



# Dino DC420Ri S5 SURFACE DRILLS

## TECHNICAL SPECIFICATION

Dino DC420Ri is a hydraulic, self-propelled, self-contained, crawler based surface drilling unit with full radio remote control.

Typical applications for DC420Ri are road construction, demolition works, secondary breaking, foundation drilling and trenching. Therefore DC420Ri is most often used by construction contractors, quarries and the municipal sector. Due to its versatility DC420Ri is a perfect machine for drilling and blasting contractor.

### KEY FEATURES

|                      |                         |
|----------------------|-------------------------|
| Hole diameter:       | 51 - 76 mm (2" – 3")    |
| Rock tools:          | R32, T35, T38           |
| Rock Drill           | 14 kW                   |
| Engine output:       | 105 kW (S5)             |
| Flushing air:        | 3,5 m3/min, up to 8 bar |
| Production capacity: | 600 m3/shift            |
| Total weight :       | abt. 11 000 kg          |



| HYDRAULIC ROCK DRILL    |                |
|-------------------------|----------------|
| Rock drill              | RD414          |
| Rock tools              | R32, T35, T38  |
| Operating pressure      | 110 - 220 bar  |
| Percussion rate         | 56 - 78Hz      |
| Percussion output power | 14 kW          |
| Maximum rotation torque | 680 Nm         |
| Shank lubrication       | Air / oil mist |
| Flushing                | Air            |
| Weight                  | 180 kg         |

| FEED                        |                  |
|-----------------------------|------------------|
| Feed type                   | Chain feed CF400 |
| Total length                | 6900 mm          |
| Rock drill travel           | 3800 mm          |
| Max. length of starter rod  | 4270 mm (14')    |
| Hole depth with starter rod | 3510 mm          |
| Hose reel                   | Standard         |
| Feed extension travel       | 1300 mm          |
| Feed/pull out force         | 15 kN            |
| Feed swing                  | 45/45°           |
| Feed tilt                   | 119°             |

| ROD CHANGER      |                                            |
|------------------|--------------------------------------------|
| Rod changer type | RC400                                      |
| Storage capacity | 1 + 1,<br>1 + 3 optional                   |
| Rod length       | 14' + 12'<br>14' + 12' + 12' + 12 optional |
| Max. hole depth  | 14,5 m                                     |

| BOOM              |                    |
|-------------------|--------------------|
| Boom type         | DB410, articulated |
| Boom reach        | 5,2 m              |
| Drilling coverage | 18 m2              |
| Boom swing        | +/- 45°            |
| Collaring height  | +1,65 m / -4,15 m  |
| Horizontal holes  | forward only       |

| POWERPACK             |                               |
|-----------------------|-------------------------------|
| Engine type           | Volvo Penta TAD580VE (Stage5) |
| DEF tank              | AdBlue, 25 l                  |
| Number of cylinders   | 4                             |
| Engine output         | 105 kW                        |
| Transmission type     | Gearbox                       |
| Screw compressor type | Enduro 12                     |
| Air filters           | 2 pcs                         |
| Fuel tank             | 210 l                         |

| HYDRAULIC SYSTEM         |                                                    |
|--------------------------|----------------------------------------------------|
| Number of gear pumps     | 3 pcs. for dust collector and cooling              |
| Number of piston pumps   | 2pcs. for drilling, tramming, boom and rodhandling |
| Filtration rate          | 10 micron abs.                                     |
| Cooling capacity         | up to +50°C ambient                                |
| Hydraulic oil tank       | 235 l                                              |
| Shank lubrication device | SLU 14-1                                           |

| CONTROL SYSTEM                  |                                                               |
|---------------------------------|---------------------------------------------------------------|
| Control system type             | Sandvik SICA, PLC controlled proportional electro- hydraulics |
| Tramming/boom/ drilling control | PLC controlled                                                |
| User interface                  | Radio remote and touch screen                                 |
| Control system diagnostics      | Graphical flow chart diagnostic system                        |
| Drilling control system type    | iTorque                                                       |
| Antijamming system              | For rotation and flushing                                     |
| Collaring control               | Automatic                                                     |
| Preset drilling parameters      | 2 adjustable                                                  |
| Voltage                         | 24 VDC                                                        |

| DUST COLLECTOR           |                                |
|--------------------------|--------------------------------|
| Dust collector type      | DC400H                         |
| Capacity/vacuum          | 16 m3/min at 855 mm vacuum H2O |
| Filter elements/material | 9 pcs/fiber                    |
| Total filter surface     | 7,2 m2                         |
| Primary cyclone          | na                             |
| Movable suction head     | Standard                       |

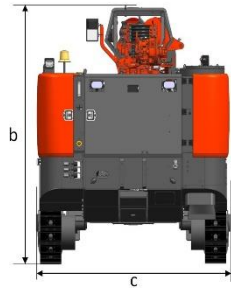
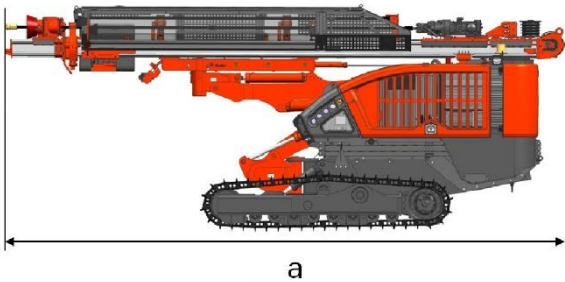
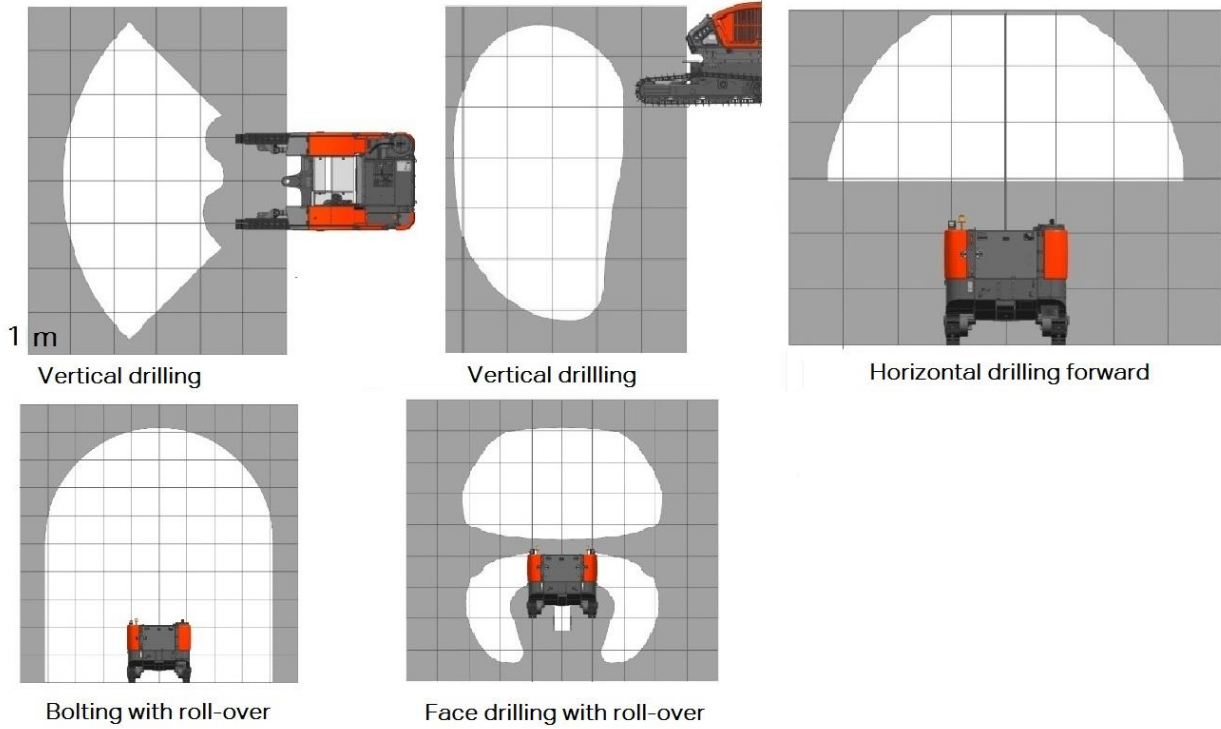
| CARRIER               |            |
|-----------------------|------------|
| Track type            | FL 4       |
| Grouser plate width   | 250 mm     |
| Ground contact length | 2450 mm    |
| Ground pressure       | 0.8 kg/cm2 |
| Ground clearance      | 400 mm     |
| Oscillation angles    | +/- 10°    |
| Tramming force        | 100 kN     |
| Max. tramming speed   | 3,2 km/h   |

| STANDARD COMPONENTS                                                |  |  |
|--------------------------------------------------------------------|--|--|
| Rock drill RD414                                                   |  |  |
| Feed CF400                                                         |  |  |
| Safety cage for feed                                               |  |  |
| Stainless steel strips for feed                                    |  |  |
| Hose reel                                                          |  |  |
| Rod handler: One rod add                                           |  |  |
| Boom DB410: articulated                                            |  |  |
| Carrier, track mounted                                             |  |  |
| Led Lights 6 pcs                                                   |  |  |
| Power pack; diesel engine, hydraulic pumps and on-board compressor |  |  |
| Hydraulic system, electric load sensing                            |  |  |
| Dust collector DC400                                               |  |  |
| Control system                                                     |  |  |
| radio remote control                                               |  |  |
| Hydraulic rear ground support                                      |  |  |
| Real time rock drill position                                      |  |  |
| Pressure filter for percussion line                                |  |  |
| Torque control                                                     |  |  |
| Oil heating circulation                                            |  |  |
| Shutdown of suction for waterholes                                 |  |  |
| Flushing control automatics                                        |  |  |
| Drilling stop input for external navigation systems                |  |  |
| Gauge Set For rock drill accumulators                              |  |  |
| SanRemo Mobile, Bluetooth connectivity for My Sandvik              |  |  |
| My Sandvik Insight, one-year subscription, BG01162214              |  |  |
| Manuals: 1 x paper copy                                            |  |  |
| Manuals: 1 x USB memory (Toolman)                                  |  |  |

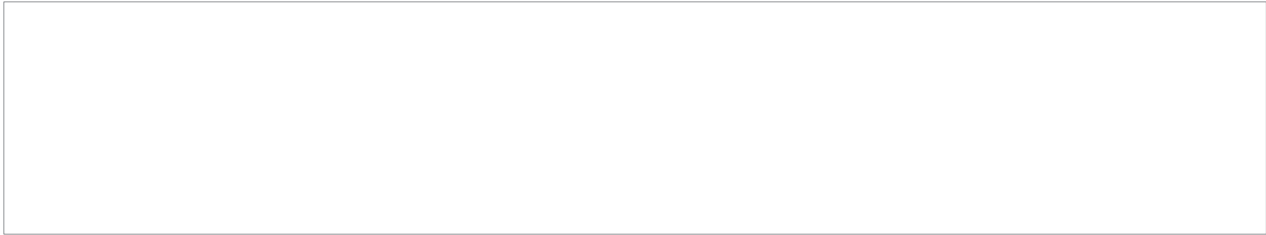
| THE JAWS FOR DRILL STEELS |                         |                              |
|---------------------------|-------------------------|------------------------------|
| DRILL STEEL TYPE          | DRILL STEEL<br>DIAMETER | RECOMMENDED<br>HOLE DIAMETER |
| R32                       | R32 / 32 mm             | 51 – 76 mm                   |
| T35                       | T35 / 39 mm             | 54 – 76 mm                   |
| T38                       | T38 / 39 mm             | 64 – 76 mm                   |

| SELECTION OF OPTIONS                                                |
|---------------------------------------------------------------------|
| Knowledge Box (4G/LTE and WiFi for My Sandvik)                      |
| TIMi for vertical holes and hole depth measuring                    |
| TIMi horizontal holes measurement (requires TIMi)                   |
| TIMi aligned holes with GPS and hole depth measurement              |
| TIMi aligned holes with GPS, laser level and hole depth measurement |
| Auto alignment for DC TIMi                                          |
| Rod changer for 3 rods                                              |
| Kit for alternative steels, each                                    |
| SLU based thread greasing                                           |
| Hydraulic roll-over DC400                                           |
| Biodegradable hydraulic oil                                         |
| Electric fuel filling pump                                          |
| Hydraulic winch                                                     |
| Remote screen interface (Tablet or mobile phone not included), CGU  |
| Electric engine heater and float charger 230 V                      |
| Fuel powered heater for engine, SLU and water tank (if selected)    |
| Dustmizer                                                           |
| Flap feeder for dust collector                                      |
| Precyclone for dust collector                                       |
| Grinder Sandvik RG400                                               |
| Hydraulic connection for grinder                                    |
| Spare radio remote transmitter                                      |
| Shoulder harness for radio remote transmitter                       |
| First service kit for DC400                                         |
| Special tools for RD414, field kit                                  |
| Service agreement - select level from extra item                    |

COVERAGE AREA AND DIMENSIONS



| DIMENSIONS     |                |
|----------------|----------------|
| Weight         | abt. 11 000 kg |
| Width          | c, 2450 mm     |
| Height         | b, 2850 mm     |
| With roll-over | b, 3000 mm     |
| Total length   | a, 6900 mm     |



Sandvik Mining and Rock Solutions 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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