



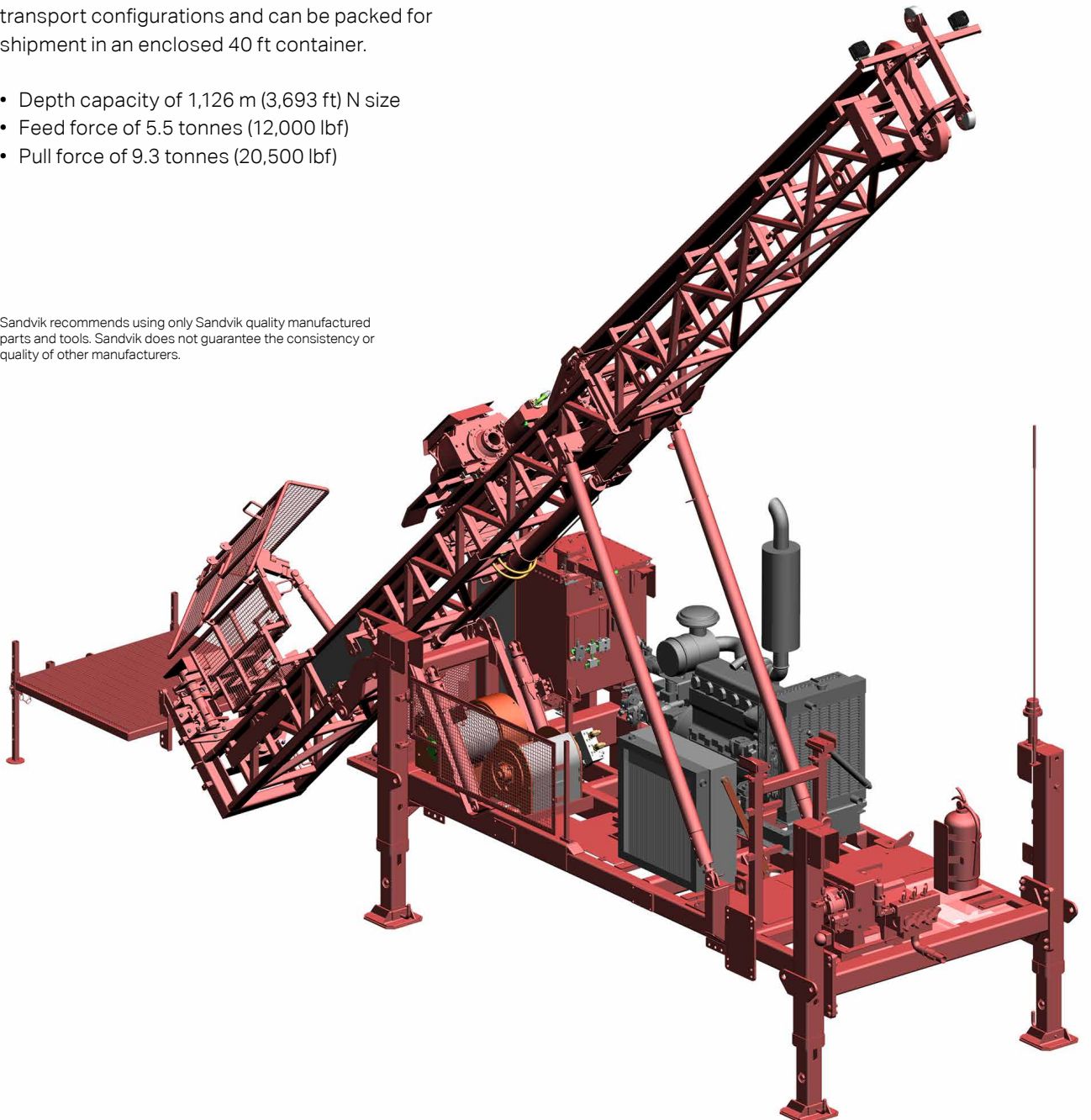
SANDVIK DE710 HEAVY-DUTY SURFACE CORE DRILL

TECHNICAL SPECIFICATION

The SANDVIK DE710 is a mid-size coring drill that has a heavy-duty base frame design and is considered to be the most versatile drill in its class. The efficient design allows the DE710 to suit a number of different transport configurations and can be packed for shipment in an enclosed 40 ft container.

- Depth capacity of 1,126 m (3,693 ft) N size
- Feed force of 5.5 tonnes (12,000 lbf)
- Pull force of 9.3 tonnes (20,500 lbf)

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



SANDVIK DE710 HEAVY-DUTY CORE DRILL RIG FOR SURFACE APPLICATIONS

KEY FEATURES

- Radio remote tramming with no driver compartment
- Rotating rod guard with interlock
- "P" size rotation unit with chuck drive and hollow spindle
- Stepless rotation speed control
- Fully hydraulically operated
- Self-propelled drill unit (Crawler Track option)
- 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)
- Safety spin capable of making up and breaking out of rod joints during tripping operations (option)
- Fits in a closed 40 ft container

OPTIONS

- Fire suppression system
- DA512 Safe-T-Spin
- High altitude boost system - enables operation above 2,000 m+ (6,560 ft)
- Jaw kit - basic jaws B, N, H and P sizes
- Crawler track option - 2 speed
- Truck fitment 4x2 - truck Tata

STANDARD FEATURES

DEPTH CAPACITY*

	METRIC	IMPERIAL
TK46	N/A	
A	N/A	
TK56	1,953 m	6,406 ft
B	1,440 m	4,723 ft
TK66	1,674 m	5,491 ft
N	1,126 m	3,693 ft
TK76	1,156 m	3,792 ft
H	754 m	2,473 ft
P	509 m	1,670 ft

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

ROTATION UNIT

	METRIC	IMPERIAL
Hollow spindle - ID (N)	120 mm	4.73 in
Number of jaws		5
Gripping range		B, N, H and P
Torque @ 75 RPM	2733 Nm	2016 lbf ft
Torque @ 900 RPM	611 Nm	451 lbf ft
Torque @ 1500 RPM	296 Nm	218 lbf ft
Rotation speed		0 to 1,500 RPM

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

ROD HOLDER / ROD CLAMP

	METRIC	IMPERIAL
Number of jaws		2
Gripping range	44.5 - 177.8 mm	1.75 - 7 in
Gripping range - Jaw sets		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	53.2 kN (5.5 t)	12,000 lbf
Pull force	91.2 kN (9.3 t)	20,500 lbf
Feed length (stroke)	3.45 m	11 ft 3 in
Speed (up and down)	30 m/min	100 ft/min

Head traverse system directly coupled to rotation unit carriage with no ropes or chains.

CONTROL PANEL

All drilling functions controlled from one control panel. The control panel is full hydraulic control.

POWER UNIT / HYDRAULICS

	METRIC	IMPERIAL
Diesel engine	John Deere JD6068TF250	
Power	134 kW @ 2200 rpm	180 hp @ 2,200 RPM
Emission rating	Tier 1	
Engine filtration	Standard plus remote fuel filter	
Hydraulic filtration	Full flow 10 µm rated return oil filter	
Maximum working pressure (rotation hydraulic oil)	265 bar	3,844 psi
Maximum oil flow	200 l/min	53 USgal/min
Tank volume (hydraulic oil)	400 l	106 USgal
Cooler	Engine	Jacket water
	Hydraulics	Air
Electrical system	12V	

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 W1,122	
Maximum flow	140 l/min	37 gpm
Maximum pressure	7,000 kPa	1,000 psi

MAST

	METRIC	IMPERIAL
Rod pull capacity	6 m	20 ft
Mast dump	1,067 mm	42 in
Mast length	9 m	30 ft
Mast angle	90 - 45° angle holes	
Mast support	Double mast supports (Locks mast at drill angle and provides solid mast support when drilling)	

WIRELINE WINCH

Pull capacity	7.8 kN	1,750 lbf
Speed	270 m/min	887 ft/min
Cable capacity	1,000 m x 5 mm	2,380 ft x 3/16 in

MAIN WINCH

	METRIC	IMPERIAL
Pull capacity (single line)	76.6 kN (7.8 t)	17,200 lbf
Speed (up to)	55 m/min	180 ft/min
Cable diameter	16 mm	0.63 in

SHIPPING DIMENSIONS CRAWLER TRACK

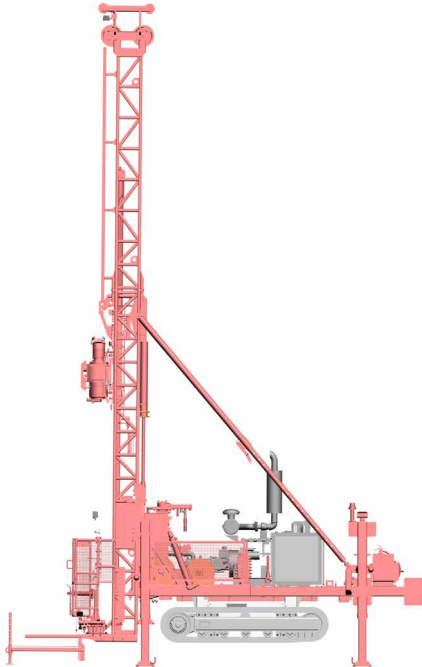
		METRIC	IMPERIAL
High cube 40 ft container (door opening)	Width	2,336.8 mm	7 ft 8 in
	Height	2,565.4 mm	8 ft 5 in
When shipping in container the mast is removed			

WEIGHT CRAWLER TRACK

	METRIC	IMPERIAL
Complete rig mass including crawler track	12,500 kg	27,558 lb
Rig excluding crawler track	9,500 kg	20,944 lb
Crawler track	3,000kg	6,614 lb

OPERATING FOOTPRINT 90° SET UP CRAWLER TRACK

	METRIC	IMPERIAL
Height	10,578 mm	34.70 ft
Length	6,906 mm	22.66 ft
Width	2,300 mm	7.55 ft



SHIPPING DIMENSIONS TRUCK

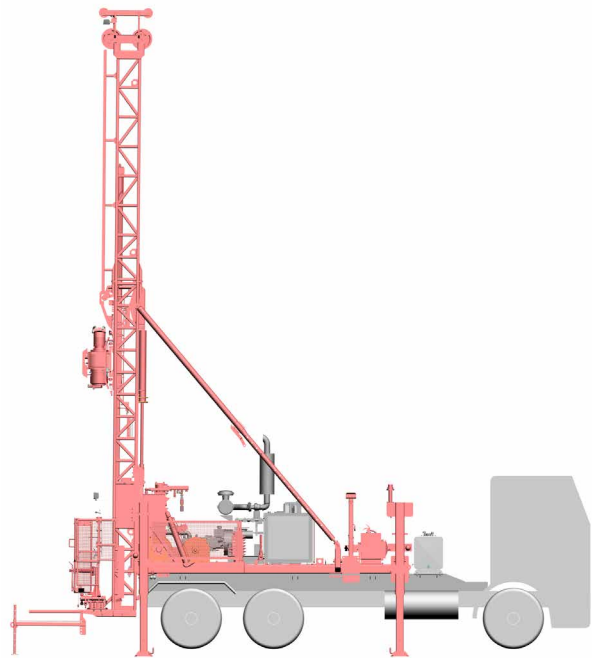
		METRIC	IMPERIAL
High cube 40 ft container (door opening)	Width	2,336.8 mm	7 ft 8 in
	Height	2,565.4 mm	8 ft 5 in
When shipping in container the mast is removed - Excludes truck			

WEIGHT TRUCK

	METRIC	IMPERIAL
Complete rig mass including Tata truck	17,200 kg	37,920 lb
Rig excluding Tata truck	9,500 kg	20,944 lb
Tata truck mass	7,700 kg	16,976 lb

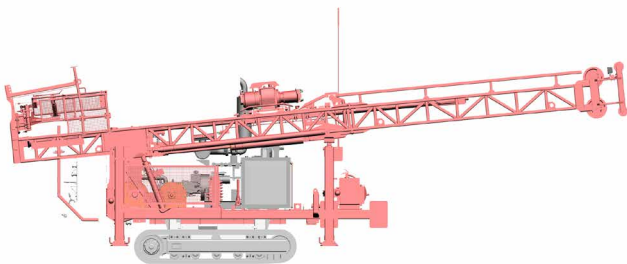
OPERATING FOOTPRINT 90° SET UP TRUCK

	METRIC	IMPERIAL
Height	10,578 mm	34.70 ft
Length	Subject to truck OEM	
Width	2,300 mm	7.55 ft



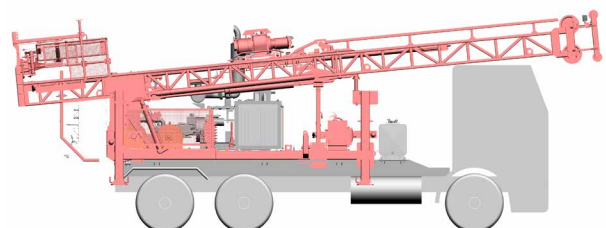
DIMENSIONS TRAVEL CRAWLER TRACK

	METRIC	IMPERIAL
Height	3,302 mm	10.83 ft
Length	10,653 mm	34.95 ft
Width	2,300 mm	7.55 ft



DIMENSIONS TRAVEL TRUCK

	METRIC	IMPERIAL
Height	Subject to truck OEM	
Length	10,673 mm	35.02 ft
Width	2,400 mm	7.87 ft



OPTIONS

HIGH ALTITUDE - OPTION

High altitude boost system is required for operation above 2,000 m

CARRIER CONFIGURATION CRAWLER TRACK

	METRIC	IMPERIAL
Maximum speed	2.6 km/h	1.6 m/h
Fuel capacity	350 lt	93 GL
DE710 is available in two speed crawler configuration		
Operating angle front	20 degrees	
Operating angle side	10 degrees	
Includes radio remote controlled crawler track drive		
The SANDVIK DE710 track sub-structure has a tow hook provision		

CARRIER CONFIGURATION TRUCK

	METRIC	IMPERIAL
Maximum speed	Contact truck OEM	
Fuel capacity	Contact truck OEM	
Include truck mounting		
Standard fitment is Tata 4x6 drive		
Customer to supply truck		

JAW KIT - OPTION

Chuck jaws, rod clamp jaws and guides for drilling B, N, H and P sizes

Lower chuck rod guide P size	1
Lower chuck rod guide H size	1
Lower chuck rod guide B size	1
Lower chuck rod guide N size	1
Socket head cap screw M12 x 35	10
Socket head cap screw M12 x 50	10
Washer flat M24	10
Lynch pin Diameter 6mm x 42mm	10
Pin - jaw holder rod clamp	2
Rod clamp set jaw holder	1
Rod clamp set jaw 2 3/16" B size	1
Rod clamp set jaw 2 3/4" N size	1
Rod clamp set jaw 3 1/2" H size	1
Rod clamp set jaw 4 1/2" P size	1
Jaw Storage box	1
Retaining ring for chuck jaw P size	1
Retaining ring for chuck jaw H size	1
Retaining ring for chuck jaw N size	1
Retaining ring for chuck jaw B size	1
Upper head rod guide P size	1
Upper head rod guide H size	1
Upper head rod guide N size	1
Upper head rod guide B size	1
Chuck jaw set P size rod 5 pieces	1
Chuck jaw set H size rod 5 pieces	1
Chuck jaw set N size rod 5 pieces	1
Chuck jaw set B size rod 5 pieces)	1

SANDVIK TOOLS AND CONSUMABLES

Sandvik have a complete range of down hole tools and consumables to support exploration rigs for start up and continued operation, Sandvik 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

SANDVIK AFTERMARKET

Sandvik has excellent aftermarket service and support with a global footprint in 130 countries around the world.

AFTERMARKET AVAILABLE

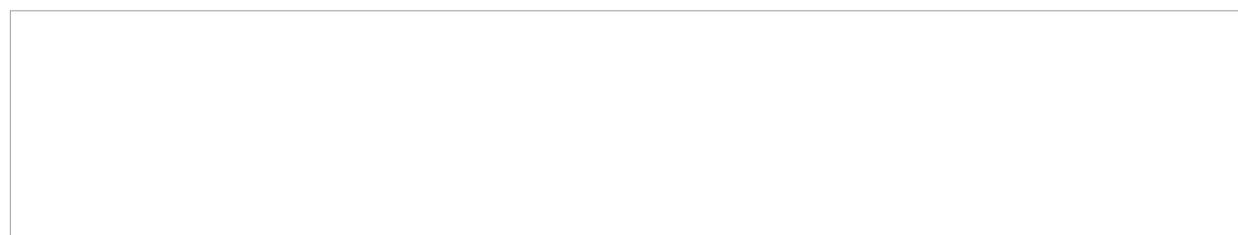
- All spare parts are available through Sandvik global warehouses
- Spare parts packages can be supplied with new rigs
- Sandvik can tailor service contracts to suit customer requirements

SANDVIK GEOLOGICAL CONSUMABLES

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

GEOLOGICAL PRODUCTS AVAILABLE

- 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
- Over 700 products total



Photos and illustrations in this brochure may show equipment with optional extras. Equipment, equipment specifications and data on this data sheet subject to change without notice. Please contact a Sandvik representative for clarification on equipment, equipment specifications and data.