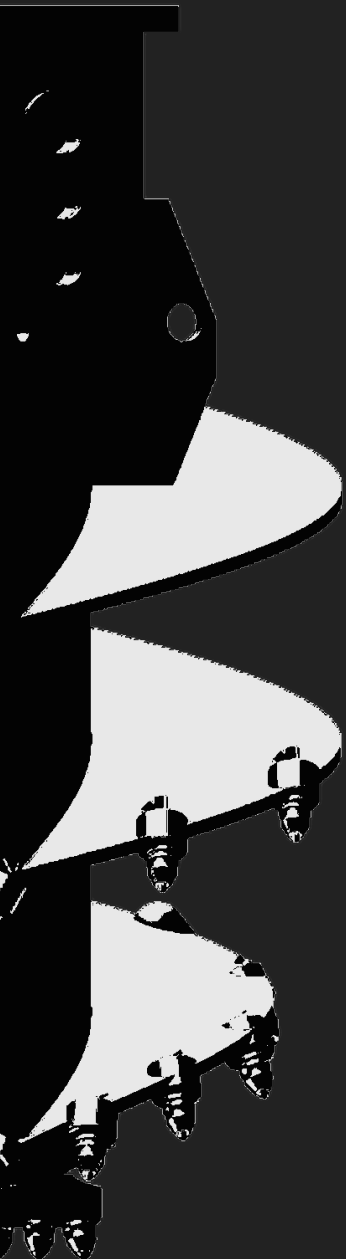




MECLEAD DRILLING EQUIPMENT

Rock Auger | Core Barrel | Drilling Bucket | Casing



<https://meclead.com>

Straight Rock Auger



- 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
- Applicable layers: clay, high-weathered layers, gravel etc.

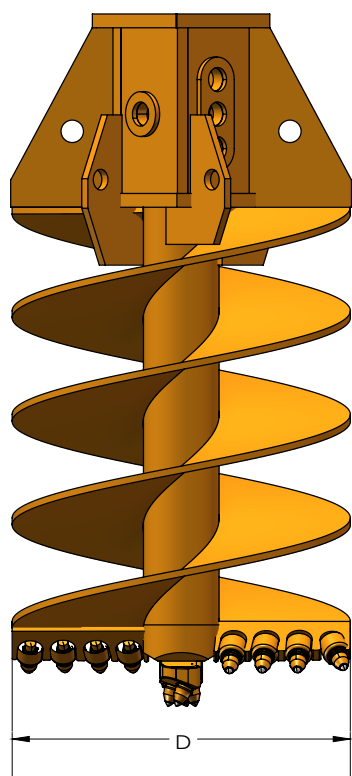


Conical Rock Auger

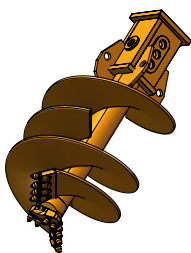


- Location by pilot, conical structure drilling into the rock
- Double cutter bearing uniform force, can avoid inclined hole
- Double spiral easy to carry soil, but meet cohesive soil, single spiral is easy to dump spoil;
- Applicable layers: medium weathered rock, bedrock

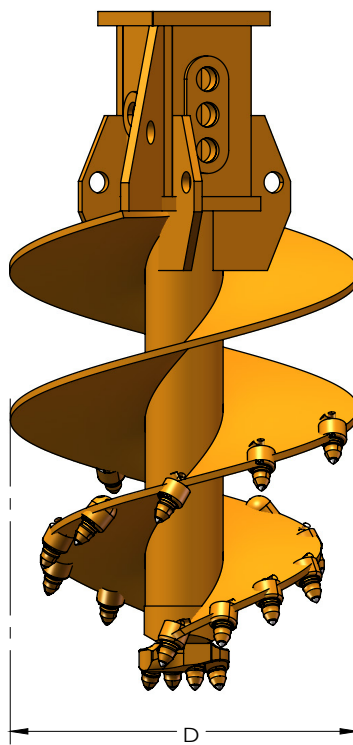
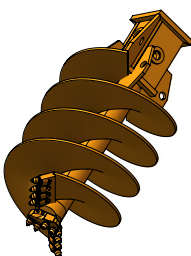
AUGER



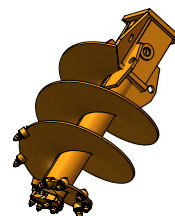
Single Flight



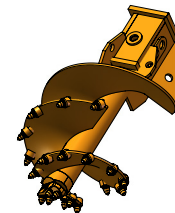
Double Flight



Single Cut



Double Cut



Double Flight



Cutting Dia (mm)	Spiral Height (mm)	Spiral Thickness (mm)	Teeth No.	Weight (kg)
600	1500	30+20	6	700
800	1500	30+20	9	850
1000	1500	30+20	11	1000
1200	1500	30+30	13	1300
1500	1500	30+30	16	1750
1800	1500	35+30	21	2450
2000	1500	35+30	22	2900

Tool diameter D (mm)	Spiral Height (mm)	Spiral Thickness (mm)	Teeth No.	Weight (kg)
600	1400	30+20	15	600
800	1400	30+20	21	750
1000	1500	30+20	23	900
1200	1500	30+30	25	1150
1500	1500	30+30	32	1600
1800	1500	35+30	38	2250
2000	1500	35+30	40	2700

Soil Drilling Teeth Bucket

- Longer bucket shell is helpful to avoid the pile inclined
- Ventilation plate can avoid bucket stuck by vaccum space under the bucket bottom
- Applicable scope:silt, gravel, clay and highly weathered rock



Cuttiing Dia (mm)	Shell Height (mm)	Shell Thickness (mm)	Teeth No.	Weight (kg)
800	1200	16	4	950
1000	1200	16	5	1250
1200	1200	16	7	1550
1500	1200	16	9	2200
1800	1000	20	10	3200
2500	800	25	19	5550
3000	800	25	24	7900

*Other lengths and diameters on request. All weights are approximate values

Rock Drilling Teeth Bucket

- Option half-automatic or manual mechanic bottom open system, builtin ventilation pile
- cast pilot with rock drilling bits, arc guide plate teeth arrangement, double unlocking system



Cuttiing Dia (mm)	Shell Height (mm)	Shell Thickness (mm)	Teeth No.	Weight (kg)
800	1200	20	11	1050
1000	1200	20	13	1450
1200	1200	20	17	1800
1500	1200	20	20	2400
1800	1000	20	25	3250
2500	800	25	32	5650
3000	800	30	47	8400

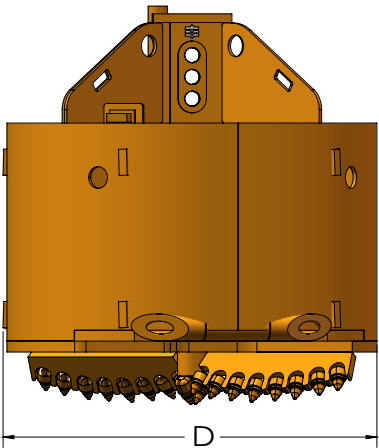
*Other lengths and diameters on request. All weights are approximate values

Cleaning Bucket



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

DRILLING BUCKET





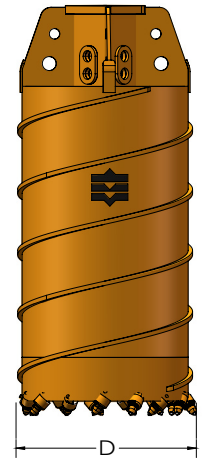
Core Barrel



Bullet Teeth Core Barrel



- Cutting ring with rock drilling bits and releases the internal stress of rock
- Rock drilling bits perform stage breaking and drilling
- Small barrel facilitates the coring operation, large barrel performs stage breaking
- Applicable Layers: backfill layer, medium weathered rock, bedrock



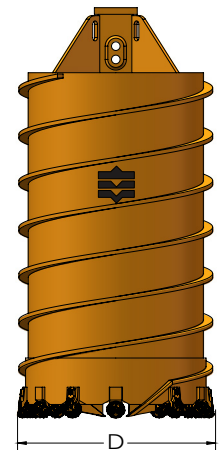
Cutting Dia (mm)	Shell Height (mm)	Shell Thickness (mm)	Teeth No.	Weight (kg)
800	1200	20	15	800
1000	1200	20	18	1050
1200	1200	20	21	1250
1500	1200	20	27	1600
1800	1000	20	33	1900
2500	800	25	45	2900
3000	800	30	54	4200

*Other lengths and diameters on request. All weights are approximate values

Roller Bit Core Barrel



- Cutting ring with rock drilling bits and releases the internal stress of rock
- Drilling with the method of rolling and squeezing can increase the anti-wear ability of the barrel
- Small barrel facilitates the coring operation, large barrel performs stage breaking
- Applicable layers: medium or slightly weathered rock, hard or superhard bedrock

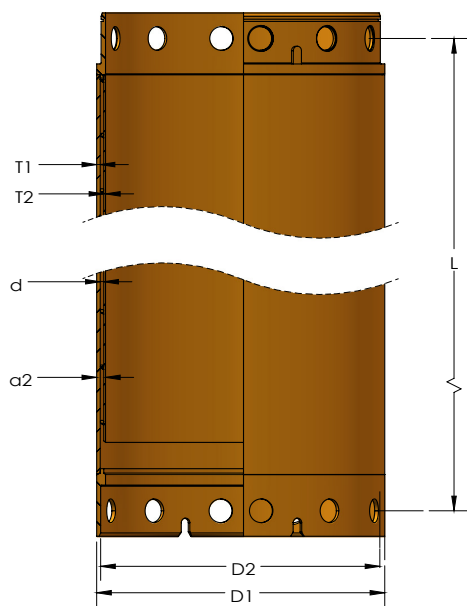


Cutting Dia (mm)	Shell Height (mm)	Shell Thickness (mm)	Teeth No.	Weight (kg)
800	1200	20	6	850
1000	1200	20	8	1100
1200	1200	20	10	1300
1500	1200	20	12	1650
2000	800	20	18	2000
2500	800	25	20	2900
3000	800	30	26	4000

*Other lengths and diameters on request. All weights are approximate values

Piling Casing

Double Wall Segmental Casing

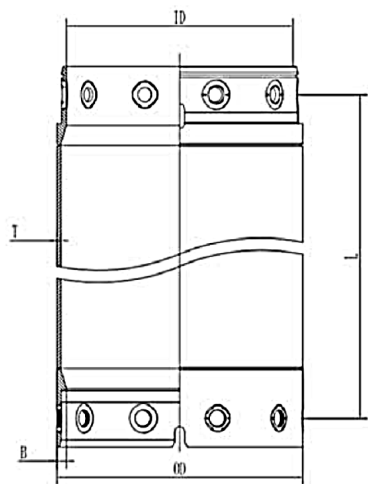


DIAMETER	LENGTH L (WEIGHT)						CASING WALL THICKNESS			BOLTS
D1/D2 (mm)	1m(kg)	2m(kg)	3m(kg)	4m(kg)	5m(kg)	6m(kg)	t1(mm)	t2(mm)	Total Thickness a2 (mm)	Bolt qty (nos)
620/540	403	739	1074	1411	1747	2081	12	8	40	8
750/670	492	902	1311	1722	2131	2540	12	8	40	10
880/800	585	1069	1552	2036	2520	3005	12	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	1246	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	12
2000/1880	2450	4280	6110	7940	9770	11600	20	10	50	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

- High Strength: The double-wall structure makes these ocasings more durable, allowing them to perform well under high torque and in difficult geological conditions.
 - Durability: Double-wall casings are less prone to deformation or damage in hard rock formations or gravel layers, offering longer service life.
- Better Torsion Resistance: They cantransmit the rotary torque more effectively, ensuring stable performance during drilling.
 - Applications: Ideal for complex geological conditions like hard rock/gravel layers and deep drilling needing high strength & durability.



Single Wall Segmental Casing

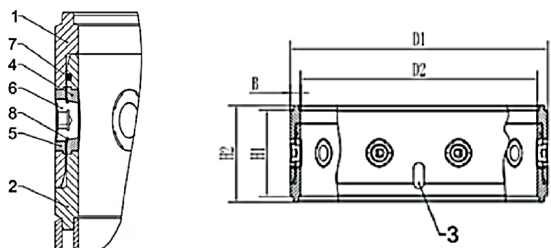


DIAMETER	LENGTH L (WEIGHT)						CASING WALL THICKNESS		BOLTS
D1/D2 (mm)	1m(kg)	2m(kg)	3m(kg)	4m(kg)	5m(kg)	6m(kg)	T(mm)	B(mm)	Bolt qty (nos)
1300/1220	845	1475	2105	2735	3365	3995	20	40	12
1500/1400	1310	2220	3130	4040	4950	5860	25	50	12
1800/1700	1580	2675	3770	4865	5960	7055	25	50	12
2000/1880	2140	3355	4570	5785	7000	8215	25	60	12
2200/2080	2350	3690	5030	6370	7710	9050	25	60	12
2500/2380	2575	4100	5625	7150	8675	10200	25	60	16

- Light weight: Single - layer structure makes single - wall casings lighter, suitable for shallow or soft soil drilling.
- Lower Cost: Cheaper to produce and using less material, they are budget - friendly for certain projects.
 - Applications: Suitable for soft - soil or shallow - drilling projects in simple geological conditions like sandy or clay soils.

Casing Joint

The casing joints are precision-machined to ensure fast, efficient replacement and secure bolting, providing the highest level of force transmission.



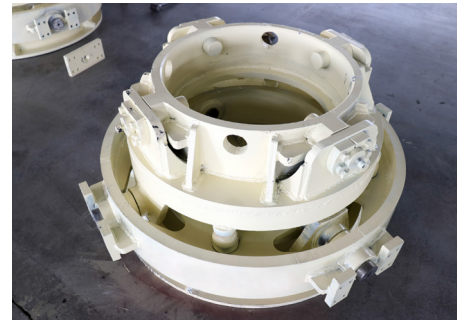
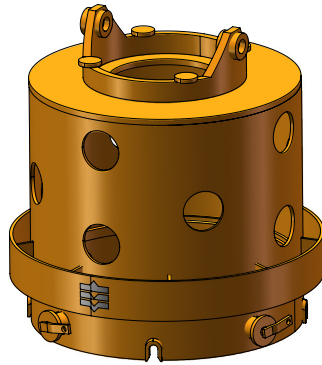
1	Female Part	5	Threaded Ring
2	Male Part	6	Bolt
3	Locating Key	7	Sealing
4	Conical Ring	8	O-Ring

DIMENSION					BOLTS & INSERTS				KEY	O-RING
D1/D2 (mm)	H1(mm)	H2(mm)	B(mm)	Weight (kg)	Bolt Type	Bolt qty	Thread Ring qty	Conical Ring qty	Locating Key qty	O-Ring(mm)
620/540	338	378	40	179	I	8	8	8	4	10x535
750/670	338	378	40	218	I	10	10	10	4	10x665
880/800	338	378	40	261	I	10	10	10	4	10x790
1000/920	338	378	40	300	I	10	10	10	4	10x910
1180/1100	338	378	40	355	I	12	12	12	4	10x1090
1200/1120	338	378	40	375	I	12	12	12	4	10x1110
1300/1220	338	378	40	393	I	12	12	12	4	10x1210
1500/1400	490	530	50	827	II	12	12	12	4	10x1400
1800/1700	490	530	50	998	II	12	12	12	4	10x1695
2000/1880	561	601	60	1520	II	12	12	12	8	10x1870
2200/2080	561	601	60	1670	II	12	12	12	8	10x2070
2500/2380	561	601	60	1800	III	16	16	16	8	10x2360



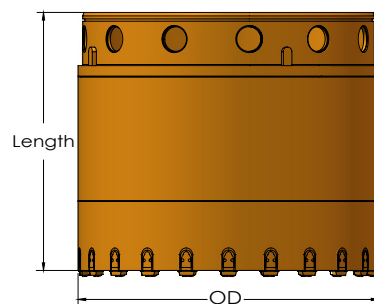
Casing Drive Adapter

The casing drive adapter is a crucial component for transferring torque to the top of the casing string. Its upper connection is fully customizable according to the customer's specific requirements.

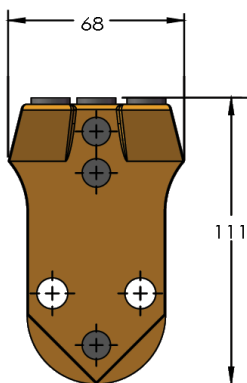


Casing Shoe

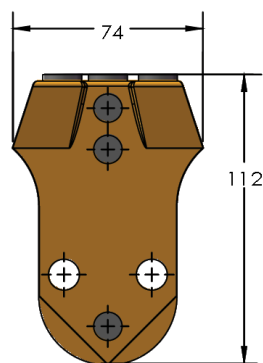
The casing shoe is an essential part in the casing system. It is typically located at the bottom of the casing string.



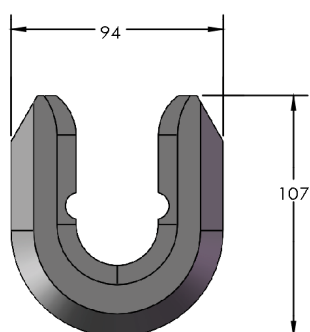
Casing Accessories



WS 39 



WS 46 



WS Holder 



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knowledge about hard rock piling

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