delkom **A.Ş.**
manufacturer of rock drill alternative spare parts

ROCK BUGGY
SURFACE DRILLS

TECHNICAL SPECIFICATION

MAIN COMPONENTS

- One hydraulic rock drill
- Aluminium feed with rail bar
- Two independent hydraulic stabilizer legs
- Rail bar
- Folding boom

- Self propelled four-wheel drive unit
- CANBUS control system
- Cummins engine
- Screw compressor
- Dust collector system

DSI APPLICATIONS

Marble – Granite – Sandstone – Limestone

DSI OPERATIONS

Primary cut drilling

Bench dressing

Block dressing

ROCK DRILL

DF420	Metric	Imperial
Hole diameter	28 – 45 mm	(1 1/8"– 1 3/4")
Weight	41 kg	(90.4 lb)
Percussion pressure	110/140 bar	(1 595/2 031 psi)
Percussion rate	100 – 115 Hz	100 – 115 Hz
Percussion oil flow	40/60 lit./min	10.6/15.8 US gal/min
Rotation torque	100 Nm	73.7 lbs/ft
Rotation speed	245 rpm	245 rpm
DF500X		
Hole diameter	28 – 45 mm	1 1/8" – 1 3/4"
Weight	55 kg	121.3 lb
Percussion pressure	100/130 bar	1 595/1 885 psi
Percussion rate	75 – 95 Hz	75 – 95 Hz
Percussion oil flow	46/80 lit./min	12.1/21.1 US gal/min
Rotation torque	110 Nm	81.1 lbs/ft
Rotation speed	235 rpm	235 rpm

DRILLING UNIT

Starter rod	2.40 m	7' 10 1/2"
Rail bar with travel length	3.7 m	12' 1 11/16"
Rail bar with travel length	3.05 m	10'

2 independent hydraulic stabilizer legs

Rail bar front rotation +/-20°

Rail bar lateral rotation +/-20°

Rail bar horizontal rotation +/-90°

Feed in aluminium with hardened steel inserts for slide advancing with hydraulic approaching device to the ground

Chain feed slide with hydraulic engine

Sliding block in self lubricating composite

Fast system steel retainer

FOLDING BOOM

Length boom	4.8 m	15' 9"

Swing boom rotation +/- 35°

CARRIER

Axles: equipped with three steering systems

Front axle rigid to the frame

Balancing rear axle

4 drive steering wheels

4 hydraulic stabilizer legs

Hydrostatic transmission at closet circuit with pump and variable-powered pistons hydraulic motor

Differential automatic blocksystem

HYDRAULIC SYSTEM

Variable displacement main pump with load-sensing control system

Gears secondary pump for starting the dust collector system and radiator oil cooling device

Automatic device of oil pre-heating system

Oil cooling system

Anti-jamming device

Proportional control hydraulic valves

10 micron absolute oil filtration

CONTROL SYSTEM

PMI (Panel Machine Interface) is a cable control system with graphic display and joystick

3 electronic power stations

As optional 1 Radio Remote Control panel

Drilling low start device concerning both the thrust pressure and the percussion pressure

ENGINE

Cummins B 3.3 Turbo

Direct injection

4 cylinders

Power 85 hp – 62.5 kW

COMPRESSOR

FAD, at normal working pressure	22 l/s	46 cfm
Maximum preassure	6 bar	87 psi

Mod E3

DUST COLLECTOR

Filtering surface	6 m²	65 sq.ft
Suction capacity	97 l/s	206 cfm

Number of filters: 2

Automatic cleaning system of the filters

TRAMMING

Tramming speed	9.5 km/h	5.9 mph

VOLUMES

Hydraulic oil tank	60 l	15.9 US gal
Hydraulic oil total	100 l	26.4 US gal
Compressor oil	8 l	2.11 US gal
Diesel engine oil	8.5 l	2.25 US gal
Diesel tank	140 l	37 US gal

ENVIRONMENT

Temperature limits	-20°C + 45°C	-4°F + 113°F
Maximum altitude	2 300 m	7 550 ft

ELECTRICAL SYSTEM

Voltage: 24 V

Batteries: 2 x 12V 100 Ah

Alternator: 55 A

delkom A.Ş.
manufacturer of rock drill alternative spare parts

Rock Buggy

Guide rail reduces positioning time and ensures aligned straight holes.

Folding boom allows a large coverage area.

Integrated dust collector reduces encumbrance.

Oscillating rear axle that provides good terrainability.

Stabilizer legs provides greater stability in challenging terrains.
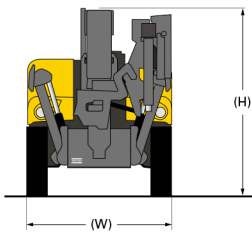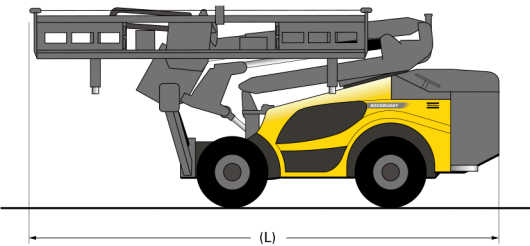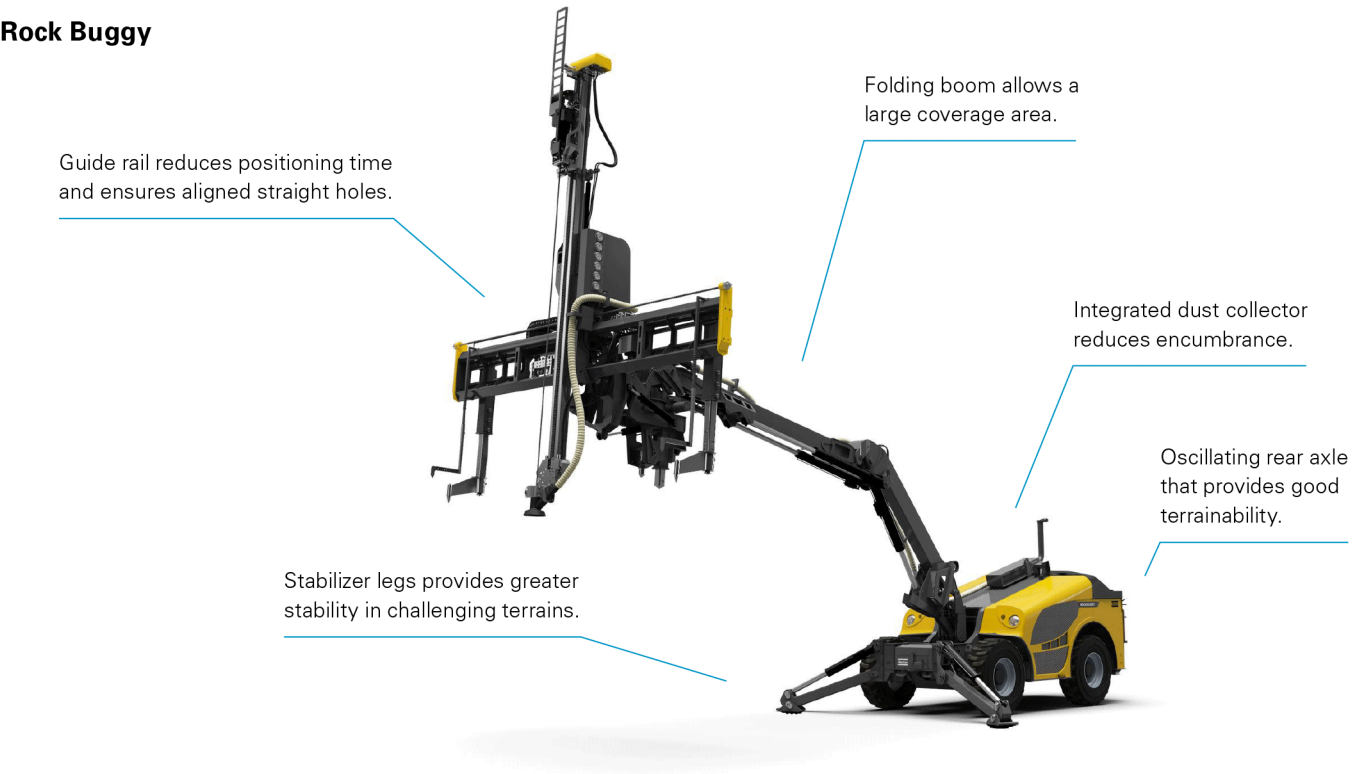
TRANSPORT DIMENSIONS AND WEIGHT		
	Metric	Imperial
Length (L)	5.90 m	19' 4"
Width (W)	2.20 m	7' 3"
Height (H)	2.38 m	7' 10"
Weight	5 900 kg	13 000 lb

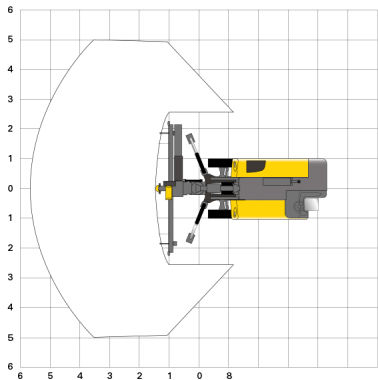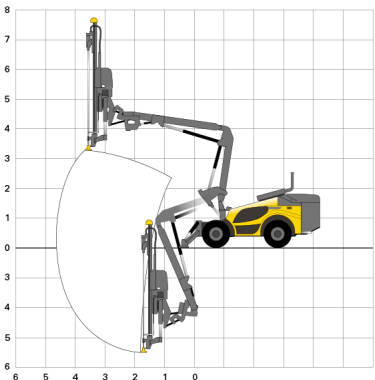Standard unit excluding all options and drill steel
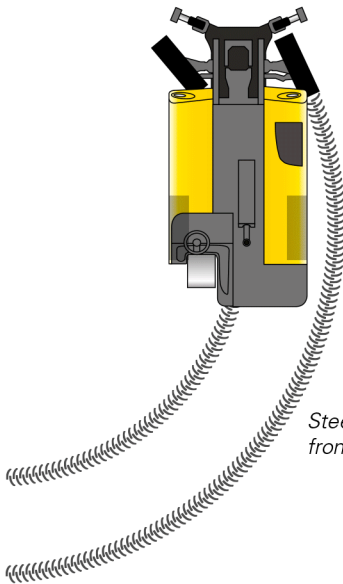
Steering with front wheels
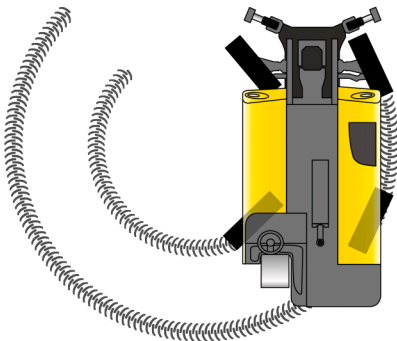
Steering with front and rear wheels
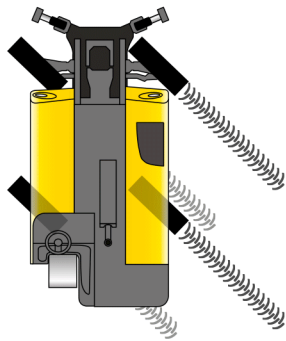
Sideways/diagonal movement
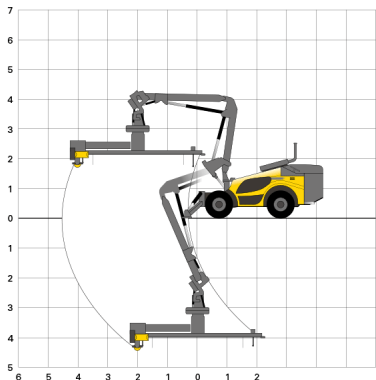
delkom A.Ş.
manufacturer of rock drill alternative spare parts
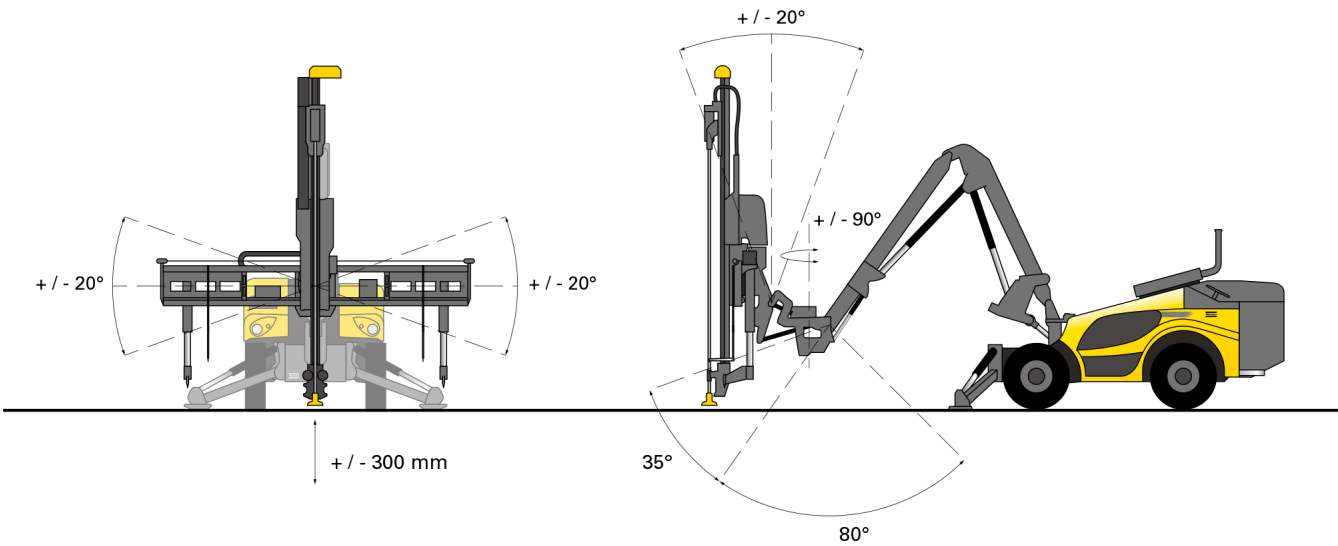
Horizontal reach - vertical drilling (mm)

Vertical reach – vertical drilling (mm)

Vertical reach – horizontal drilling (m)
with supported rail bar

Rail inclination

Feed swing angle

OPTIONAL EQUIPMENT

- Radio Remote Control (RRC) system
- Drill rod extractor
- Kit for horizontal cutting available only on 2.4 feed length
- Automatic drilling device measuring hole depth and distance between holes

delkom A.Ş.
manufacturer of rock drill alternative spare parts