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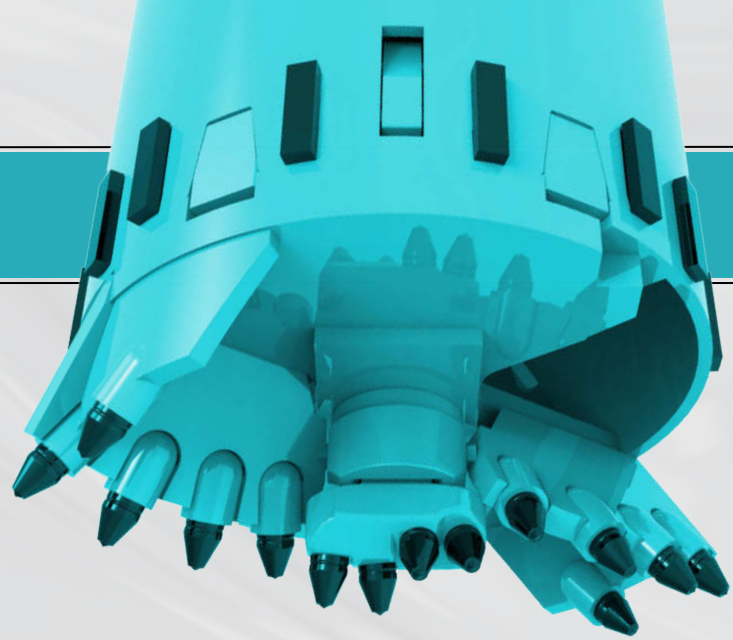
Drilling Buckets - Rock Drilling Bucket



					Single cut	Double cut
Drilling Dia mm	Shell Dia mm	Shell Length mm	Shell Thickness mm	Teeth Qty pcs	Weight kg	Weight kg
600	550	1200	16	5+2	682	712
700	650	1200	16/20	6+2	826	866
800	700	1200	16/20	7+2	921	971
900	800	1200	16/20	10+1	1061	1130
1000	900	1200	16/20	8+4+2	1190	1280
1100	1000	1200	16/20	10+4+2	1360	1440
1200	1100	1200	16/20	10+4+2	1513	1643
1300	1200	1200	16/20	12+4+2	1778	1938
1400	1300	1200	16/20	13+4+2	1919	2100
1500	1400	1200	16/20	14+4+2	2164	2304
1600	1500	1200	16/20	16+4+2	2428	2668
1700	1600	1000	20	16+4+4	2405	2535
1800	1700	1000	20	18+4+4	2957	3207
2000	1900	800	20	20+4+4	3247	3567
2200	2100	800	20	22+4+4	3787	4137
2500	2400	800	20	24+4+4	4236	4716

***Other sizes can be tailor-made as requirement**

Features:

- Optional prolong straight bucket shell can avoid drilling hole inclined
- Conical shell type can accelerate dumping and increase drilling efficiency
- Ventilation pipe shaft inside can prevent vacuum
- Collar plate can be added according to working conditions



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One Asia

Drilling Diameter	2500mm
Shell Length	1500mm
Teeth Model	B47K22H
Drilling Rig Modell	Sany SR415R

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

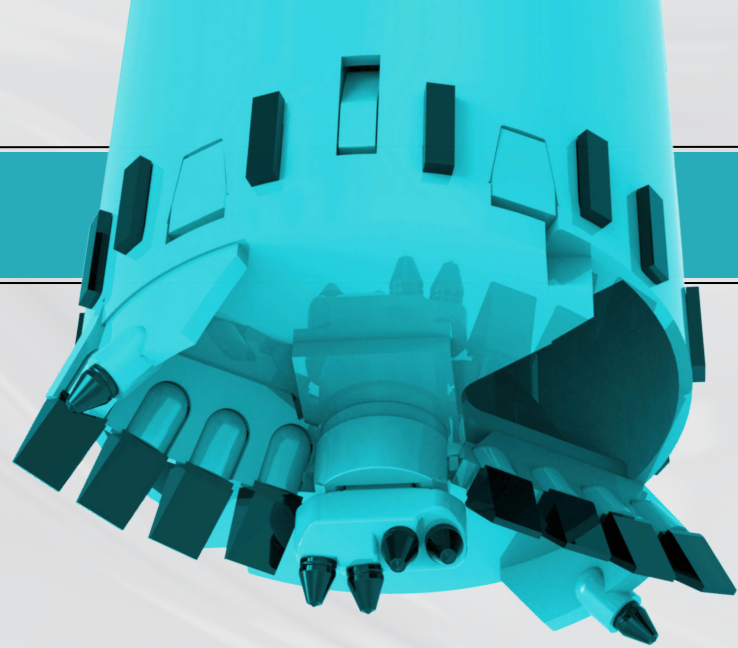
Case Two Asia

Drilling Diameter	1500mm
Shell Length	1500mm
Teeth Model	B47K22H
Drilling Rig Model	Bauer BG26

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Drilling Buckets - Soil Drilling Bucket



					Single cut	Double cut
Drilling Dia mm	Shell Dia mm	Shell Length mm	Shell Thickness mm	Teeth Qty pcs	Weight kg	Weight kg
600	550	1200	16	4	656	686
700	650	1200	16/20	4	784	824
800	700	1200	16/20	4	909	959
900	800	1200	16/20	5	1051	1120
1000	900	1200	16/20	6	1186	1276
1100	1000	1200	16/20	6	1336	1416
1200	1100	1200	16/20	6	1455	1585
1300	1200	1200	16/20	7	1668	1828
1400	1300	1200	16/20	8	1841	2022
1500	1400	1200	16/20	9	1938	2078
1600	1500	1200	16/20	10	2152	2392
1700	1600	1000	20	10	2271	2401
1800	1700	1000	20	11	2823	3073
2000	1900	800	20	12	3160	3480
2200	2100	800	20	14	3669	4019
2500	2400	800	20	16	4076	4556

***Other sizes can be tailor-made as requirement**

Features:

- Optional prolong straight bucket shell can avoid drilling hole inclined
- Conical shell type can accelerate dumping and increase drilling efficiency
- Ventilation pipe shaft inside can prevent vacuum
- Collar plate can be added according to working conditions



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One North America

Drilling Diameter	800mm
Shell Length	1200mm
Teeth Model	B47k22H
Drilling Rig Model	Soilmec SR30

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

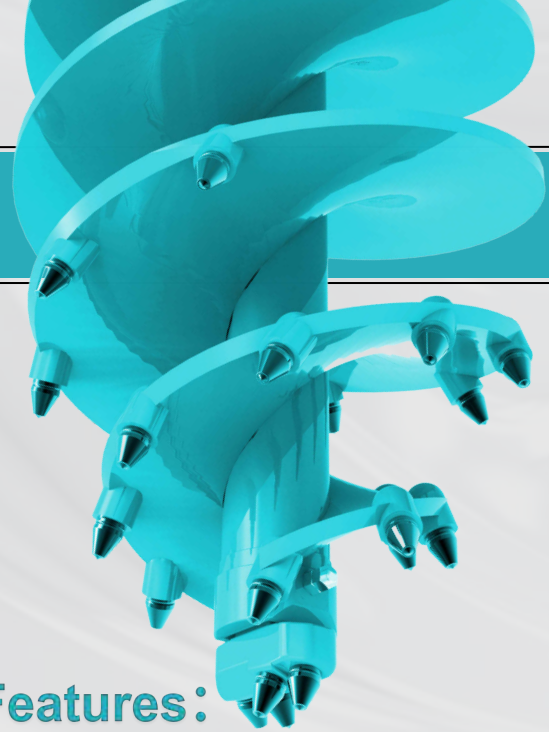
Case Two North America

Drilling Diameter	1200mm
Shell Length	1200m
Teeth Model	B47k22H
Drilling Rig Model	Sany SR185

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Drilling Augers - Rock Drilling Augers

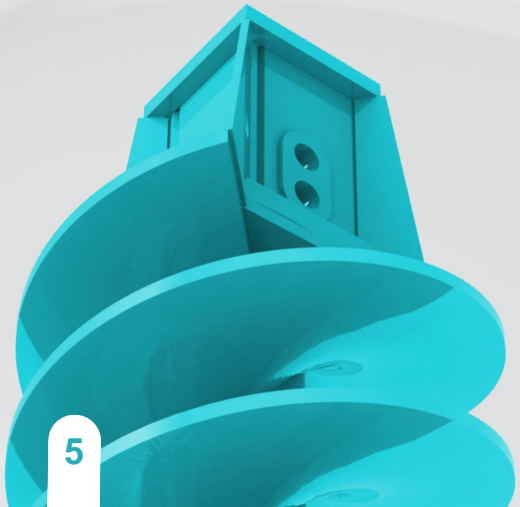


					Single cut	Double cut
Drilling Dia mm	Flight Dia mm	Pitch mm	Flight Length mm	Teeth Qty pcs	Weight kg	Weight kg
600	550	600	1200	20+4	438	537
700	650	600	1200	20+4	467	596
800	750	600	1200	22+4	512	708
900	850	600	1200	22+4	586	775
1000	950	600	1200	24+4	633	871
1100	1050	600	1200	26+4	674	958
1200	1150	600	1200	28+4	718	1047
1300	1250	600	1200	28+4	767	1145
1400	1350	600	1200	30+4	821	1253
1500	1450	600	1200	32+4	875	1367
1800	1750	600	1200	36+4	1081	1766

***Other sizes can be tailor-made as requirement**

Features:

- Design as straight type,better for carry soil;
- Double cutter bearing uniform force,can avoid inclined hole;
- Double spiral easy to carry soil,but meet cohesive soil,single spiral is easy to dump spoil.



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One North America

Drilling Diameter	800mm
Flight Length	1200mm
Teeth Model	B47K22H
Drilling Rig Model	IMT AF270

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

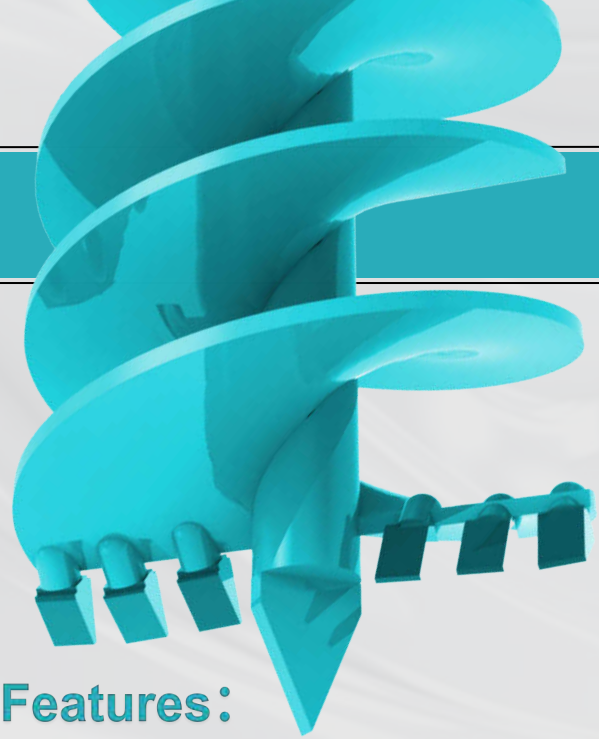
Case Two North America

Drilling Diameter	1000mm
Flight Length	1200mm
Teeth Model	B47K22H
Drilling Rig Model	CZM EK20

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Drilling Augers - Soil Drilling Augers



					Single cut	Double cut
Drilling Dia mm	Flight Dia mm	Pithch mm	Flight Length mm	Teeth Qty pcs	Weight kg	Weight kg
600	550	600	1200	4	478	561
700	650	600	1200	4	516	630
800	750	600	1200	4	554	700
900	850	600	1200	5	610	796
1000	950	600	1200	6	668	904
1100	1050	600	1200	6	732	1016
1200	1150	600	1200	6	800	1139
1300	1250	600	1200	7	879	1279
1400	1350	600	1200	8	959	1429
1500	1450	600	1200	9	1050	1590
1800	1750	600	1200	11	1351	2132

***Other sizes can be tailor-made as requirement**

Features:

- Design as straight type,better for carry soil;
- Double cutter bearing uniform force,can avoid inclined hole;
- Double spiral easy to carry soil,but meet cohesive soil,single spiral is easy to dump spoil.



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One North America

Drilling Diameter	1524mm
Flight Length	1676mm
Teeth Model	C31
Drilling Rig Model	Soilmec SR30

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

Case Two Southeast Asia

Drilling Diameter	1200mm
Flight Length	1200mm
Teeth Model	B47K22H
Drilling Rig Model	Soilmec RT3ST

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Core Barrel - Core barrel with Bullet teeth



Drilling Dia mm	Shell Dia mm	Shell Length mm	Shell Thickness mm	Teeth Qty pcs	Weight kg
600	530	1200	16+30	6	500
700	620	1200	16+30	9	572
800	720	1200	16+30	9	660
900	820	1200	16+30	12	730
1000	920	1200	16+30	12	810
1100	1020	1200	16+30	15	861
1200	1120	1200	16+30	15	1000
1300	1220	1200	16+30	15	1052
1400	1320	1200	16+30	18	1180
1500	1420	1200	16+30	18	1240
1600	1520	1200	16+30	21	1350
1700	1620	1000	20+40	24	1635
1800	1720	1000	20+40	24	1690
2000	1920	800	20+40	27	1770
2200	2120	800	20+40	30	1950
2500	2420	800	20+40	33	2450

***Other sizes can be tailor-made as requirement**

Features:

- Cutting ring with rock drilling bits and releases the internal stress of rock;
- Rock drilling bits perform stage breaking and driling;
- Small barrel facilitates the coring operation;large barrel performs stage breaking.



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One North America

Drilling Diameter	1300mm
Shell Length	1200mm
Teeth Model	B47K22H
Drilling Rig Model	Tescar CF3

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

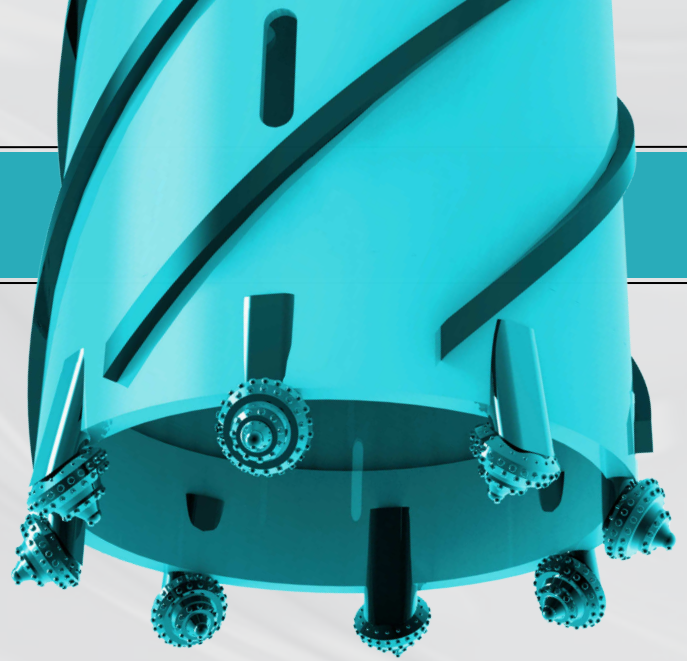
Case Two Southeast Asia

Drilling Diameter	1180mm
Shell Length	1200mm
Teeth Model	B47K22H
Drilling Rig Model	Jintai SD25A

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Core Barrel - Core barrel with Roller bits



Drilling Dia mm	Shell Dia mm	Shell Length mm	Shell Thickness mm	Teeth Qty pcs	Weight kg
600	520	1200	16+30	4	550
700	600	1200	16+30	4	612
800	700	1200	16+30	6	734
900	800	1200	16+30	6	794
1000	900	1200	16+30	8	908
1100	1000	1200	16+30	8	1006
1200	1100	1200	16+30	8	1089
1300	1200	1200	16+30	10	1175
1400	1300	1200	16+30	12	1327
1500	1400	1200	16+30	12	1387
1600	1500	1200	16+30	14	1522
1700	1600	1000	20+40	16	1831
1800	1700	1000	20+40	16	1886
2000	1900	800	20+40	18	1991
2200	2100	800	20+40	19	2162
2500	2400	800	20+40	20	2687

***Other sizes can be tailor-made as requirement**

Features:

- Cutting ring with rock drilling bits and releases the internal stress of rock;
- Rock drilling bits perform stage breaking and driling;
- Small barrel facilitates the coring operation;large barrel performs stage breaking.



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand



Case One Southeast Asia

Drilling Diameter	900mm
Shell Length	1500mm
Teeth Model	8½ Inch Roller Bits
Drilling Rig Model	SWDM240-2

Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)

Case Two Middle East

Drilling Diameter	1800mm
Shell Length	800mm
Teeth Model	8½ Inch Roller Bits
Drilling Rig Model	Bauer BG30

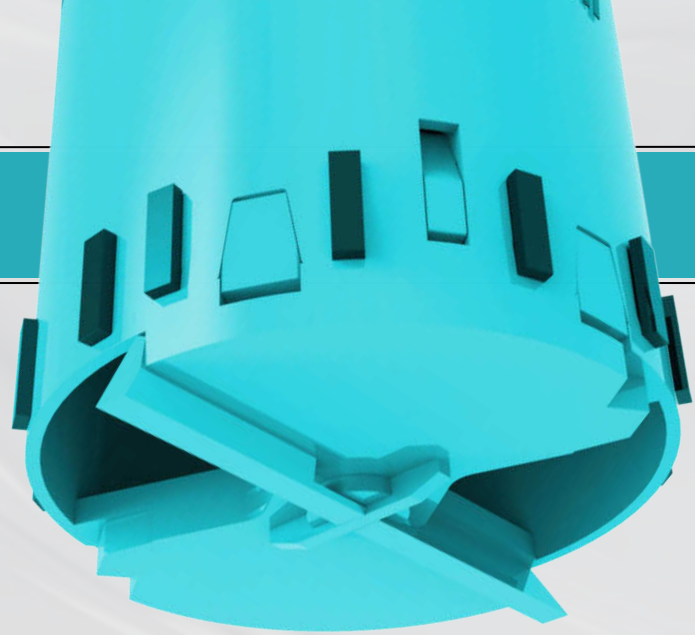
Support customized design(including length,kelly box size,thickness). Add extra wear-resistant welding for extremely hard soil condition(with hardox blocks)



Cleaning Bucket

Drilling Dia mm	Shell Dia mm	Shell Length mm	Shell Thickness mm	Weight kg
600	550	1200	16	740
700	650	1200	16/20	837
800	700	1200	16/20	920
900	800	1200	16/20	1024
1000	900	1200	16/20	1109
1100	1000	1200	16/20	1293
1200	1100	1200	16/20	1431
1300	1200	1200	16/20	1591
1400	1300	1200	16/20	1778
1500	1400	1200	16/20	1988
1600	1500	1200	16/20	2194
1700	1600	1000	20	2592
1800	1700	1000	20	2875
2000	1900	800	20	3350
2200	2100	800	20	3829
2500	2400	800	20	4622

***Other sizes can be tailor-made as requirement**



Features:

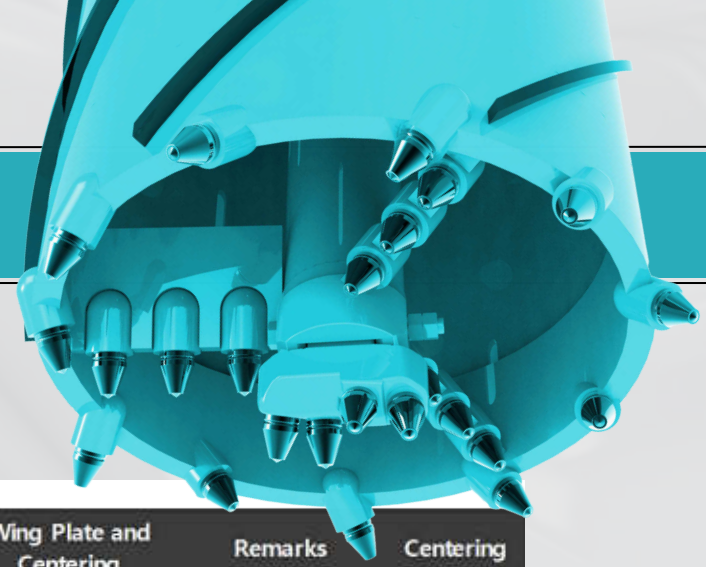
- Choose conical or straight bucket according to different working conditions;
- Choose straight guide plate or no guide plate according to different working condition;
- Applicable scope:cleaning spoil at pile bottom,soft layer.



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand

Cross-shell Drilling



Three-Wing Drill (600-1000)

Specification	Retained Diameter	Lower Circle H1	Barrel Height H	Wall Thickness T2/T1	Outer Teeth Number	Wing Plate and Centering	Remarks	Centering
600	580	150	1200	16/40	9	2+3	Horse-shoe seat	-
700	680	150	1200	16/40	10	2+5	Horse-shoe seat	-
800	780	150	1200	16/40	13	4+6	Four-way head	-
900	880	200	1200	16/40	14	4+7	Four-way head	-
1000	980	200	1200	20/40	16	4+9	Four-way head	-

***Other sizes can be tailor-made as requirement**

Four-Wing Drill (1100-2000)

Specification	Retained Diameter	Lower Circle H1	Barrel Height H	Wall Thickness T2/T1	Outer Teeth Number	Wing Plate and Centering	Remarks	Centering
1100	1080	200	1200	20/40	17	4+12	Four-way head	-
1200	1180	200	1200	20/40	19	4+14	Four-way head	-
1300	1280	200	1200	20/40	21	4+16	Four-way head	-
1400	1380	200	1200	20/40	23	4+18	Four-way head	-
1500	1480	200	1200	20/40	25	4+20	Four-way head	-
1600	1580	200	1200	20/40	26	4+22	Four-way head	-
1800	1780	200	1200	20/40	29	4+26	Four-way head	-
2000	1980	200	1200	20/50	33	4+30	Four-way head	-

***Other sizes can be tailor-made as requirement**



Remark:

Cutter and Bottom Customizable:Single and Double design as Customer demand;
Kelly Box Size:Kelly box size based on the kelly bar,like 130*130,150*150,200*200 etc;
*Other sizes can be manufactured as per customer demand

Kelly Bar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Kelly Bar - Interlocking Kelly Bar

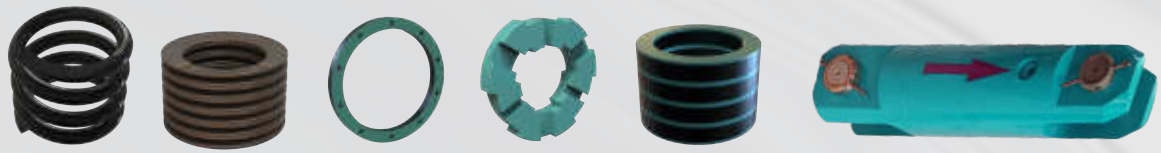


Specifications	A (mm)	B (mm)	D (mm)	C (mm)	C1 (mm)	Gross Weight (kg)	Torque (kNm)
JS299-4x6	7240	7410	6050	22820	22320	2450	100
JS299-4x7	8240	8410	7050	26820	26320	2750	100
JS355-4x11	12240	12410	11050	42070	41570	5200	160
JS355-4x12	13240	13410	12050	46070	45570	5600	160
JS368-4x10	11245	11420	10050	37265	36765	5300	200
JS368-4x13	14245	14420	13050	49265	48765	6700	200
JS377-4x10	11250	11420	10050	38065	37565	5800	180
JS377-4x12.5	13750	13920	12550	48065	47565	7000	180
JS394-4x10	11250	11420	10050	37525	37025	6300	250
JS394-4x13	14250	14420	13050	49525	49025	7800	250
JS406-4x11	12250	12420	11050	41420	40920	6950	250
JS406-4x14.5	15750	15920	14550	55420	54920	8800	250
JS419-4x13.5	14750	14920	13550	50960	50460	9300	300
JS419-4x18	19250	19420	18050	68960	68460	12100	300
JS440-4x13.5	14750	14920	13550	51265	50765	9600	280
JS440-4x15.5	16750	16920	15550	59265	58765	10900	280
JS470-4x15	16320	16490	15050	57010	56510	12750	420
JS470-4x18	19320	19490	18050	69010	68510	15100	420
JS508-4x16	17305	17480	16050	60650	60150	13800	360
JS508-4x17	18305	18480	17050	64650	64150	14600	360
JS580-4x19	20270	20470	19050	72080	71580	19900	460
JS580-4x20	21270	21470	20050	76080	75580	20850	460

***Other sizes can be tailor-made as requirement**



Kelly Bar Accessories





Case One Europe

Kelly Bar	Interlocking
Dimensions	419-4*13.5m
Max Drilling Depth	48m
Drilling Rig Model	Liebherr LB28

Can tailor-made all brands kelly bar even square shape, the brands including Liebherr, Bauer, Soilmec, Casagrande, Mait, IMT, CZM, Far etc.

Case Two Europe

Kelly Bar	Interlocking
Dimensions	470-4*16m
Max Drilling Depth	58m
Drilling Rig Model	Liebherr LB36

Can tailor-made all brands kelly bar even square shape, the brands including Liebherr, Bauer, Soilmec, Casagrande, Mait, IMT, CZM, Far etc.



Kelly Bar - Friction Kelly Bar

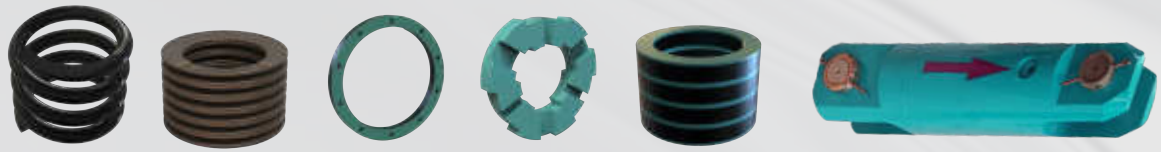




Specifications	A (mm)	B (mm)	D (mm)	C (mm)	C1 (mm)	Gross Weight (kg)	Torque (kNm)
MZ299-4x6	7240	7410	6050	22840	/	2350	100
MZ299-4x7	8240	8410	7050	26840	/	2650	100
MZ355-4x11	12240	12410	11050	42270	/	5050	160
MZ355-4x12	13240	13410	12050	46270	/	5450	160
MZ368-4x10	11245	11420	10050	37385	/	5150	200
MZ368-4x13	14245	14420	13050	49385	/	6550	200
MZ377-4x10	11250	11420	10050	38185	/	5700	180
MZ377-4x12.5	13750	13920	12550	48185	/	6900	180
MZ394-4x10	11250	11420	10050	37645	/	6100	250
MZ394-4x13	14250	14420	13050	49645	/	7600	250
MZ406-4x11	12250	12420	11050	41540	/	6750	250
MZ406-4x14.5	15750	15920	14550	55540	/	8600	250
MZ419-4x14	15250	15420	14050	53080	/	9100	300
MZ419-4x15	16250	16420	15050	57080	/	11900	300
MZ440-4x14	15250	15420	14050	53545	/	9400	280
MZ440-4x15	16250	16420	15050	57545	/	10700	280
MZ470-4x12	13320	13490	12050	45290	/	10300	420
MZ470-4x14	15320	15490	14050	53290	/	11850	420
MZ508-4x16	17305	17480	16050	60930	/	13300	360
MZ508-4x17	18305	18480	17050	64930	/	14200	360
MZ580-4x18	19270	19470	18050	68360	/	18600	460
MZ580-4x21	22270	22470	21050	80360	/	21300	460

***Other sizes can be tailor-made as requirement**

Kelly Bar Accessories





Case One Southeast Asia

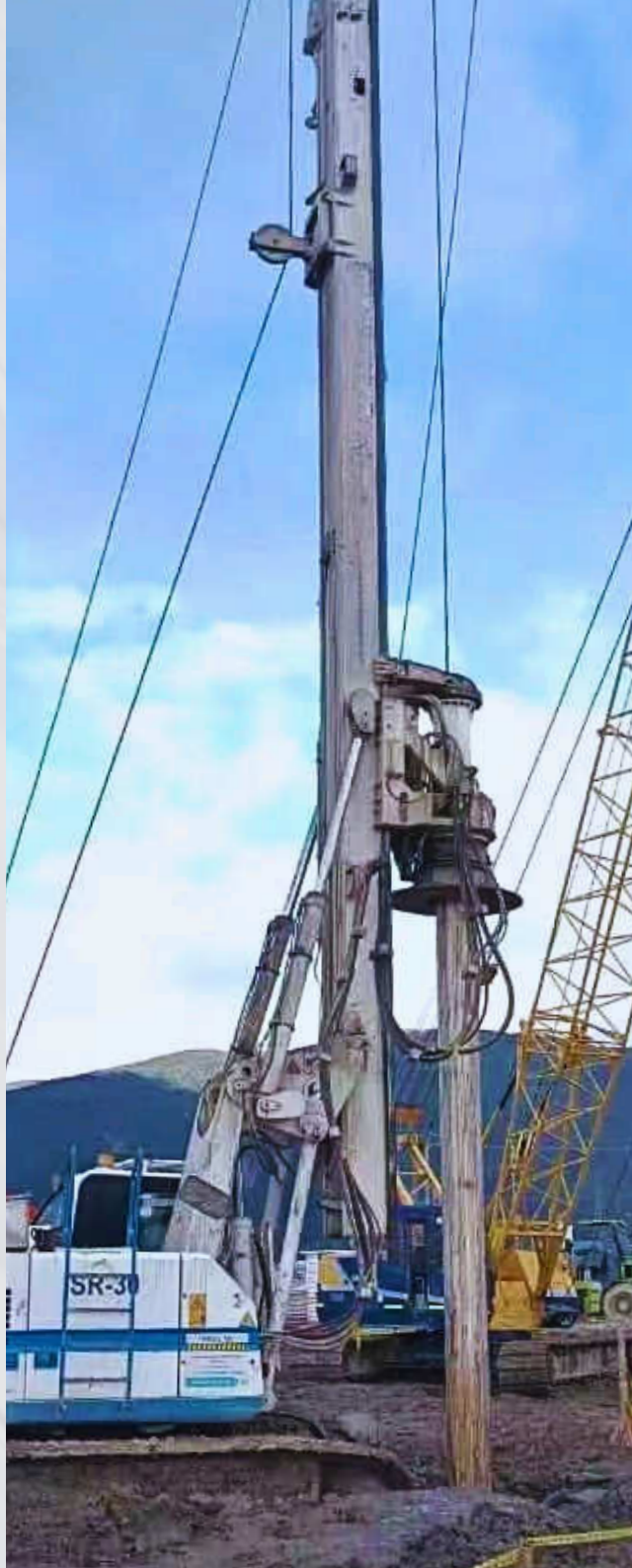
Kelly Bar	Friction
Dimensions	355-5*12m
Max Drilling Depth	52.5m
Drilling Rig Model	Soilmec SR40

Can tailor-made all brands kelly bar even square shape, the brands including Liebherr, Bauer, Soilmec, Casagrande, Mait, IMT, CZM, Far etc.

Case Two South America

Kelly Bar	Friction
Dimensions	355-5*13m
Max Drilling Depth	57.5m
Drilling Rig Model	Soilmec SR30

Can tailor-made all brands kelly bar even square shape, the brands including Liebherr, Bauer, Soilmec, Casagrande, Mait, IMT, CZM, Far etc.



Kelly Bar - Full Interlocking Kelly Bar

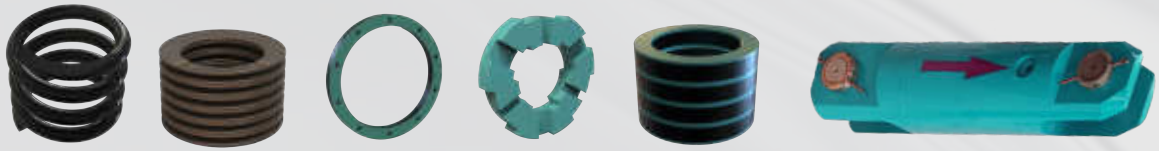


OD	Section		Way of corwing	Length of per section (m)	Drill Depth
Φ299	3	4	Multi-lock	9-14	24-50
Φ342	3	4	Multi-lock	9-14	24-50
Φ355	3	4	Multi-lock	9-14	24-50
Φ368	3	4	Multi-lock	9-14	24-50
Φ377	3	4	Multi-lock	9-15	24-55
Φ394	3	4	Multi-lock	9-15	24-55
Φ406	3	4	Multi-lock	9-15	24-55
Φ419	3	4	Multi-lock	9-15	24-55
Φ440	3	4	Multi-lock	9-15	24-55
Φ470	3	4	Multi-lock	9-15	24-55
Φ508	3	4	Multi-lock	9-15	24-55

***Other sizes can be tailor-made as requirement**



Kelly Bar Accessories





Case One North America

Kelly Bar	Full Interlocking
Dimensions	406-4*6.8m
Max Drilling Depth	21.2m
Drilling Rig Model	IMT AF270

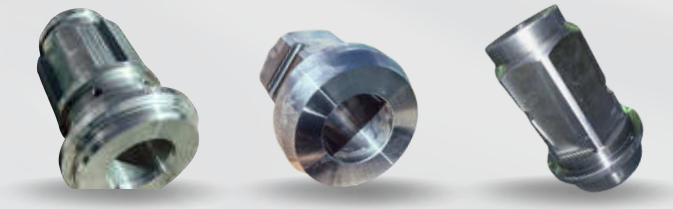
Can tailor-made all brands kelly bar even square shape, the brands including Liebherr, Bauer, Soilmec, Casagrande, Mait, IMT, CZM, Far etc.

Continuous Flight Auger



Continuous Flight Auger

Continuous Flight Augers or CFA are manufactured by Unicorn Drill for different drilling conditions i.e.,soft soil or hard rock.CFA is equipped with different types of hexagonal coupling depending on the type of soil being drilled,drilling method being used and also the drilling diameter.



Size	Diameter(D) (mm)	Section length (mm)	Flight thickness(T) (mm)	Pitch(P) (mm)
600	580	2000/3000/6000	20/30	400/500/600
700	680	2000/3000/6000	20/30	400/500/600
800	780	2000/3000/6000	20/30	400/500/600
900	880	2000/3000/6000	20/30	400/500/600
1000	980	2000/3000/6000	20/30	400/500/600

***Other diameters, length, couplings etc can be customized as requirement**



Case One — South America

Dimensions	800mm, 6m/Section
Drilling Depth	25m
Drilling Rig Model	Mait HR180

Case Two — Europe

Dimensions	900mm, 3m 6m/Section
Drilling Depth	24m
Drilling Rig Model	Casagrande CFA 425



Casing Items



Full Casing System

The casing drilling is obtained by driving a steel siding into the ground in order to protect the whole drilling operation;basicly the rotary drilling tool during the working process,performs inside mechanical protectation made by the casing fixed into ground.



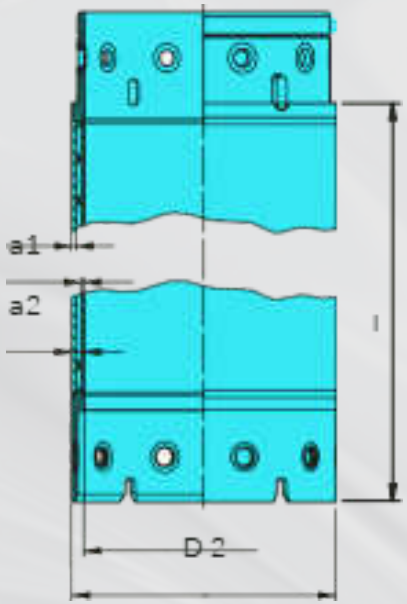
Single Wall Casing Technical Data

diameter	Length						Casing wall Thickness	Casing wall Thickness	Bolt QTY
D1/D2	1m	2m	3m	4m	5m	6m	T	B	Bolt
(mm)	Weight(KG)Parts Number						(mm)	(mm)	(Nos)
1300/1200	845	1475	2105	2735	3365	3995	20	40	12
1500/1400	1310	2220	3130	4040	4950	5860	25	50	12
1800/1700	1580	2675	3770	4865	5960	7055	25	50	16
2000/1880	2140	3355	4570	5785	7000	8215	25	60	12
2200/2080	2350	3690	5030	2350	7710	9050	25	60	12
2500/2380	2575	4100	5625	7150	8675	10200	25	60	16

***Other sizes can be tailor-made as requirement**

Casing Items





Double Wall Casing Technical Data

Diameter	Length						Casing wall Thickness1	Casing wall Thickness2	Total Thickness	Bolt QTY
D1/D2	1m	2m	3m	4m	5m	6m	A1	A2	T2	Bolt
(mm)	Weight(KG)Parts Number						(mm)	(mm)	(mm)	(Nos)
620/540	403	739	1074	1411	1747	2081	12	8	40	0
750/670	492	902	1311	1722	2131	2540	12	8	40	10
880/800	585	1069	1552	2036	2520	3005	12	8	40	10
1000/920	669	1221	1773	2328	2877	3429	12	8	40	10
1180/1100	844	1580	2316	3052	3787	4522	16	8	40	12
1200/1120	872	1620	2370	3120	3870	4620	16	8	40	12
1300/1220	933	1746	2558	3372	4184	4996	16	8	40	12
1500/1400	1433	2628	3817	5009	6210	7393	20	10	50	12
1800/1700	1730	3166	4602	6038	7474	8910	20	10	50	16
2000/1880	2450	4280	6110	7940	9770	11600	20	15	60	12
2200/2080	2700	4720	6740	8760	10780	12800	20	15	60	12
2500/2380	2960	5240	7520	9800	12080	14360	20	15	60	16

***Other sizes can be tailor-made as requirement**

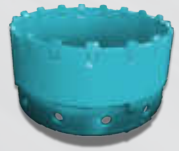
Casing Adaptor



Casing Drive



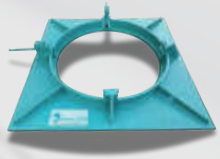
Casing Shoe



Casing Tube



Casing Clamp



Casing Joint





Case One Europe

Casing Diameter	800/720mm
Product Name	Double Wall Casing
Drill Rig Model	Delmag RH18

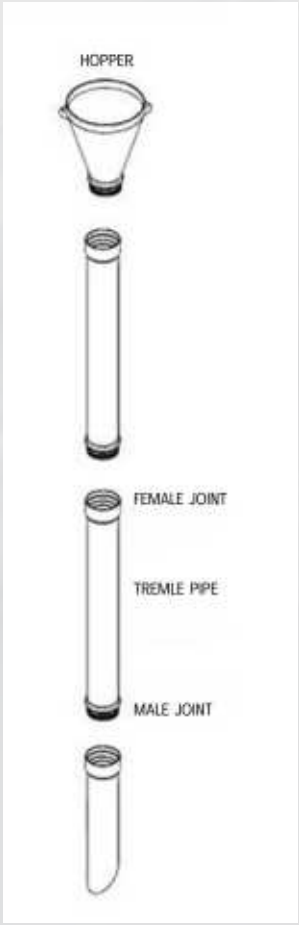
Case Two Europe

Casing Diameter	620/540mm
Product Name	Double Wall Casing
Drill Rig Model	Sany SR235



Tremie Pipe

Thread Type





Thread Pipe

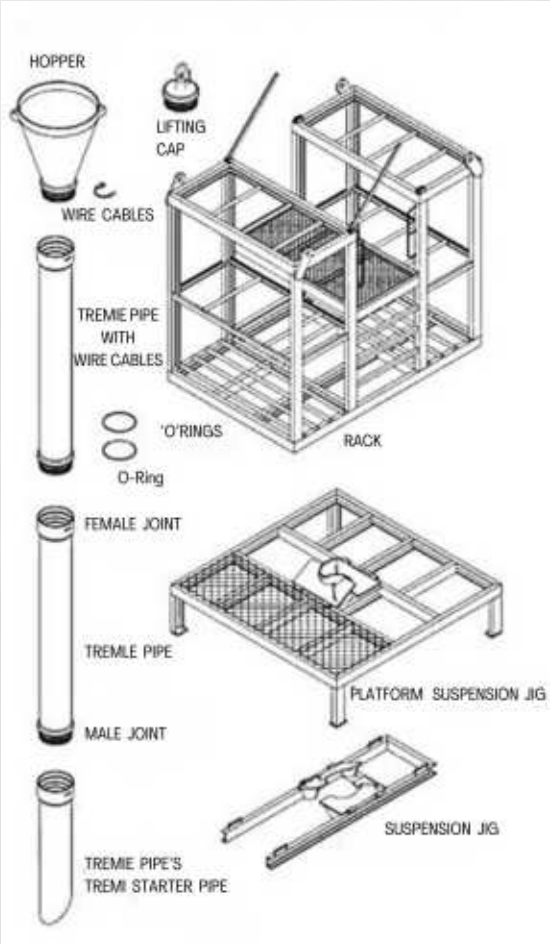
During the operations they are lowered inside and through the steel cage reinforcement to protect concrete from soil contami-nation water filtering and to avoid any possible concrete quality corruption.
Unicorn Drill tremie pipes are made of quality drawn steel plates in order to guarantee high resistance elements.
Pipes sections can be connected by two kinds of coupling systems: threaded joints and wire cable joints.



While threaded tremie pipes are equipped with male /female joints with thread,the wire cable system is designed for quick assembly/dismounting of the various pipe sections during the concreting operations.Using wire cables joints water and mud penetrations is prevented by O-ring seals applied in between male and female joints.

Tremie Pipe

Wire Cable Type





Tremie Pipe Tech

Threaded Tremie Pipes				
Female joint	Male joint	Tremie pipe	Tremie pipe Thickness	Weight for 1m
mm	mm	mm	mm	kg
260	240	219	3	30
306	286	269	3	32
345	322	300	3	40

***Other dimensions are available on request.**





Tremie Pipes with Wire Cables				
Female joint	Male joint	Tremie pipe	Tremie pipe Thickness	Weight for 1m
mm	mm	mm	mm	kg
274	248	219	3	40
325	294	260	3	48
374	338	300	3	65

***Other dimensions are available on request.**

Casing Oscillator



Casing Oscillator

The short type hydraulic casing oscillators are perfecty suited for mounting rotary drilling rigs.

The short hydraulic casing oscillators have been designed in accordance with the latest technical know-how.Extremely sturdy construction guarantee worth-while use on size.By means of exact statical calculations in conjunction with higher quality material,an optimum conformity of loads,weight and material strength is achived.

	Size		UND1000/D	UND1300/D	UND1500/D	UND2000/D
D	Max.Casing diameter	mm	1000	1300	1500	2000
W	Width of machine	mm	1850	2250	2500	3200
L	Length of machine	mm	2700	3870	4070	4800
L1	W.retaining cyd.	mm	950	1200	1450	1700
H	Height of machine	mm	1250	1600	1600	1600
H1	Height from ground to top of cradle guide	mm	850	1020	1020	1020
H2	Height of cradle guide	mm	400	400	500	500
	Operating pressure	Mpa	27	27	27	27
	Torque	KN.m	650	1750	2000	2520
	Stroke	mm	350	450	450	450
	Lifting force	KN	800	1800	1800	2000
	Clamping force	KN	530	1650	2100	2510
	Rotation angle		22°	22°	22°	22°
	Casing rotation	mm	185	245	290	340
	Weight	kg	7500	11200	15000	17600

***Other sizes can be tailor-made as requirement**



Case One Europe

Dimensions	1500mm
Variable Diameter	1200mm/1500mm/2000mm

Can work with power station or directly connect to rotary drilling rig

*Other diameter could be customized

Desander



Desander

UN-Desanding plant is widely used in the purification and recycling of slurry forthe construction of hydropower,continuous concrete wall,sully shield tunnel,etc.the equipment is increasingly becoming a necessity of civilized construction since it not only can cut down construction cost,but also can reduce the pollution of the environment.It canprovide you with main advantages as following.



UN-100/30 slurry separation system is widely used in the purification and recycling of slurry for the construction of hydropower,continuous concrete wall,slurry shield tunnel,etc.the equipment is increasingly becoming a necessity of civilized construction since it not only can cut down construction cost,but also can reduce the pollution of the environment.

Slurry feed capacity	100m³/h
Cut piont	30μm
Soild feed capacity	25-50t/h
Total capacity	24.2kw
Dismension	3.0*1.9*2.3m
Weight	2700kg

***Other models can be provided as requirement**



Case One North America

Dimensions	100m³
Electric Vol	220V/50Hz
Cut Point	30 um
Soild Feed Capacity	25~50t/h
Total Capacity(kw)	24.2kw
Weight	2700kg

Desander cyclone, screens etc spare parts can be supplied as requirement

Case Two Southeast Asia

Dimensions	250m³
Electric Vol	380V/50Hz
Cut Point	60 um
Soild Feed Capacity	25~80t/h
Total Capacity(kw)	58~60.8kw
Weight	6000kg

Desander cyclone, screens etc spare parts can be supplied as requirement



Pile Breaker



Pile Breaker

The low-cost hydraulic pile breakers can be easily handled for efficient.low-noise and safe operation.It imposes no impact force on the parent body of the pile and no influence on the bearing capacity of the pile,and shortensthe construction period greatly.

It is applicable for pile-group works and is recommended strongly by the construction department and the supervisor department.



Module numbers	The diameter range mm	Platform weight t	weight kg	Height of single crush pile/mm	Pile Cutting Range/mm	Φ500 - 2500
6	500-600	20	2400	200-300	Maximum Pressure of Hydraulic Cylinder	34.3 MPa
7	650-800	22	2800	200-300	Number of Piles Cut/8h	20 - 100 (pieces)
8	850-1000	26	3200	200-300	Height of Single Pile Cut/mm	200 - 300
9	950-1200	27	3600	200-300	Matched Excavator Tons/t	20 - 46
10	1150-1400	30	4000	200-300	Size of Single Module/mm	908*780*400
11	1350-1600	32	4400	200-300	Thrust of Single Hydraulic Cylinder/t	79.6
13	1650-1800	35	5200	200-300	Stroke of Hydraulic Cylinder/mm	205
14	1850-2100	35	5600	200-300	Total Machine Weight/t	6.4
15	2050-2300	40	6000	200-300	Thrust of a Single Cylinder	80t
16	2250-2500	46	6400	200-300		

***Other sizes can be tailor-made as requirement**

Case One Africa

Dimensions	1300mm



Case Two Middle East

Dimensions	2500mm

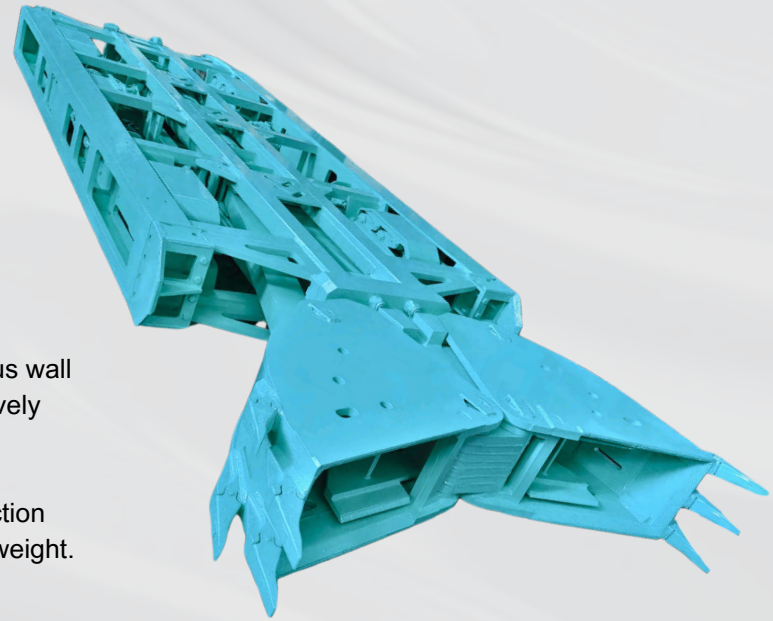
Mechanical rope grab

Mechanical rope grab(AType)

The diaphragm wall grab machine is matched with the crawler crane the underaround continuous wall construction of the instrument,using double steel wire rope desian,two steel cables are respectively controlled lifting With the opening and closing of grab,suitable for more severe and complicated stratum,using weight impact grab,can underground continuous wall construction completed deeper.Into the groove precision is slightly lower than the hydraulic grab.Especially not construction units continuous wall dedicated hosting.

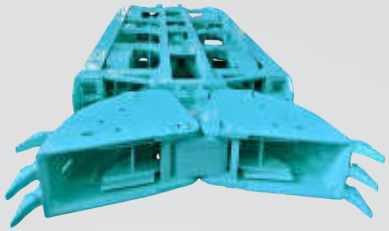
Wall Width mm	Pulley number Piece	closing force KN	Closing/opening time Sec	Open shell width (sex) Mm	Capacity L	Grab weight (Light) Kg	Grab weight (Heavy) Kg
600	6	1100	8/5	2800	850	13000	19000
800	6	1100	8/5	2800	1200	14000	20000
1000	6	1100	8/5	2800	1500	15000	21500
1200	6	1100	8/5	2800	1900	16000	23000
1500	6	1100	8/5	2800	2300	18000	25000

***Other sizes can be tailor-made as requirement**



Mechanical rope grab(BType)

The diaphragm wall grab machine is matched with the crawler crane the underground continuous wall construction of the instrument,using double steel wire rope design,two steel cables are respectively controlled lifting with the opening and closing of grab,suitable for more severe and complicated stratum,using weight impact grab,can underground continuous wall construction completed deeper.Into the groove precision is slightly lower than the hydraulic grab.Especially not construction units continuous wall dedicated hosting.Compared with A type frame structure body more light weight.





Wall Width mm	Pulley number Piece	closing force KN	Closing/opening time Sec	Open shell width (sex) Mm	Capacity L	Grab weight (Light) Kg	Grab weight (Heavy) Kg
600	5	1100	8/5	2800	850	11000	16500
800	5	1100	8/5	2800	1200	12000	17000
1000	5	1100	8/5	2800	1500	13000	18500
1200	5	1100	8/5	2800	1900	14000	20000
1500	5	1100	8/5	2800	2300	16000	22500

***Other sizes can be tailor-made as requirement**



Case One Europe

Product Name	Diaphragm Wall Grab
Dimensions	2.8*1.2m
Max Drilling Depth	10m
Drilling Rig Model	Casagrande C600

Case Two Southeast Asia

Product Name	Diaphragm Wall Grab
Dimensions	2.5*0.8m
Max Drilling Depth	8m
Drilling Rig Model	XCMG



Hammer Grab



Hammer Grab(A Type)

Robust free-fall grad with High closing force especially Suitable for boring in detritus Soils and for water-logged Pile foundations. The pulleys Are equipped with oil-filled Maintenance-free life-time Bearings.

Model	Casing Diameter mm	Down Diameter mm	Up Diameter mm	Capacity L	Weight kg
CZD/A-600	800/720	600	570	70	1750
CZD/A-700	880/800	700	670	90	2430
CZD/A-800	1000/900	800	770	150	3150
CZD/A-900	1100/1000	900	870	210	3540
CZD/A-1000	1180/1100	1000	970	340	4250
CZD/A-1100	1250/1170	1100	1070	440	4750
CZD/A-1200	1300/1220	1200	1170	510	5270
CZD/A-1300	1500/1420	1300	1270	700	5850

***Other sizes can be tailor-made as requirement**







Hammer Grab

Hammer Grab(B Type)

The hammer grad type suitable for single winch and Double winch lifting machinery,widely applicable formations,the pulleys are equipped with oil-filled maintenance-free life-time Bearings.



Model	Casing Diameter mm	Down Diameter mm	Up Diameter mm	Capacity L	Weight kg
CZD/B-1300	1500/1420	1300	1100	750	5200
CZD/B-1400	1600/1520	1400	1200	800	5500
CZD/B-1500	1700/1620	1500	1300	850	5900
CZD/B-1600	1800/1720	1600	1400	900	6400
CZD/B-1700	1900/1720	1700	1500	1000	7000
CZD/B-1800	2000/1920	1800	1600	1100	7850
CZD/B-1900	2100/2020	1900	1700	1200	8950
CZD/B-2000	2200/2120	2000	1800	1400	10250
CZD/B-2100	2300/2220	2100	1900	1650	10800
CZD/B-2200	2400/2320	2200	2000	1850	11500
CZD/B-2300	2500/2420	2300	2100	2400	13100
CZD/B-2400	2600/2520	2400	2200	3200	14820
CZD/B-2500	2700/2620	2500	2600	4000	16800
CZD/B-3000	3200/3020	3000	2800	5000	19650

***Other sizes can be tailor-made as requirement**

Hammer Grab(C Type)

Double rope grad with high closing force especially suitable for vibration-free boring in semi-hard and hard soil conditions.



Model	Casing Diameter mm	Down Diameter mm	Up Diameter mm	Capacity L	Weight kg
CZD/C-1300	1500/1420	1300	1200	400	8000
CZD/C-1400	1600/1520	1400	1300	450	9400
CZD/C-1500	1700/1620	1500	1400	700	10600
CZD/C-1600	1800/1720	1600	1500	790	11530
CZD/C-1700	1900/1720	1700	1600	920	12700
CZD/C-1800	2000/1920	1800	1700	1000	14000
CZD/C-1900	2100/2020	1900	1800	1200	14820
CZD/C-2000	2200/2120	2000	1900	1450	15400
CZD/C-2100	2300/2220	2100	2000	1580	16650
CZD/C-2200	2400/2320	2200	2100	1750	17600
CZD/C-2300	2500/2420	2300	2200	1900	19000
CZD/C-2400	2600/2520	2400	2300	2150	20500
CZD/C-2500	2700/2620	2500	2400	2500	21000
CZD/C-3000	3200/3020	3000	2900	3900	24150

***Other sizes can be tailor-made as requirement**



Case one Asia

Drilling Diameter	920mm
Equipment Model	55 tons Crawler Crane

*Other size could be customized



Teeth and Holder

Soil Teeth & Holder



18TL



25TL



BFZ70



BFZ72



BFZ80

Rock Bits



Unicorn-NB(30Mpa)



Unicorn-SB(60Mpa)



Unicorn-TB(70Mpa)



Unicorn-DB(70Mpa)



Unicorn-UB(80Mpa)



Unicorn-MB(100Mpa)



C30 & C31

Holder



B43H



B85



B85/2

***Other models can be supplied as requirement**

Roller Bits

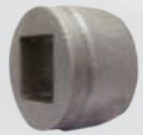




Pilot & Holder

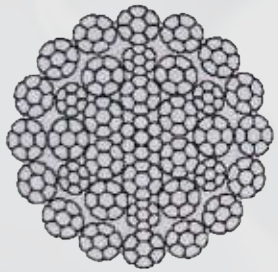






Wire Rope





35（W）*K7



Wire Rope

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade	
		1770 Mpa	1960 Mpa
		Minimum breaking force kN	
14	100	142	158
16	131	186	206
18	165	235	260
20	204	290	321
22	247	351	389
24	294	418	463
26	345	491	543
28	400	569	630
30	459	653	723
32	522	743	823
34	590	839	929
36	661	941	1040
38	736	1050	1160
40	816	1160	1290
42	900	1280	1420

***Other Types (35W*7, 6*36, 6*26) & diameters can be tailor-made as requirement**

Unicorn Drill

www.unicorndrill.com

Your Foundation Optimizer

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