On Load:** When the compressor is on load, the CMS throttles the volume of the compressor to deliver the desired up hole velocity so no air is wasted with excess pipe and bit wear.

**Off Load:** When the compressor is off load, the CMS regulates receiver pressure and evacuates the main compressor, thus reducing engine load and compression where when air is not needed.

**Shutdown:** CMS unloads the compressor from the engine to allow for cooler engine shutdown, extending turbo and engine life.



“The Sandvik CMS will save us thousands of gallons of fuel every year. It was a classic no-brainer.”

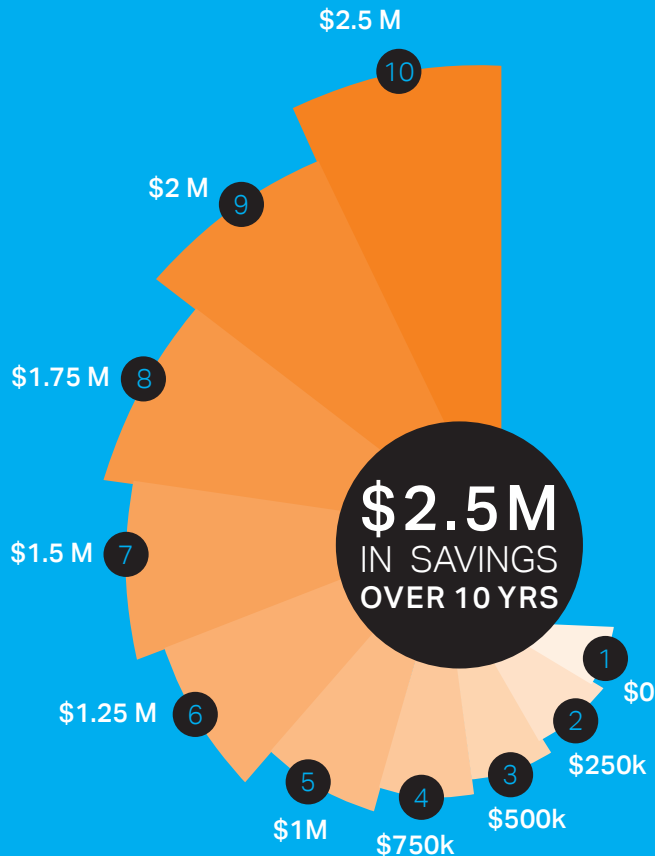
– Mark Gilbertson, Director of Asset Management, Cloud Peak Energy



# INCORPORATING OUR REVOLUTIONARY CMS SYSTEM TO BOOST PRODUCTIVITY.

Sandvik's patented CMS solves the inherent inefficiencies of rotary blasthole drills that have a direct connection between the engine and compressor. Isolating the compressor reduces the load on the engine by eliminating the need to maintain pressure when the machine is not drilling.

IN ADDITION TO REDUCING THE CARBON FOOTPRINT OF MINES AND DRILL SITES, THE CMS MAKES A TANGIBLE IMPACT ON PRODUCTIVITY.



REDUCED CARBON EMISSIONS by 300t



INCREASED ENGINE AND COMPRESSOR LIFE

20-35% LESS FUEL CONSUMPTION



MAINTENANCE intervals EXTENDED



# MACHINE SPECIFICATIONS

## D45KS/D50KS

<b>D45KS</b>	<b>METRIC</b>	<b>IMPERIAL</b>
Hole diameter	165-222 mm	6 1/2" - 8 3/4"
Maximum hole depth - Single-pass	63 m	208'
First pass capability - Single-pass	8.7 m	28' 6"
<b>FEED</b>		
Maximum pulldown	200 kN	45,000 lbf
Maximum bit load	244 kN	55,000 lbf
Feed rate up/down - Single-pass	0-38 m/min	0-125 fpm
<b>ENGINE, CUMMINS QSX19*</b>		
Power	522 kW	700 hp
RPM	1,800 rpm	
High pressure	32.8 m <sup>3</sup> /min	1,160 scfm
DTH	24.1 bar	350 psi
<b>HOIST</b>		
Hoist rate	0-49 m/min	0-160 fpm

\*Optional power group shown - consult factory for other configurations

<b>D50KS</b>	<b>METRIC</b>	<b>IMPERIAL</b>
Hole diameter	152-229 mm	6"-9"
Maximum hole depth - Single-pass	45 m	148'
First pass capability - Single-pass	8.7 m	28' 6"
<b>FEED</b>		
Maximum pulldown	222 kN	50,000 lbf
Maximum bit load	267 kN	60,000 lbf
Feed rate up/down - Single-pass	0-38 m/min	0-125 fpm
<b>ENGINE, CUMMINS QSX19*</b>		
Power	522 kW	700 hp
RPM	1,800 rpm	
Low pressure	45.3 m <sup>3</sup> /min	1,600 scfm
Rotary	6.9 bar	100 psi
<b>HOIST</b>		
Hoist rate	0-49 m/min	0-160 fpm

\*Optional power group shown - consult factory for other configurations





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