

# D55SP and D75KS blasthole drills

Sandvik is a high-technology engineering group with world-leading positions in selected areas – tools for metal working, advanced materials technology, and mining and construction. We are represented in 130 countries.

Sandvik Mining and Construction represents one third of the overall Sandvik Group and serves a broad range of customers in construction, mineral exploration, mining and bulk materials handling. Our construction expertise covers quarrying, tunneling, demolition and recycling, and other civil engineering applications. Our mining products and services support customers on the surface and under ground, in all mineral, coal and metal mining applications to ore transportation.





## Versatile production yields more product

### **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. Structural strength, easy maintenance, and world-wide support, all maximize drilling time and keep you on top of your production schedule. Sandvik also offers the world's widest range of tools and accessories for rock drilling. Equip these drills with products that are renowned for quality and high performance and you build a complete drilling system unmatched in productivity. Choose the right Sandvik rig for your needs and count on it to perform for years to come.

### **PROVEN DRILLS FOR DEPENDABLE OPERATION**

The D55SP and D75KS are two unique, large diesel-powered, 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.

Consider Sandvik your source for equipment that meets the challenges of adapting to rugged mining environments. The D55SP and D75KS have proven their worth around the world in the mines of Australia, North and South America, Europe, Africa and Asia, most commonly in coal or metal mines. These drills are rugged, dependable, with downtime at a minimum. Plenty of power to get the job done. With these aggressive drills in your fleet you can focus on your real work. Production.



### **D55SP**

The D55SP comes with low-pressure air for rotary drilling or high-pressure air for down-the-hole (DTH) drilling. The drill excels in single pass drilling, where productivity increases significantly, in particular in soft and medium hard rock. Also in angle drilling which is a standard feature.

- 172 to 254 mm (6 3/4" to 10") diameter holes
- Single pass depths up to 17 m (55')
- Pulldown 200 kN (45 000 lbf)
- Bit load up to 232 kN (52 000 lbf)

### **D75KS**

The D75KS comes with low pressure air for rotary drilling. Optional high pressure compressors add flexibility to drill with 8" hammers. It is a rugged and time-proven design often found in stripping applications in coal or metals mining.

- 229 to 279 mm (9" to 11") diameter holes
- Multi-pass drill for up to 53 m (173') high benches
- Pulldown 334 kN (75 000 lbf)
- Bit load up to 409 kN (92 000 lbf)

# Top penetration from powerful drills



## PRODUCTIVE OPERATOR'S ENVIRONMENT

- Excellent visibility of the drilling operation
- Higher productivity with quicker holespotting
  - Fast set-up for drilling
- Comfortable environment with shock mounted cab
- Roller sunshades to reduce glare
- Thermal insulation and noise reduction to 80 dBA
- Drill controls arranged logically on the console
  - Ease of operation
  - Intuitive fast learning
- Air conditioning/heating/pressurizing unit for operator comfort with less fatigue
- FOPS approved in compliance with mining safety requirements
- Extended cab provides ample work space for a trainer



## POWERFUL DRILLING PLATFORM

- Wide flange I-beam rails on main frames
  - WF 14 X 74, ASTM alloy A572, grade 50 steel
  - Solid support for mounted components
- 330SL (D55SP), 330EL (D75KS) class undercarriages
  - Excellent stability for the drill
  - Total reliability on difficult grades
  - Hydrostatic drive power: 119 kW (160 hp) per track (D55SP)(D75KS)
  - Delivers top slewing power for faster hole-spotting
- Fixed axle under the mast pedestal
- Equalizer axle at the other end of the tracks
  - Effective side to side movement
  - Reduces stress on the frame for longer frame life
  - More fatigue resistance and increased mobility

Rigid lattice style masts and heavy duty pulldown chains are part of the package that makes Sandvik's D55SP and D75KS blasthole drills top performers in a class of their own. The angle drilling option is one of the many features that drive performance in an impressive range of applications. The mast can be set in 5° increments, from 0° to 20° for drilling angle holes with the D55SP and 0° to 25° on the D75KS.

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.

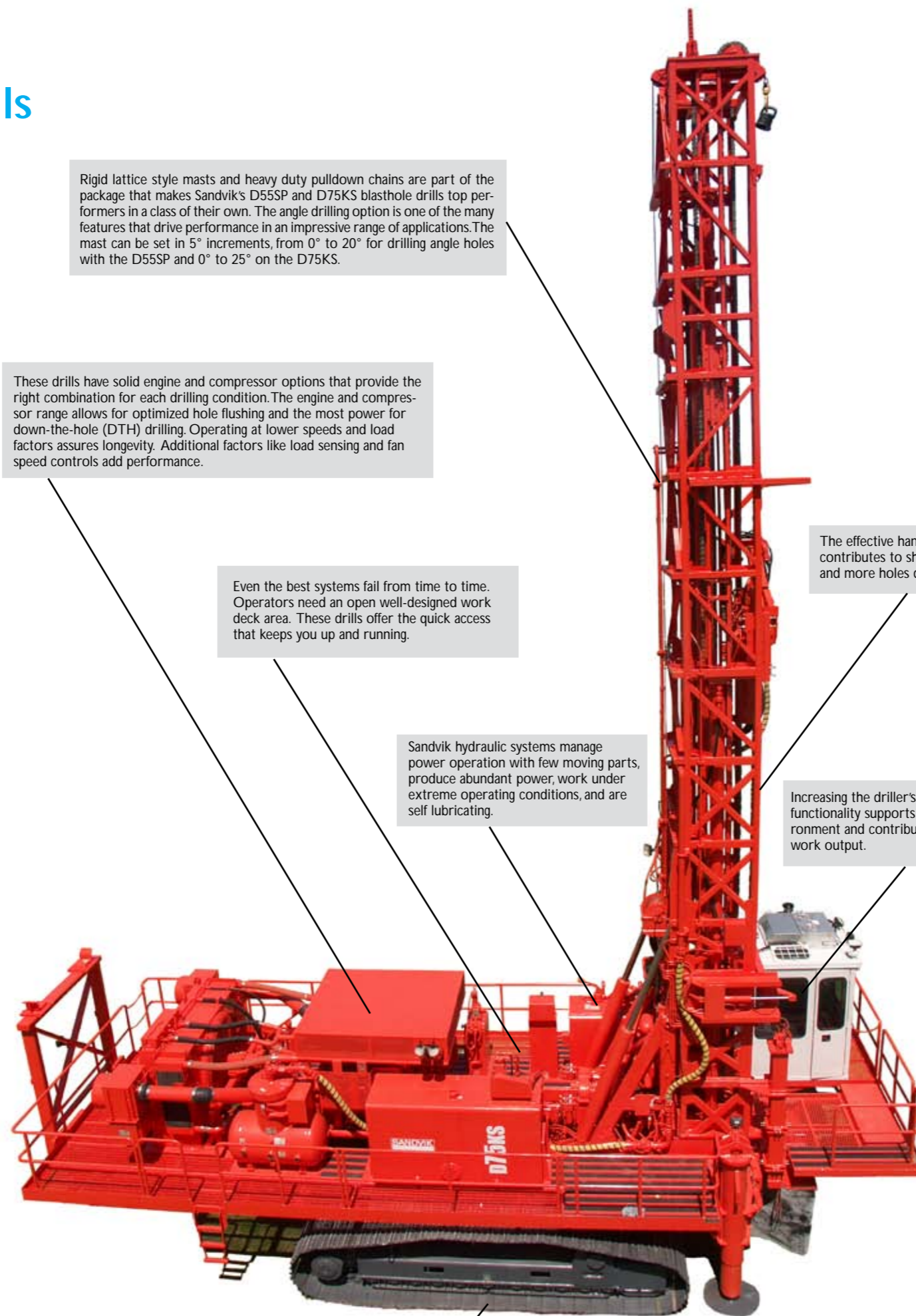
Even the best systems fail from time to time. Operators need an open well-designed work deck area. These drills offer the quick access that keeps you up and running.

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

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

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

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.



## EFFICIENT HYDRAULICS

- Closed loop system for rotation, feed, track and fan circuits
  - Lowers operating costs
  - Reduces power consumption
- Large 872 L (230 gal) pressurized hydraulic oil reservoir
  - Reduces the number of oil cycles
  - Lowers oil temperatures
  - Extends service intervals
- 5 μm (5 micron) filtration
  - Cleaner system
  - Extends component life
  - Lowers maintenance costs



## OPTIMIZED POWER DELIVERY

- Diesel engines, matched for high or low pressure compressors and required volume
  - Long life and lower fuel consumption
- Tier III C27 or QSK19C engines rated 567 - 708 kW (760 - 949 hp)
  - Most effectively operating at 1800 rpm
  - Provide optimum power at lower cycling times and better efficiency
- Full range of compressors producing
  - 38.2 - 56.6 m<sup>3</sup>/min (1350 - 2000 SCFM) @ 6,9 or 24,1 Bar (100 - 350 psi)
  - The compressor is mounted directly to the flywheel housing in-line with the engine for efficient power transfer
- Cooling systems -26°C (-15°F) up to 54°C (130°F) ambient temperature
  - Direct drive fan
  - Fan is hydraulically delayed during start-up of engine for maximum torque
- An optional cold weather package lowers the temperature range for frigid conditions down to arctic weather

# Robust design for top production



## EFFECTIVE PIPE HANDLING

- The pipe length for the D55SP is 7,6 m (25') pipes in diameters 165-194 mm, (6 1/2" - 7 5/8") and D75KS is 10,7 m (35') pipes in diameters 194-244 mm, (7 5/8" - 9 5/8")
- The D55SP has a two-pod loader, inside mast and the D75KS has a four pod loader, inside mast
  - Flexible hole sizes
  - Extended depth capacity
- Pipe loading is controlled from the operator's cab
- Holding wrench and optional hydraulic auto tong wrench and pipe thread greaser
  - Help to break loose tight pipe joints
- Hydraulic loader swing and indexing:
  - Simplicity of very few moving parts in the loader
  - Higher productivity
  - Lower maintenance and drill pipe cost

## EXCELLENT SERVICEABILITY

- D55SP and D75KS open in-line design - with all components very accessible
  - Ease in service and maintenance
  - Walkways are provided to reach major components
- Fluids service center option, for filling fuel, hydraulics, and water and for hydraulic evacuation
  - Faster servicing
  - Greater availability of the drills
- Central greasing station options, manual or electric, are available for lubricating
  - Reduces wear at main pivot points
  - Increases serviceability
  - Adds to the availability of the drills
- Ease of service is a priority with Sandvik equipment

## D55SP popular options

Compressors available up to 56,6 m<sup>3</sup>/min (2000 SCFM) @ 6,9 Bar (100 psi), and 38,2 m<sup>3</sup>/min (1350 SCFM) @ 24,1 Bar (350 psi)

Multiple dry dust collection and water injection systems

Hydraulic system test station

Various rotary head speed/torque combinations

Cold and arctic weather equipment

## Benefits

Increased productivity with 6" and 8" hammers  
Improved hole cleaning

Advanced chip removal and dust suppression  
Meets or exceeds regulatory standards

Quick diagnostics and troubleshooting  
Cost effective preventive maintenance

Capability to fine tune drilling in various ground conditions

Enables operation in extreme environments

## D75KS popular options

Compressors available up to 56,6 m<sup>3</sup>/min (2000 SCFM) @ 6,9 Bar (100 psi), and 38,2 m<sup>3</sup>/min (1350 SCFM) @ 24,1 Bar (350 psi)

Multiple dry dust collection and water injection systems

Various rotary head speed/torque combinations

Central lubrication and fluid systems

Drill monitoring system

## Benefits

Capability of operating at high elevation  
Improved cleaning of large holes

Advanced chip removal and dust suppression  
Meets or exceeds regulatory standards

Capability to fine tune drilling in various ground conditions

Speed of servicing  
Cleaner operation

For preventative maintenance in operations

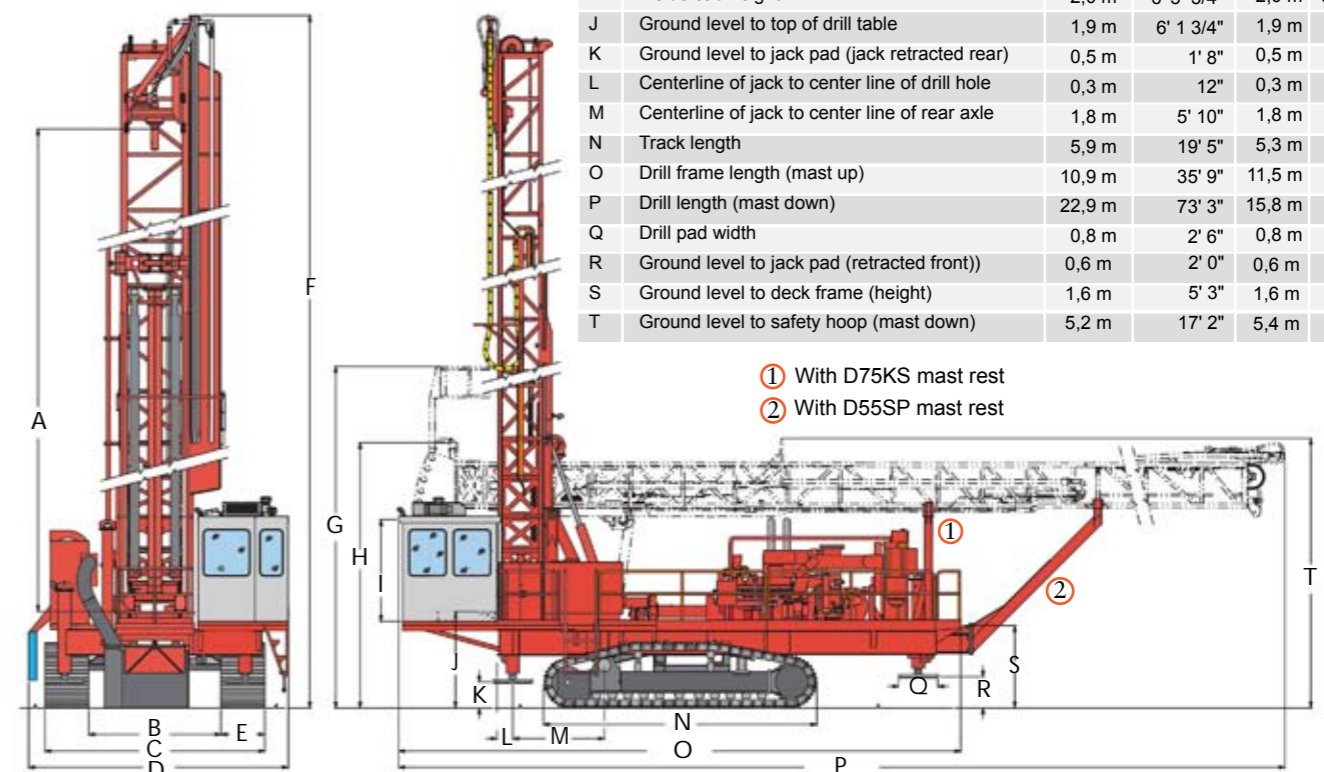
## Technical Data

D55SP	
Hole diameter	172 mm - 254 mm (6 3/4"-10")
Drill pipe	7,62 m (25')
Hole depth	17 m (55') single pass
Undercarriage	330SL class Excavator
Max pull-down	200 kN (45 000 lbf)
Bit load	232 kN (52 000 lbf)
Engine	597 kW (800 hp)
Compressor	45,3 m <sup>3</sup> /min (1600 scfm) 6,9 Bar (100 psi)
Feed rate	0-35,4 m/min (0-116 fpm)
Hoist rate	0-61,6 m/min (0-202 fpm)
Rotation speed	0-131 RPM
Rotation torque	9934 Nm (88 000 in-lb)
Operating weight	79 832 kg (176 000 lb)
Shipping Dimensions	
Mast assembly length	22,45 m (73' 8")
Mast assembly width	2,46 m (8' 1")
Mast assembly height	2,51 m (8' 3")
Mast assembly weight	14 515 kg (32 000 lb)
Base/frame length	11,96 m (39' 3")
Base/frame width	4,32 m (14' 2")
Base/frame height	4,11 m (13' 6")
Base/frame weight (std)	65 317 kg (144 000 lb)

D75KS	
Hole diameter	229 mm - 279 mm (9"-11")
Drill pipe	10,67 m (35')
Hole depth	45 m (148')
Undercarriage	330EL class Excavator
Max pull-down	334 kN (75 000 lbf)
Bit load	409 kN (92 000 lbf)
Engine	597 kW (800 hp)
Compressor	45,3 m <sup>3</sup> /min (1600 scfm) 6,9 Bar (100 psi)
Feed rate	0-27 m/min (0-89 fpm)
Hoist rate	0-34,8 m/min (0-114 fpm)
Rotation speed	0-94 RPM
Rotation torque	14 236 Nm (126 000 in-lb)
Operating weight	64 864 kg (143 000 lb)
Shipping Dimensions	
Mast assembly length	16,08 m (52' 9")
Mast assembly width	2,59 m (8' 6")
Mast assembly height	2,51 m (8' 3")
Mast assembly weight	18 144 kg (40 000 lb)
Base/frame length	12,14 m (39' 10")
Base/frame width	4,32 m (14' 2")
Base/frame height	4,17 m (13' 8")
Base/frame weight (std)	46 720 kg (103 000 lb)

Performance ratings are based upon optimum conditions. This capacity may vary according to operating location. Sandvik reserves the right to amend these specifications without notice. Shipping dimensions vary with option selected.

Dimension locations		D55SP		D75KS	
A	Bullshaft to drill table	19,4 m	63' 8"	12,6 m	41' 3"
B	Track to track inside measurement	2,6 m	8' 5"	2,6 m	8' 5"
C	Track to track outside measurement	4,3 m	14' 0"	4,3 m	14' 0"
D	Overall machine width (operating)	5,0 m	16' 6"	5,0 m	16' 6"
E	Track pad width	0,8 m	33 1/2"	0,8 m	33 1/2"
F	Mast up (height)	23,1 m	75' 8"	16,5 m	54' 3"
G	Ground to top work deck (mast down)	6,6 m	21' 9"	6,6 m	21' 9"
H	Ground to drill table (mast down)	5,2 m	16' 11"	5,2 m	16' 11"
I	Inside cab height	2,0 m	6' 5 3/4"	2,0 m	6' 5 3/4"
J	Ground level to top of drill table	1,9 m	6' 1 3/4"	1,9 m	6' 1 3/4"
K	Ground level to jack pad (jack retracted rear)	0,5 m	1' 8"	0,5 m	1' 8"
L	Centerline of jack to center line of drill hole	0,3 m	12"	0,3 m	12"
M	Centerline of jack to center line of rear axle	1,8 m	5' 10"	1,8 m	5' 10"
N	Track length	5,9 m	19' 5"	5,3 m	17' 5"
O	Drill frame length (mast up)	10,9 m	35' 9"	11,5 m	37' 8"
P	Drill length (mast down)	22,9 m	73' 3"	15,8 m	51' 10"
Q	Drill pad width	0,8 m	2' 6"	0,8 m	2' 6"
R	Ground level to jack pad (retracted front))	0,6 m	2' 0"	0,6 m	2' 0"
S	Ground level to deck frame (height)	1,6 m	5' 3"	1,6 m	5' 3"
T	Ground level to safety hoop (mast down)	5,2 m	17' 2"	5,4 m	17' 7"



- ① With D75KS mast rest
- ② With D55SP mast rest