

# Pantera DI 6400 SURFACE DRILLS

## TECHNICAL SPECIFICATION



PANTERA™ DI6400 is an advanced high-pressure DTH drill designed to meet the mining industry's future needs in terms of safety, increased production and full automation options. It is designed for vertical and inclined drilling of 115–203 mm diameter blastholes up to 45 meters deep, for wall control, pit development and production drilling.

Pantera™ DI6400 shares a common proven control system and automation platform with other Sandvik drills – including the ability to carry out autonomous operations. Advantages include increased drilling capacity, fewer tool changes, significantly improved fuel efficiency and optimised delivery of power on demand compared with other DTH solutions.

Pantera™ DI6400 brings longer drill pipes and up to 35 bar operating pressure to DTH drilling. Significantly improved fuel efficiency is achieved through Sandvik's Sustainability Package (SP), which delivers fuel savings of up to 20% compared with conventional systems.

Pantera™ DI6400 is available in three configurations – Silver, Gold and Platinum – allowing it to be readily adapted to the needs of customers in different mining markets and applications. Operating performance can be further boosted with different options packages to suit varying climatic conditions.

### MAIN FEATURES

Hole diameter range	115–203 mm (4½–8")
DTH hammer range	4"–6"
Drill pipe diameters	89–140 mm (3½–5½")
Drill pipe length	7.5 m (25')
Max. hole depth	45 m (150')
Engine output	399 kW@1,800 rpm
Air delivery	28 m³/min (1,000 cfm)
Air pressure	Max 35 bar (Max 500 psi)
Transport weight	35,700 kg (78,700 lbs)
Transport width	2.995 m (9'10")
System platform	Sandvik SICA

### KEY TO CONFIGURATIONS

SILVER	GOLD	PLATINUM
	Powerpack	
	Winterization	
	Dust Suppression	

## ROTATION DRILL

Rotary head type	Sandvik RH6050
Pipe diameter range	89–140 mm (3½–5½")
Hydraulic motor	Danfoss OMT400
Operating pressure	Up to 240 bar (threading)
Rotation speed	0–100 RPM
Maximum rotation torque	5,000 Nm
Hammer lubrication	Air/oil mist

## FEED MODULE

Chain feed module	LF2025 with hose reel
Length of feed module	12,940 mm
Rock head travel	8,250 mm
Single pass drilling, hole depth	8,500 mm
Feed travel	2,000 mm
Feed/pull out force	70 kN
Length of pipes	7,500 mm (25')
Retaining centralizer	For centering/uncoupling
Feed swing	-30/+20°
Feed tilt	-30/+98°

## PIPE HANDLING SYSTEM

Pipe changer type	Linear
Storage capacity Ø127 mm	5+1 pipes
Maximum hole depth	45 m

## BOOM

Boom type	FB2000H, single section
Boom lift	+52/-5°
Boom swing	+8/-40°
Coverage length/width	1,150/3,500 mm
Collaring height	+1.3/-2.5 m
Horizontal coverage	4.1 m <sup>2</sup>

## CRAWLER BASE

Track plate width (3-bar)	400 mm
Ground contact length	3,295 mm
Ground pressure	1.3 kg/cm <sup>2</sup>
Ground clearance	400 mm
Track oscillation	+/-10°
Tramming force	200 kN
Tramming speed	3,5 km/h

## POWERPACK

Engine type	Cummins QSX15 Tier 2
Engine output	399 kW@1,800 rpm
Transmission principle	Gear box
Hydraulic pumps	Variable
Air compressor type	Sullair
Compressor air delivery	28 m <sup>3</sup> /min (1,000 cfm)
Operating pressure	Up to 35 bar (500 psi)
Air cleaner	Dry type with ejectors (2)
Fuel tank	1,100 liters
Fuel saving system	Standard

## HYDRAULIC SYSTEM

Filtration rate	10 micron abs.
Ambient temperature range	+50...-5°C
Hammer lubrication device	SLU50-1 (tank 50 liters)
Hydraulic oil tank	700 liters

## ELECTRIC SYSTEM

Control system diagnostics	Via cabin display
Voltage	24V DC
Battery capacity	140 Ah

## DUST SUPPRESSION SYSTEM

Type of system	Water flushing
Water pump	Hydraulic driven
Water tank	1,850 l

## OPERATOR'S CABIN

Cab mounting	Nested under frame
Certification	ROPS/FOPS
Noise level in the cabin	80 dB(A)
Controls	Joysticks, integrated in arm rests
Pressurization	Standard
Seating configuration	For operator + trainer + trainee
Vibration dampening	Standard
Safety windows	Laminated and tinted
Engine control panel	Standard
Hole alignment and depth measurement	Sandvik TIMi 6300

## SILVER – ROCK SOLID PERFORMANCE

Feed module	Hydraulic rotation head with shock absorber
	Travelling hose reel
	Ground support
	Thread greasing system for pipes
	Bit basket
Pipe handling system	Retaining centralizer
	Linear pipe magazine
	Uncoupling device
Single section boom	
Crawler base and drill frame	Hydraulic oil and multiple tanks
	Central lubrication system SANDVIK
	Fast fill connections (fuel/coolant/oils/water)
	2-speed traction motors
	Disengagement track drive hubs
	Guides for track chains
	3-bar track plates
	Oscillation +/-10°
Powerpack	Cummins QSX15 engine (Tier 2)
	Double stage Sullair air compressor
	Hydraulic pumps
	Air receiver restriction alarm
	Cooling system (+50...-5°C)
Sandvik Sustainability Package	Engine/compressor clutch system
	Intelligent cooling management
	ELS pumps
Hydraulic system	Lubrication device for DTH-hammer
	Monitoring system for hammer lubrication system
Pneumatic system	
Electrical system	
Single hole Automation	
Control system	Sandvik Integrated Control Architecture (SICA)
	DPI control system interface
	Flushing control system
	Health monitoring via USB
	Troubleshooting via cabin display
Operator's cabin	Air conditioning and heating system
	Windshield protection grill
	Windshield defrosting system
	Laminated safety glasses
	Vibration dampening system
	Multiposition seat
	Bench for trainer and trainee behind operator
	Storage compartment for personal items
	Storage holder for manuals
	Radio/CD/MP3 player and USB for iPad
	12/24V electrical outlet
Reversing camera and dedicated display	
Camera for top of the feed view	
Toolbox under the operator seat	

TIMI hole alignment and depth measurement system	
Water flushing system	Water pump
	1,850 l water tank
Lighting system	12 pcs working lights
	Lighting in engine compartment
Safety	Reversing alarm and flashing beacon
	Independent electric horn
	Hand fire extinguisher
	Hand rails and ladders
Other features	EU safety devices
	Pressure washer with hose and reel
Delivery and documentation	Painted in standard Sandvik colours
	2 sets of manuals
	1 set of CD-ROMs (ToolMan)

## GOLD – AUTOMATION AND COMMUNICATION

Including all SILVER scheme features

Automatic boom and feed positioning
Automatic feed alignment
TIM3D navigation via GPS*)
3D Wireless Drill plan transfer into TIM3D via GSM or USB
SanRemo Platinum (GSM or Satellite)
Data collection (USB)
12 months service fee free of charge for Drill plan transfer and SanRemo
Readiness for TeleRC operation (line of sight)

## PLATINUM – AUTOMINE® TELE REMOTE CONTROL

Including all GOLD scheme features

Single drill tele remote control (line-of-sight) for all functions
On-board kit and remote operation station
<i>Not included: vehicle, hosting the remote operation station</i>

## POWERPACK

Cumming QSX15 engine Tier 4*
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## WINTERIZATION

Winter – Ambient temperature up to -20°C

Arctic – Ambient temperature up to -40°C

Available on request

## DUST SUPPRESSION

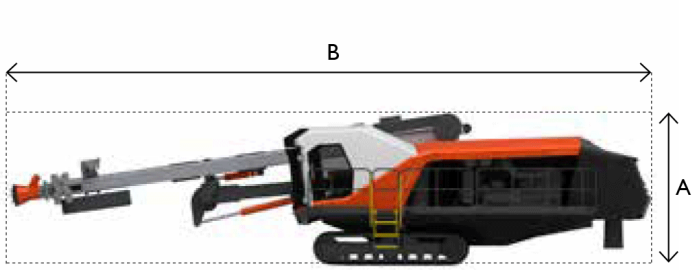
Dry dust collection system including primary separator, movable suction head and shut down of suction for water holes
Water flushing system including a 950l water tank and water pump*

\*) Replaces standard component

\*\*) Replaces Dust collection system

Specific features are available on request.

**TRANSPORT DIMENSIONS**



Weight	35,700 kg (78,700 lbs)
Width	2,995 m (9'10")
A. Height	4.6 m (15'11")
B. Total length	17.5 m (57'5")

**OPERATING DIMENSIONS**



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