## SANDVIK

## Leopard DI560 T4 SURFACE DRILLS

#### **TECHNICAL SPECIFICATION**

Leopard DI560 is a diesel powered, self-contained crawler mounted drilling rig designed for DTH blasthole drilling in the mining, quarry and construction industries. The drill is equipped with an operator's cabin, fixed boom, dry dust collector and drill pipe changer. The design and the lay-out are according to latest state-of-art.

#### **KEY FEATURES**

| Hole diameter:       | 90 - 165 mm 3½" – 6 ½"        |
|----------------------|-------------------------------|
| Drill pipes:         | 76, 89, 102 and 114 mm 3",    |
|                      | 31⁄2", 4" and 41⁄2"           |
| DTH-Hammer           | 4", 4" HP, 5", 6"             |
| Engine output:       | 328 kW (Tier 4 Final)         |
| Air delivery         | 24,4 m3/min at 24 bar 862 cfm |
| -                    | at 348 psi 21,6 m3/min at 30  |
|                      | bar 763 cfm at 435 psi        |
| Production capacity: | 1,85 Mt/a, one shift          |
| Total weight :       | 24 050 kg                     |



| ROTARY HEAD             |   |
|-------------------------|---|
| Rotary head             | HTRH6                                   |
| Drill pipes             | 76, 89, 102, 114 mm 3", 3½",<br>4", 4½" |
| Operating pressure      | 180 bar                                 |
| Rotation speed          | 080 rpm                                 |
| Maximum rotation torque | 4300 Nm                                 |
| Hammer lubrication      | Air / oil mist                          |
| Flushing                | Air                                     |
| Weight                  | 478 kg                                  |

#### FEED

PIPE CHANGER Pipe changer type

Storage capacity

Max. hole depth

Pipe length

| Feed type             | Chain feed |  |
|-----------------------|------------|--|
| Total length          | 10050 mm   |  |
| Rotary head travel    | 5990 mm    |  |
| Length of tubes       | 5000 mm    |  |
| Hose reel             | Standard   |  |
| Feed extension travel | 1200 mm    |  |
| Feed/pull out force   | 32 kN      |  |
| Feed swing            | -30/+95°   |  |
| Feed tilt             | -35/+93°   |  |
|                       |            |  |

# Engine output328 kW / 1800 rpmTransmission typeDirectScrew compressor typeGHH CF 1000HAir filters2 pcs, dry typeFuel tank930 litres

#### HYDRAULIC SYSTEM

| Filtration rate          | 10 micron           |
|--------------------------|---------------------|
| Cooling capacity         | Up to +55°C ambient |
| Hydraulic oil tank       | 3501                |
| Shank lubrication device | SLU 50              |

#### CONTROL SYSTEM

| Control system type                | PLC controlled proportional<br>electro- hydraulics |
|------------------------------------|--|
| Tramming/boom/ drilling<br>control | PLC controlled                                     |
| User interface                     | Electro proportional joysticks<br>and screen       |
| Antijamming system                 | Standard   |
| Collaring control                  | Automatic  |
| Voltage                            | 24 VDC   |

#### DUST COLLECTOR

| Dust collector type      | X-150                  |  |
|--------------------------|------------------------|--|
| Capacity/vacuum          | 51 m3/min at 500 mm WG |  |
| Filter elements/material | 4 pcs / fiber          |  |
| Total filter surface     | 16 m2                  |  |
| Primary cyclone          | Standard               |  |
| Movable suction head     | Standard               |  |

Carousel

5000 mm

40 m \*

7+1 (76 to 102 mm pipes) 5+1 (114 mm drill pipe)

| BOOM             |                   |
|------------------|-------------------|
| Boom type        | Fixed             |
| Boom extension   | 500 mm (Optional) |
| Boom reach       | 3,6 m             |
| Boom swing       | 0/+20°            |
| Collaring height | + 0,5 / -3,8 m    |
| Horizontal holes | To the right      |

| CABIN                    |                          |
|--------------------------|--------------------------|
| Cabin type               | HVC550                   |
| Certificates             | FOPS and ROPS            |
| Noise level in the cabin | <80 dB (A)               |
| Air conditioning         | Standard*                |
| Pressurization           | Standard                 |
| Seat                     | Ergonomic, adjustable    |
| Vibration dampening      | Standard                 |
| Windows                  | Safety laminated, tinted |
|                          |                          |

\* Air condition system contains fluorinated greenhouse gases HFC-134a

#### POWERPACK

-

| Engine type         | Caterpillar C13 (Tier 4 Final) |  |
|---------------------|--------------------------------|--|
| DEF tank            | AdBlue 47 I                    |  |
| Number of cylinders | 6                              |  |

#### CARRIER

den and other countries.

| CARRIER               |                |  |
|-----------------------|----------------|--|
| Track type            | FL 6           |  |
| Grouser plate width   | 400 mm         |  |
| Ground contact length | 2450 mm        |  |
| Ground pressure       | 1.21.3 kg/cm2  |  |
| Ground clearance      | 360 mm         |  |
| Oscillation angles    | +/- 10°        |  |
| Tramming force        | 140 kN         |  |
| Max. tramming speed   | 1.6 / 3.2 km/h |  |

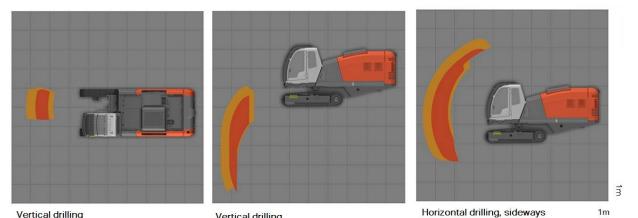
| STANDARD COMPONENTS                                   |
|---|
| Rotary head HTRH6.0                                   |
| Chain feed, with hose reel                            |
| Safety cage for feed                                  |
| Pipe changer, carousel type                           |
| Fixed boom  |
| Cabin HVC550  |
| Carrier, track mounted                                |
| Powerpack, diesel driven, hydraulic pumps and onboard |
| compressor  |
| Dust collector X-150                                  |
| Hydraulic system, load sensing                        |
| Control system  |
| Working lights, 11 pcs, 3 pcs in engine compartment   |
| 1 Set Manuals, paper copy                             |
| 1 Set Manuals, CD rom                                 |

| LL STEELS   |                                     |
|-------------|-------------------------------------|
| DRILL STEEL | RECOMMENDED                         |
| DIAMETER    | HOLE DIAMETER                       |
| 76/89 mm    | 89 - 127 mm 3½" -<br>5"             |
| 102/114mm   | 114 - 165 mm 4½"<br>- 6 ½"          |
|             | DRILL STEEL<br>DIAMETER<br>76/89 mm |

|   | dditional tool box below cabin   |
|---|--|
|   | adio with CD-MP3 player  |
|   | eversing camera  |
|   | ock shield for lights and lower part of the window                                       |
| - | oller blinds for cabin windows   |
|   | acuum cleaner for cabin  |
|   | PS aiming device for TIM and TIMi inclined holes   |
|   | IM 5200 for vertical holes   |
|   | IM 5300 for vertical holes and depth measuring   |
|   | IM 5600 for vertical and horizontal holes and depth measuring                            |
|   | IM 6300 for inclined holes and depth measuring   |
|   | IM 6500 for inclined holes, depth measuring and laser level                              |
|   | IM3D hole navigation system  |
|   | TH hammer service tool (requires radio remote control option)                            |
| - | lorizontal drilling kit  |
|   | it for alternative pipes, each   |
|   | ipe winch (requires radio remote control option)   |
|   | hread greasing   |
|   | elescopic boom   |
|   | nti-freeze system for thread greasing  |
|   | Central lubrication system Sandvik   |
|   | lectric fuel filling pump  |
|   | lectric hydraulic oil filling pump   |
|   | lectric water filling pump   |
|   | ast fill connection for engine coolant, hydraulic and engine oils                        |
|   | ast fill connection for fuel Wiggins   |
|   | uides for grousers   |
| H | and-held led working light with accumulator  |
|   | lydraulic rear ground support  |
|   | lydraulic winch (requires radio remote control option)                                   |
|   | Ianual compressor oil filling pump   |
|   | ressure washer (with water injection option only)  |
|   | adio remote control for carrier and pipe winch and hammer                                |
|   | ervice tool  |
|   | ingle bar grouser plates   |
|   | owing hook<br>enon lights, 11 pcs  |
|   |  |
| - | ed lights, 9 pcs   |
|   | hisengagement clutch for compressor, manual  |
|   | ther starting aid for engine without ether bottle  |
|   | uel powered engine heater, extra large   |
|   | uel powered engine heater, large   |
|   | ump start device (high current el. socket)   |
|   | Vater injection system   |
| - | brinder Sandvik RG420H   |
|   | xtra bit basket  |
|   | xtra manuals, price will be added according to pricing sheet                             |
|   | irst service kit for DI560   |
|   | ervice agreement - select level from extra item<br>anRemo - select level from extra item |



#### COVERAGE AREA AND DIMENSIONS



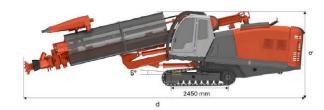
Vertical drilling

Horizontal drilling, sideways

Vertical drilling



Fix boom



### Zoom boom



#### DIMENSIONS

| Weight       | 24 050 kg          |
|--------------|--------------------|
| Width        | 2.49 m             |
| Height       | 3.37 m/3.29 m      |
| Total length | c/d, 12.6 m/12.1 m |

Sandvik Mining and Rock Technology reserves the right to make changes to the information on this data sheet without prior notification to users. Please contact a Sandvik representative for clarification on specifications and options.

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