SCX DE740

DESIGNED BY SANDVIK

SUNNY CORNER EXPLORATION

HEAVY-DUTY SURFACE CORE DRILL

TECHNICAL SPECIFICATION

The DE740 deep hole core drill rig is capable of pulling and running rods in 9 m (30 ft) lengths. It features a telescopic mast with excellent handling and assembly characteristics and can be angled to near horizontal position.

This powerful and truly space-efficient core drill can provide significant value on sites where a smaller foot print is required.

- Depth capacity of 2000m (6560ft) N size
- Feed force of 6,8 tonnes (15000 lbf)
- Pull force of 13,6 tonnes (30000 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 DE740

HEAVY-DUTY CORE DRILL RIG FOR SURFACE APPLICATIONS

FEATURES

- “P” size chuck drive C40 rotation head with hollow spindle and stepless speed control
- Telescoping upper mast
- All hydraulically operated
- Self-propelled drill unit
- Rod spin guard
- One rod clamp can support B, N, H, P and S rod sizes, 44,5 to 177,8 mm (1-3⁄4 to 7 in)
- Head traverse system directly coupled to rotation head carriage
- Wireline wiper and safety cut out - Keeps rig cleaner and prevents overwind during wireline operations

OPTIONS

- Truck or crawler configurations
- High altitude boost system enables operation above 2000 m+ (6560 ft)
- Fire suppression system - suitable for subzero climates
- Hydraulic folding walkways for ease of maintenance work
- Safety spin capable of making up and breaking out drill rods during tripping operations
- Hydraulically operated left-hand and right-hand walkways - provides easy access to areas of rig requiring maintenance.

STANDARD FEATURES

DEPTH CAPACITY*

	Metric	Imperial
TK46	N/A	
A	N/A	
TK56	3,187 m	10,453 ft
B	2,350 m	7,708 ft
TK66	2,731 m	8,958 ft
N	2,000 m	6,560 ft
TK76	1,886 m	6,186 ft
H	1,400 m	4,593 ft
P	831 m	2,726 ft

*Calculations are based on machine capacity, which in some cases may exceed the rated hole depth of the down hole tooling. SCX do not guarantee that these results will be achieved in all drilling conditions.

ROTATION UNIT

	Metric	Imperial
Hollow Spindle - ID (N)	123 mm	4.84 in
Number of jaws	9	
Gripping range, set of jaws	B, N, H and P	
Hydraulic motor	160 cc variable displacement	
Rotation speed	0 to 1500 rpm	
Rotation torque range	7640 Nm - 786 Nm	5635 lbf ft - 580 lbf ft
Rotation torque @ 900 rpm	1188 Nm	876 lbf ft
Torque @ rpm - low gear	7640 - 2620 Nm @ 140 - 408 rpm	5635 - 1932 lbf ft @ 140 - 408 rpm
Torque @ rpm - high gear	2292 - 786 Nm @ 466 - 1361 rpm	1932 - 580 lbf ft @ 466 - 1361 rpm

High - low manual gear change and 0 - 1,500 RPM stepless speed control.

ROD CLAMP

	Metric	Imperial
Number of jaws	2	
Gripping range	44,5 - 177,8 mm	1.75 - 7 in
Gripping range/set of jaws	B, N, H, P and S	
Maximum opening (no jaws)	224 mm	8.8 in

Hydraulically operated and self energizing rod holder.

FEED

	Metric	Imperial
Feed force	67 kN (6,8 t)	15,000 lbf
Pull force	133,5 kN (13,6 t)	30 000 lbf
Feed length (stroke)	3,45 m	11 ft 3 in
Speed (up and down)	30m/min	100 ft/min
Flow fuse hose burst system	Prevents uncontrolled dropping of rotation head if hoses fails.	

Head traverse system directly coupled to rotation head carriage.

CONTROL PANEL

The entire drilling process is controlled from a single control panel providing the operator with an excellent overview of the drill site. The control panel is intuitive and easy to learn and operate.

POWER UNIT / HYDRAULICS

	Metric	Imperial
Diesel engine	Cummins QSB6.7 (inline 6 cylinder)	
Power	194 kW @ 2200 rpm	260 hp @ 2200 rpm
Emission rating	EU Stage III CARB/EPA Tier 3	
Engine filtration	Standard plus remote fuel filter	
Hydraulic filtration	Full flow 10 µm rated return oil filter	
Maximum working pressure (rotation hydraulic oil)	250 bar	3,626 psi
Maximum oil flow	277 L/min	73 USgal/min
Tank volume (hydraulic oil)	400 L	106 USgal
Cooler	Engine	Jacket water
	Hydraulics	Air
Electrical system	24 V	

Highest quality axial and radial piston pumps and motors used in three independent circuits. Larger than typical hoses and control valve sizes used for maximum efficiency.

WATER PUMP

	Metric	Imperial
Type	Hydraulic driven, FMC Bean L1118-SC	
Maximum flow	246 L/min	65 US gpm
Maximum pressure	13,790 kPa	2,000 psi

MAST

	Metric	Imperial
Rod pull capacity	9 m	30 ft
Core pull capacity	6 m	20 ft
Mast dump	1,067 mm	42 in
Mast length	10,758 m	424 ft
Mast angle	90 - 45° angle holes	
Mast rest	Double post support - prevents mast from moving out of position when tramming on rough terrain	

WIRELINE WINCH

	Metric	Imperial
Pull capacity	21,4 kN	4,800 lbf
Speed	430 m/min	1,411 ft/min
Cable capacity	1,800 m x 6,5 mm	5,600 ft x 0.26 in
Wireline spooler	Increases life of rope and uptime via smooth rewinding	

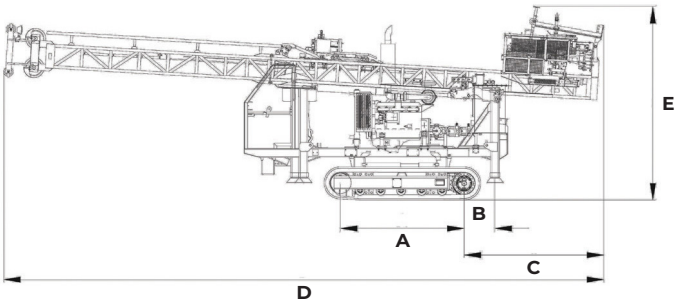
MAIN WINCH

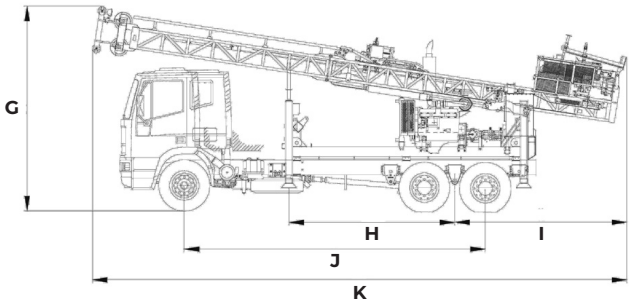
	Metric	Imperial
Pull capacity (single line)	125 kN (12.8 t)	28 100 lbf
Speed (up to)	70 m / min	230 ft/min
Cable diameter	22 mm	0.87 in
Travel limiter	Prevents the winch from over-winding	

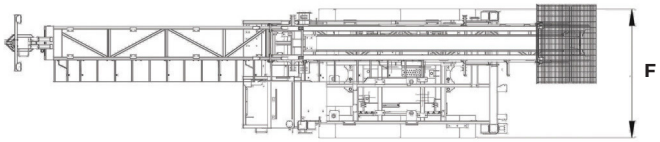
MOUNTING CONFIGURATIONS

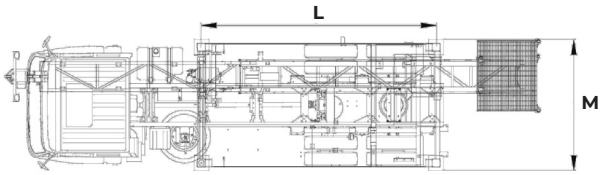
DE740 is available as truck and crawler mounted configurations.

DIMENSIONS









DRILL DIMENSION - TRACK MOUNTED

	Metric	Imperial
A	3,265 mm	128 in
B	1,118 mm	44 in
C	2,855 mm	112 in
D	10,060 mm	396 in
E	3,850 mm	152 in
F	2,565 mm	101 in

WEIGHT

	Metric	Imperial
Complete rig mass - track version (with walkway)	18,070 kg	39,840 lb
Rig without truck mass - truck version (without walkway)	13,480 kg	29,700 lb
Rig without truck mass/ with hydraulic walkway - truck version	14,300kg	31,530 lb

DRILL DIMENSION - TRUCK MOUNTED

	Metric	Imperial
G	4,205 mm	166 in
H	3,957 mm	156 in
I	3,900 mm	154 in
J	5,360 mm	211 in
K	10,060 mm	396 in
L	5,678 mm	224 in
M	2,500 mm	98 in

Mass configurations, the following components are included in the weight estimates above:

- boost pump assembly
- Safe-T-Spin
- Safe-T-Spin support structure
- rod spin guard assembly
- mast platform assembly
- wireline winch spooler
- wireline winch rope