Rotary drilling tools



LIEBHERR









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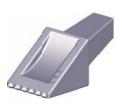
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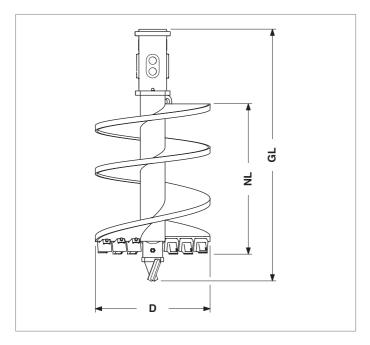


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Technical data





D	NL	GL	Torque	Weight
[mm]	[mm]	[mm]	[kNm]	[kg]
520	1500	2300	220	670
650	1500	2300	220	780
780	1500	2300	330	1010
900	1500	2300	330	1110
980	1500	2300	330	1160
1080	1500	2300	440	1340
1200	1500	2300	440	1440
1390	1500	2300	440	1740
1680	1500	2300	440	1900
1850	1500	2300	440	2240

Ø Casing			
[mm]			
620/540			
750/670			
880/800			
1000/920			
1080/1000			
1180/1100			
1300/1220			
1500/1420			
1800/1720			
2000/1910			

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Auger flight thickness of 30 mm.
- Wear protection at the auger body made of highly wearresistant and easily exchangeable composite armour plate.
- Single-start up to a diameter of 1200 mm.
- Equipped with exchangeable FT 80 flat teeth and fishtail pilot.

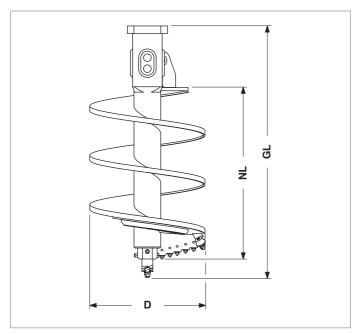
Application

Auger for loose soils such as sand and gravel as well as for cohesive soils.

Rock augers

single-start

Technical data





D	NL	GL	Torque	Weight
[mm]	[mm]	[mm]	[kNm]	[kg]
520	1500	2300	220	670
650	1500	2300	220	780
780	1500	2300	330	1010
900	1500	2300	330	1110
980	1500	2300	330	1160
1080	1500	2300	440	1340
1200	1500	2300	440	1440

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				

Other cutting diameters and effective lengths available on request.

Features

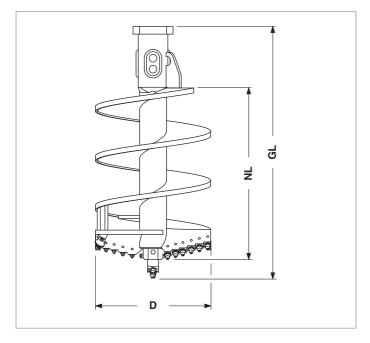
- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Auger flight thickness of 30 mm, two-layered in the cutting section.
- Wear protection at the auger body made of highly wearresistant and easily exchangeable composite armour plate.
- Cutting edge made of fine grained high-strength steel with holes for mounting the RSC 19 round shank chisels.
- A RSC 19 round shank chisel in interchangeable holder for calibrating the cutting diameter.
- PB 280-4 rock pilot, exchangeable, with four RSC 19 round shank chisels.

Application

Single-start auger also suitable for platy, fissured and compact rock of low cohesiveness.

Rock augers double-start

Technical data





D	NL	GL	Torque	Weight
[mm]	[mm]	[mm]	[kNm]	[kg]
520	1500	2300	220	700
650	1500	2300	220	830
780	1500	2300	330	1060
900	1500	2300	330	1160
980	1500	2300	330	1230
1080	1500	2300	440	1420
1200	1500	2300	440	1530
1390	1500	2300	440	1740
1680	1500	2300	440	1900
1850	1500	2300	440	2240

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				
1500/1420				
1800/1720				
2000/1910				

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Auger flight thickness of 30 mm, two-layered in the cutting section.
- Wear protection at the auger body made of highly wearresistant and easily exchangeable composite armour plate.
- Cutting edge made of fine grained high-strength steel with holes for mounting the RSC 19 round shank chisels.
- Two round shank chisels in interchangeable holder for calibrating the cutting diameter.
- PB 280-4 rock pilot, exchangeable, with four RSC 19 round shank chisels.

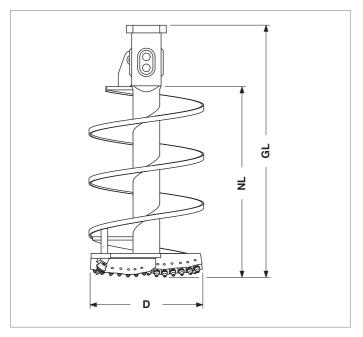
Application

Double-start auger also suitable for platy, fissured and compact rock of medium cohesiveness.

Rock augers

double-start, without pilot

Technical data





D	NL	GL	Torque	Weight
[mm]	[mm]	[mm]	[kNm]	[kg]
520	1500	2330	220	730
650	1500	2330	220	890
780	1500	2330	330	1180
900	1500	2330	330	1250
980	1500	2330	330	1340
1080	1500	2330	440	1540
1200	1500	2340	440	1650
1390	1500	2340	440	1860
1680	1500	2360	440	1970
1850	1500	2360	440	2320

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				
1500/1420				
1800/1720				
2000/1910				

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Auger flight thickness of 30 mm, two-layered in the cutting section.
- Wear protection at the auger body made of highly wearresistant and easily exchangeable composite armour plate.
- Two cutting edges with round shank chisels cutting to the centre as there is no pilot, made of fine grained high-strength steel with holes for mounting the RSC 19 round shank chisels.
- Two RSC 19 round shank chisels in interchangeable holders for calibrating the cutting diameter.

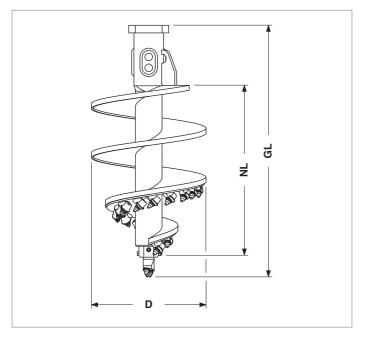
Application

Double-start auger for granular and rocky soil, platy, fissured rock and compact rock of medium cohesiveness.

Rock augers

tapered

Technical data





D	NL	GL	Torque	Weight
[mm]	[mm]	[mm]	[kNm]	[kg]
520	1500	2300	220	700
650	1500	2300	220	840
780	1500	2300	330	950
900	1500	2300	330	1070
980	1500	2300	330	1160
1080	1500	2300	440	1250
1200	1500	2300	440	1490
1390	1500	2300	440	1660
1680	1500	2300	440	2000
1850	1500	2300	440	2340

Ø Casing
[mm]
620/540
750/670
880/800
1000/920
1080/1000
1180/1100
1300/1220
1500/1420
1800/1720
2000/1910

Other cutting diameters and effective lengths available on request.

Features

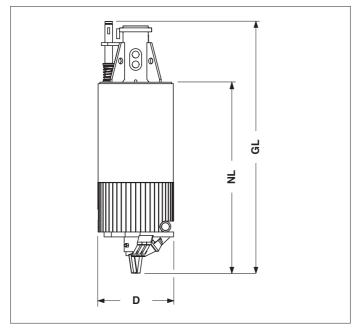
- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Auger flight thickness of 30 mm, two-layered in the cutting section.
- Wear protection at the auger body made of highly wearresistant and easily exchangeable composite armour plate.
- Tapered cutting section with single WH 320 interchangeable holders and RSC 19 round shank chisels.
- PB 280-4 rock pilot, exchangeable with four RSC 19 round shank chisels.

Application

Full-face cutting tool for compact highly cohesive rock suitable for drilling.

single-start/double-start

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
520	1500	2550	550
650	1500	2550	800
780	1500	2550	1100
900	1500	2550	1250
980	1500	2550	1750
1080	1500	2550	2000
1200	1500	2550	2700
1390	1500	2550	3300
1680	1500	2550	3900
1850	1500	2550	4500

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				
1500/1420				
1800/1720				
2000/1910				

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Hinged swivel bottom gate with quick lock. The bottom gate can be opened manually or mechanically via a spring loaded pin.
- A ventilation pipe prevents the formation of a vacuum during extraction.
- Single-start up to a diameter of 1200 mm.
- Fitted with exchangeable FT 80 flat teeth and fishtail pilot.

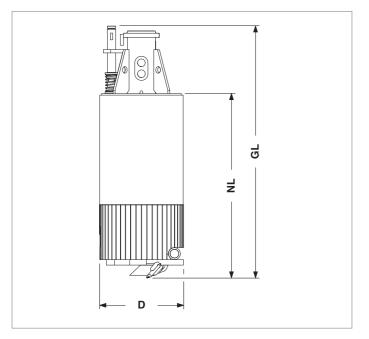
Application

Drilling bucket for loose soils, non-cohesive up to slightly cohesive sand, gravel and sand-gravel mixtures.

Drilling buckets

reamer

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
520	1500	2300	550
650	1500	2300	800
780	1500	2300	950
900	1500	2300	1200
980	1500	2300	1700
1080	1500	2300	1950
1200	1500	2300	2600
1390	1500	2300	3200
1680	1500	2300	3800
1850	1500	2300	4400

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				
1500/1420				
1800/1720				
2000/1910				

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Hinged swivel bottom gate with quick lock. The bottom gate can be opened manually or mechanically via a spring loaded pin.
- A ventilation pipe prevents the development of a vacuum during extraction.
- Swivel bottom gate with reamer without pilot.

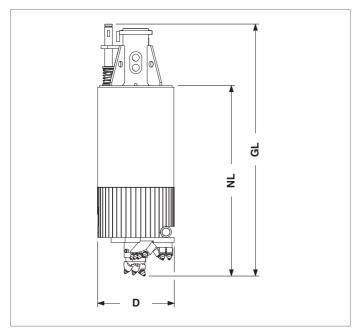
Application

For cleaning the bottom of the borehole.

Rock drilling buckets

single-start/double-start

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
520	1500	2550	550
650	1500	2550	800
780	1500	2550	1100
900	1500	2550	1250
980	1500	2550	1750
1080	1500	2550	2000
1200	1500	2550	2700
1390	1500	2550	3300
1680	1500	2550	3900
1850	1500	2550	4500

Ø Casing				
[mm]				
620/540				
750/670				
880/800				
1000/920				
1080/1000				
1180/1100				
1300/1220				
1500/1420				
1800/1720				
2000/1910				

Other cutting diameters and effective lengths available on request.

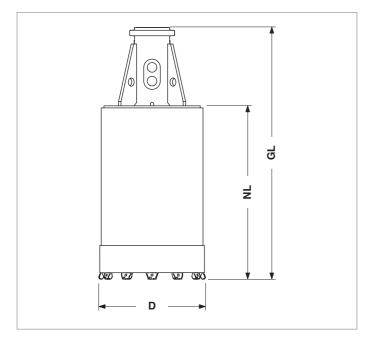
Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Hinged swivel bottom gate with quick lock. The bottom gate can be opened manually or mechanically via a spring loaded pin.
- A ventilation pipe prevents the formation of a vacuum during extraction.
- Single-start up to a diameter of 1200 mm.
- Fitted with exchangeable RSC 19 round shank chisels and rock pilot.

Application

Drilling bucket for platy, fissured and compact rock of medium cohesiveness. For loose soils, also compact sand and gravel as well as cohesive soils.

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
520	1200	1850	550
650	1200	1850	590
780	1200	1850	780
900	1200	1850	850
980	1200	1850	900
1080	1200	1850	1010
1200	1200	1850	1200
1390	1200	1850	1400
1680	1200	1850	1500
1850	1200	1850	1700

Ø Casing
[mm]
620/540
750/670
880/800
1000/920
1080/1000
1180/1100
1300/1220
1500/1420
1800/1720
2000/1910

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Cutting ring with WB 90/35 weld-on blocks.
- Cutting width approx. 35 mm.

Application

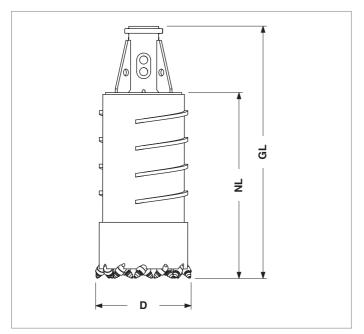
Core barrels are used to cut an annular space. The remaining centre core is subsequently broken up and removed using a rock auger.

- Solid rock up to 100 MPa.
- Slightly reinforced concrete.

Core barrels

with round shank chisels

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
520	1200	1850	550
650	1200	1850	590
780	1200	1850	780
900	1200	1850	850
980	1200	1850	900
1080	1200	1850	1010
1200	1200	1850	1200
1390	1200	1850	1400
1680	1200	1850	1500
1850	1200	1850	1700

Ø Casing
[mm]
620/540
750/670
880/800
1000/920
1080/1000
1180/1100
1300/1220
1500/1420
1800/1720
2000/1910

Other cutting diameters and effective lengths available on request.

Features

- VK 200 Kelly box made of heat-treated cast steel with two locking pins D 60 mm.
- Cutting ring with RSC 19 round shank chisels.
- Cutting width approx. 105 mm.

Application

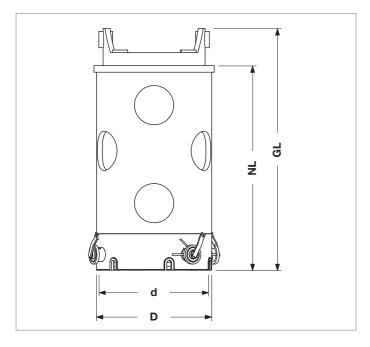
Core barrels are used to cut an annular space. The remaining centre core is subsequently broken up and removed using a rock auger.

• Solid rock up to 100 MPa.

Casing drivers

with adapter plate

Technical data





D	d	NL	GL	Locks	Weight
[mm]	[mm]	[mm]	[mm]	Pieces	[kg]
626	540	2100	2250	2	860
756	670	2100	2250	4	920
806	720	2100	2250	4	970
886	800	2100	2250	4	1020
1006	920	2100	2250	4	1200
1086	1000	2100	2250	4	1270
1186	1100	2100	2250	4	1330
1306	1220	2100	2250	4	1530
1506	1420	2100	2250	4	1960
1806	1720	2100	2250	5	2550
2006	1910	2100	2250	5	2980

Ø Casing
[mm]
620/540
750/670
800/720
880/800
1000/920
1080/1000
1180/1100
1300/1220
1500/1420
1800/1720
2000/1910

Other cutting diameters and effective lengths available on request.

Features

- The casing adapters consist of an adapter plate and the extension pipe with inspection port.
- Adapter plate for rotary drive with cardan joint.
- Reinforced female part with manual locking.

Application

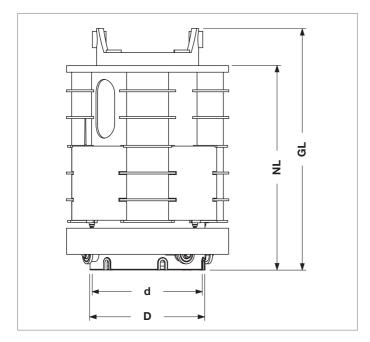
The powerful rotary drives of the LB series are able to drill casings into the ground completely or partially and extract them again without casing oscillator.

The adapter plate constitutes the connecting part between rotary drive and casing.

Casing drivers

remote-controlled

Technical data





D	d	NL	GL	Locks	Weight
[mm]	[mm]	[mm]	[mm]	Pieces	[kg]
620	540	1500	1835	2	1050
750	670	1500	1835	3	1290
800	720	1500	1835	4	1360
880	800	1500	1835	4	1460
1000	920	1500	1835	4	1680
1080	1000	1500	1835	4	1850
1180	1100	1500	1835	4	2012

Ø Casing
[mm]
620/540
750/670
800/720
880/800
1000/920
1080/1000
1180/1100

Other cutting diameters and effective lengths available on request.

Features

- Single-wall casing adapter with wall thickness of 15 mm and inspection port.
- Autarkic electric-pneumatic locking system.
- Safety remote control, sender and receiver including charging station for hand-held transmitter with charging cable and removeable battery.
- Locking is indicated optically and audibly.
- Two manual locking pins for emergency operation.

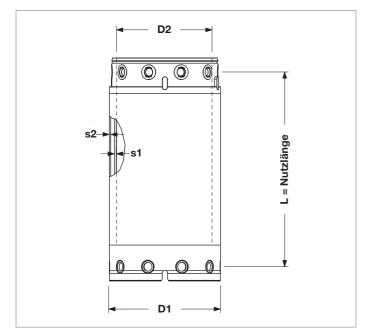
Application

The automatic casing adapter serves to connect/disconnect casings via remote control with the help of pneumatic cylinders and thus replaces manual locking.

The radio remote control is equipped with infrared for use with several casing adapters.

Casings double-wall

Technical data





D1	D2	s1	s2	L - effective lengths (m))
[mm]	[mm]	[mm]	[mm]	1 m	2 m	3 m	4 m	5 m	6 m
620	540	15	10	450	830	1205	1590	1970	2345
750	670	15	10	575	1035	1495	1965	2425	2890
800	720	15	10	615	1110	1600	2105	2600	3095
880	800	15	10	670	1215	1760	2315	2860	3405
1000	920	18	10	780	1465	2145	2840	3525	4210
1080	1000	18	10	830	1570	2310	3060	3800	4540
1180	1100	18	10	925	1740	2550	3370	4185	4995
1300	1220	18	10	1025	1920	2810	3725	4620	5520
1500	1420	18	10	1225	2265	3300	4350	5390	6430
1800	1720	18	10	1460	2750	4040	5320	6610	7900
2000	1910	18	10	1590	3080	4570	6060	7550	9050

Other cutting diameters and effective lengths available on request.

Features

- The casings are made of double-wall pipes.
- Casing connections on both sides with female and/or male part and conical and/or threaded rings. Screw connections with seal and O-ring.
- Custom-fit pipe connections for quick positioning and screwing together of the pipes.
- Lifting device available for all diameters.

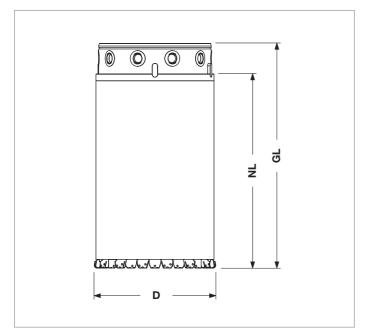
Application

Used for producing cased boreholes, especially for pile installation applying the rotary drilling method.

Bottom casing sections

Cutting shoe

Technical data





D	NL	GL	Weight
[mm]	[mm]	[mm]	[kg]
620			760
750			920
800			980
880			1080
1000			1380
1080	2000	2300	1480
1180			1620
1300			1780
1500			2080
1800			2580
2000			2980

Ø Casing
[mm]
620/540
750/670
800/720
880/800
1000/920
1080/1000
1180/1100
1300/1220
1500/1420
1800/1720
2000/1910

Other cutting diameters and effective lengths available on request.

Features

- The casing adapters are single-wall wall thickness 40 mm.
- Standard fitting with WB 90/42 weld-on blocks (also available with exchangeable blocks).

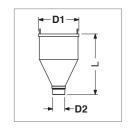
Application

For all rock types except very solid rock.

- Solid rock up to 100 MPa.
- Slightly reinforced concrete.

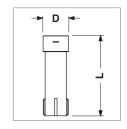


Charging funnel							
D1	D2	L	Weight				
[mm]	[mm]	[mm]	[kg]				
900	300	1200	280				



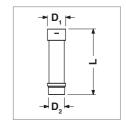


Foot section					
D	L	Weight			
[mm]	[mm]	[kg]			
300	900	280			



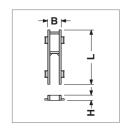


Tremie pipes				
D1	D2	L	Weight	
[mm]	[mm]	[mm]	[kg]	
300	267	1000	93	
300	267	2000	110	
300	267	3000	134	
300	267	4000	180	
300	267	5000	210	
300	267	6000	296	



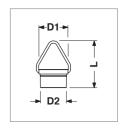


Suspension jig				
В	L	Н	Weight	
[mm]	[mm]	[mm]	[kg]	
271	1600	150	25	





Lifting cap				
D1	D2	L	Weight	
[mm]	[mm]	[mm]	[kg]	
300	267	125	40	



Features

- Tremie pipes with watertight connection.
- The tremie pipes are available in different lengths with charging funnel.
- Standard nominal width (NW) 250 mm.

Application

Used for concreting drilled piles applying the tremie method.

Drilling tools

wear parts

Designation	Part no.
Flat tooth FT 80	10500881
Holder for flat tooth FT 80	10500781
Round shank chisel RSC 19	10500787
Holder for round shank chisel RSC 19	10500788
Interchangeable holder WH 320	10523189
Weld-on block WB 90-42	10501174
Weld-on block WB 90-35	10500943
Fishtail pilot	10500885
Pilot PB 280-4	10500841
Rock pilot	10523117
Kelly pin	10522818
Splint —	10522826
Casing screw connection - threaded ring G 88/L	10500991
Casing screw connection - conical ring K 88/L	10500990
Casing screw connection 75/38 LV	10500992
Locating pin	10500788
O-ring - for casing screw connection	10501328
Seal - for casing male part	10507617
Flight wear protection VSW 45	10523544