SCX DEI30



DESIGNED BY SANDVIK

Compact Underground & Surface Core Drill TECHNICAL SPECIFICATION

The SCX DE130 is the most economic drill in its class for the underground and surface drilling contractor or mine operator. Through continuous improvements this drill has become truly versatile and has proven itself in a number of applications in mining such as underground core drilling, surface exploration drilling, underground mine development. For the construction industry, structure reinforcement, grouting and geotechnical applications.

- Depth capacity of 815 m (2,674 ft) N size
- Feed force of 4.7 tonnes (10,360 lbf)
- > Pull force of 6.3 tonnes (13,820 lbf)

SCX recommends using only SCX quality manufactured parts. SCX does not guarantee the consistency or quality of other manufacturers.



Version 1

Image for illustration purpose only, please refer to the order specification for exact rig



SCX DE130

Compact Underground & Surface Core Drill

KEY FEATURES

- · CE marked to meet European standards (Conformité Européenne)
- · Rotating rod guard with interlock
- · All hydraulic operation
- · Automated clamping for optimized rod tripping
- \cdot 360 $^{\circ}$ turn table attached to the rig base
- · Dedicated control panel for all drilling operations
- · Heliportable in easily detachable modules
- · Designed for easy set-up when fan drilling underground
- · Mechanical feed boom lineal adjustment allowing the feed boom to contact ground
- Load sensing hydraulic system for optimized power efficiency

OPTIONS

- · Rod holder / clamp 150 mm
- · H size rotation unit
- N size rotation unit high torque
- Extendable wireline mast

STANDARD FEATURES



ROTATING ROD GUARD

Rotating rod guard supplied	Yes
Feed boom fully enclosed	Yes
Interlock to stop rotation on open	Yes

ROTATION UNIT - N SIZE 1600 RPM

	Metric	Imperial
Hollow spindle - Id (N)	77 mm	3 in
Torque @ 50 RPM	447 Nm	330 lbf ft
Torque @ 1,600 RPM	146 Nm	108 lbf ft
Rotation speed	0 - 1,600 RPM	
Number of jaws	8	
Gripping range	30 - 76 mm	1.8 - 3 in
Gripping range	10 mm	0.39 in

POWER UNIT - ELECTRIC 55 kW

	Metric	Imperial
Power	55 kW	75 hp
Maximum oil flow Tank	142 l/min	37 US gpm
volume (Oil)	801	21 US gal
Cooler	Water	
Other information	– Oil level indicator	
	– Filter indicator	
	-Thermometer	
	– Hand pump for oil fill	
	– Pressure and return filter	

WIRELINE MAST

	Metric	Imperial
Length	1 m	3.28 ft

Wireline mast includes a rod support and wireline sheave wheel assembly.

Refer to OPTIONS for different mast lengths.

ROD HOLDER / CLAMP

	Metric	Imperial
Number of jaws	2	
Gripping range	30 - 106 mm	1.18 - 4.17 in
Gripping range/set of jaws	20 mm	0.79 in
Maximum opening (no jaws or guides)	136 mm	5.35 in

FEED BOOM

	Metric	Imperial
Feed force	46.1 kN / 4.7 t	10,360 lbf
Pull force	61.5 kN / 6.3 t	13,820 lbf
Feed length (stroke)	1,700 mm	5 ft 7 in
Total length	3,065 mm	10 ft
Feed rate, Rod running max	1.1 m/s	43 in/s
Feed rate, drilling max	0.04 m/s	1.57 in/s
Practical rod running speed	20 m/min	65.6 ft/min

The Feed boom is made using a torsion resistant steel profile. Adjustable drilling range up to 180° using a hydraulic tilt cylinder. Lineal feed boom adjustment using hydraulics.

CONTROL PANEL

Central control of all drilling operations, including flush pump, wireline hoist and boom tilt. Gauges for:

- Hydraulic system pressure
- Feeding force
- Water pressure
- Water flow

WATER PUMP

	Metric	Imperial	
Туре	Hydraulic d	Hydraulic drive Bean1122	
Maximum flow	100 l/min	26 US gpm	
Maximum pressure	69 Ba	1000 psi	



DEPTH CAPACITY*

	Vertical Down Metric Imperial	45° Down Metric Imperial	Horizontal Metric Imperial	45° Up Metric Imperial	Vertical Up Metric Imperial
TK46**	1,650 m 5,413 ft	1,856 m 6,090 ft	2,063 m 6,767 ft	1,444 m 4,737 ft	825 m 2,707 ft
A**	1,336 m 4,383 ft	1,503 m 4,931 ft	1,670 m 5,479 ft	1,169 m 3,835 ft	668 m 2,192 ft
TK56	1,280 m 4,199 ft	1,440 m 4,724 ft	1,600 m 5,249 ft	1,120 m 3,675 ft	640 m 2,100 ft
В	1,064 m 3,491 ft	1,197 m 3,927 ft	1,330 m 4,364 ft	931 m 3,054 ft	532 m 1,745 ft
TK66	1,230 m 4,035 ft	1,384 m 4,540 ft	1,538 m 5,044 ft	1,076 m 3,531 ft	615 m 2,018 ft
N	815 m 2,674 ft	917 m 3,008 ft	1,019 m 3,342 ft	713 m 2,340 ft	408 m 1,337 ft
TK76	884 m 2,900 ft	995 m 3,263 ft	1,105 m 3,625 ft	774 m 2,538 ft	442 m 1,450 ft
H***	555 m 1,821 ft	624 m 2,048 ft	694 m 2,276 ft	486 m 1,593 ft	278 m 910 ft

^{*}Calculations are based on pullout foce in a clean, vertical, fluid-filled hole. In some cases the depth capacity may exceed the capacity of the down hole tooling. SCX does not guarantee that these results will be achieved in all drilling conditions.

WEIGHT

	Metric	Imperial
Drill unit (Including feed boom, rod holder, rotation unit (N), and wall bracket)	510 kg	1,125 lb
Drill unit (Including feed boom, rod holder, rotation unit (H), and wall bracket)	630 kg	1,390 lb
Mounting frame (Including tilt cylinder and support legs)	200 kg	440 lb
Control panel	110 kg	242 lb
Power unit - electric (Excluding oil)	640 kg	1,411 lb
Hydraulic hoses	80 kg	176 lb
Wireline hoist - 1200 m (Excluding rope)	107 kg	236 lb
Wireline mast - 1,000 mm	40 kg	88 lb
Wireline mast - 2,000 mm	50 kg	110 lb

Note: Weights and dimensions are approximate only.

MOUNTING FRAME

– Mounting frame, 180° tilt
– Rear supports, including mounting brackets
– Wall mounting bracket
– Fork lift "pockets"
- Safety bracket for water hose
- 360°turn table attached to the rig base

WIRELINE HOIST

	Metric	Imperial
Drum capacity	1,200 m x 5 mm	3,937 ft x 0.2 in
Pulling force, empty drum	12,4 kN	2,700 lbf
Speed full drum	2.7 m/s	9 ft/s
Wireline rope spooler	Y	es

^{**}Not suitable with H-size rotation unit option.

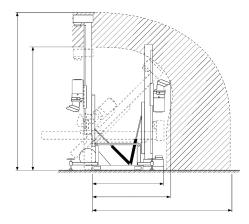
^{***} Requires H-size rotation unit option.

DIMENSIONS



	Metric	Imperial
A	4,100 mm	161 in
В	3,100 mm	122 in
С	2,225 mm	88 in
D	2,550 mm	100 in
E	3,500 mm	138 in

Note: Drawing shows working range for SCX DE130 without the wireline mast mounted. With the mast and sheave wheel mounted the measurements should be adjusted.



Note: Weights and dimensions are approximate only.

DRILL UNIT - WITHOUT WL MAST

	Metric	Imperial
A	3,924 mm	-
В	1,925 mm	-
С	1,079mm	-
D	1,195 mm	-



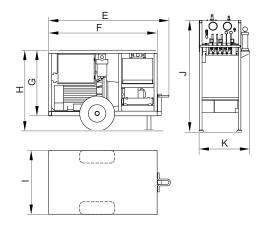
POWER UNIT

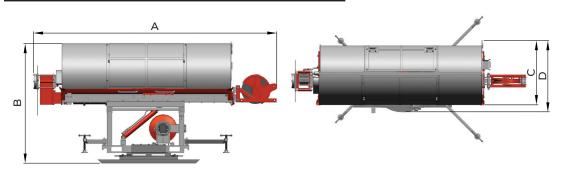
55 KW - ELECTRIC	Metric	Imperial
E	1,600 mm	63 in
F	1,430 mm	56 in
G	860 mm	34 in
Н	1,040 mm	41 in
I	840 mm	33 in

CONTROL PANEL

	Metric	Imperial
J	1,165 mm	46 in
K	525 mm	21 in
Depth	480 mm	19 in

Note: Weights and dimensions are approximate only.





OPTIONS



ROTATION UNIT - N SIZE 1100 RPM

	Metric	Imperial
Hollow spindle - ID	77 mm	3 in
Number of jaws	8	
Gripping Range	30 - 76 mm	1.18 - 3 in
Gripping range	10 mm	0.39 in
Torque @ 50 RPM	447 Nm	330 lbf ft
Torque @ 1,100 RPM	212 Nm	156 lbf ft
Rotation speed	0 to 1,10	0 RPM

ROD HOLDER / CLAMP - 150 MM

	Metric	Imperial
Number of jaws	2)
Gripping	36 - 150 mm	1.42 - 5.91 in
Gripping range/set of jaws	87 mm	3.43 in
Maximum opening (no jaws or guides)	150 mm	5.91 in

Clamp and open hydraulically. Exchangeable rod guide and jaws for standard drill rods casings and core barrels.

ROTATION UNIT - H SIZE 1100 RPM

Metric	Imperial
103 mm	4 in
12	
38 - 102 mm	1.50 - 4 in
15 mm	0.59 in
757 Nm	558 lbf ft
271 Nm	200 lbf ft
0 to 1,100 RPM	
	103 mm 12 38 - 102 mm 15 mm 757 Nm 271 Nm

WIRELINE MAST

	Metric	Imperial
Length	0.5 m	1.64 ft
Length	1 m	3.28 ft
Length	2 m	6.56 ft

Wireline mast includes a rod support and wireline sheave wheel assembly.

The Wireline Mast is extendable using different section lengths.

FEED BOOM - 900 MM

	Metric	Imperial
Feed force	46.1 kN / 4.7 t	10,360 lbf
Pull force	61.5 kN / 6.3 t	13,820 lbf
Feed length (stroke)	900 mm	35.4 in
Total length (with N rotation and no sheave wheel)	2,278 mm	89.7 in
Total length (with H rotation and no sheave wheel)	2,341mm	92.2 in
Feed rate, rod running max	1.1 m/s	43 in/s
Feed rate, drilling max	0.04 m/s	1.57 in/s
Practical rod running speed	20 m/min	65.6 ft/min

DIESEL POWER UNIT

	Model
Diesel Power Unit Tier 3	SCX DA601
Diesel Power Unit Stage 5 / Tier 4	SCX DA602



SCX TOOLS AND CONSUMABLES

SCX has a complete range of down hole tools and consumables to support exploration rigs for start up and continued operation, SCX can offer competitive tooling packages with the sale of drill rigs.

TOOLS AVAILABLE

- · Underground core barrel systems
- · Surface core barrel systems
- Core barrel and inner tube consumables.
 Full range available
- Overshot core retrieval systems
- Drill bits, reamers, PCD bits, casing shoes etc.
 Full range available
- · Diamond rods and casing all sizes available
- · Drill muds and additives
- · Wedging tools
- · Casing cutters
- Water swivels and hoisting plugs
- · Full range of adaptor subs available

SCX AFTERMARKET

SCX has excellent aftermarket service and support with a global footprint.

AFTERMARKET AVAILABLE

- All spare parts are available through SCX global warehouses
- · Spare parts packages can be supplied with new rigs
- SCX can tailor service contracts to suit customer requirements

SCX GEOLOGICAL CONSUMABLES

SCX has a comprehensive range of over seven hundred geological products available for global distribution.

SCX GEOLOGICAL CONSUMABLES

- · Metal core trays
- · Plastic core trays
- · Core tray racking systems
- · Automatic core saws and blades
- · Manual core saws and blades
- · Core handling systems
- Pipe wipers
- Orientation down hole tools
- Si-foam A and B
- Marking consumables
- · Flagging tape
- · Survey stakes
- · Magnification tools
- Geo picks and hammers
- · Compass and clinometers
- · Chip sample boxes
- · Calico bags
- Plastic bags
- Press seal bags
- Wetstrength bags
- · Certified test sieves
- · Over 700 products total