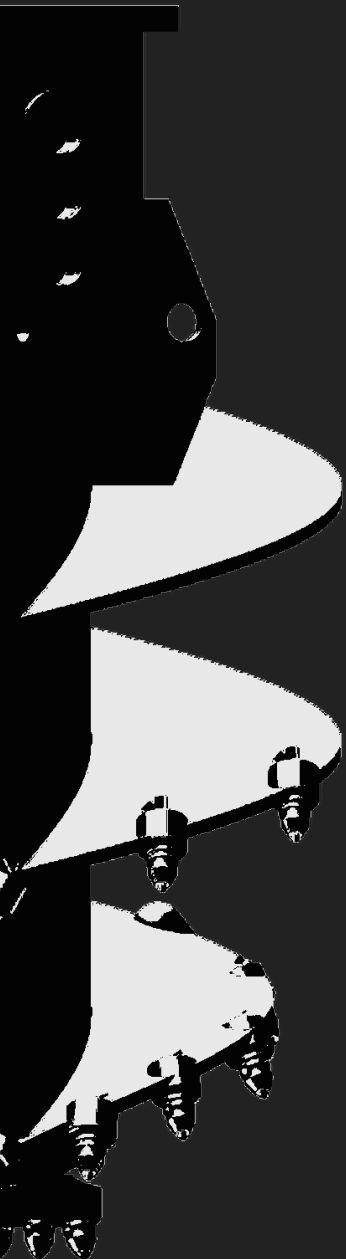




FIRMTECH

FIRMTECH DRILLING EQUIPMENT

Rock Auger | Core Barrel | Drilling Bucket | Casing



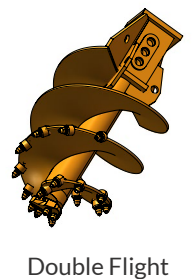
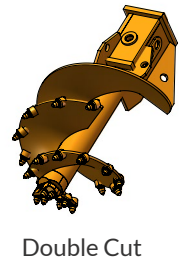
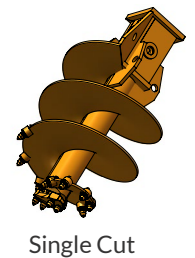
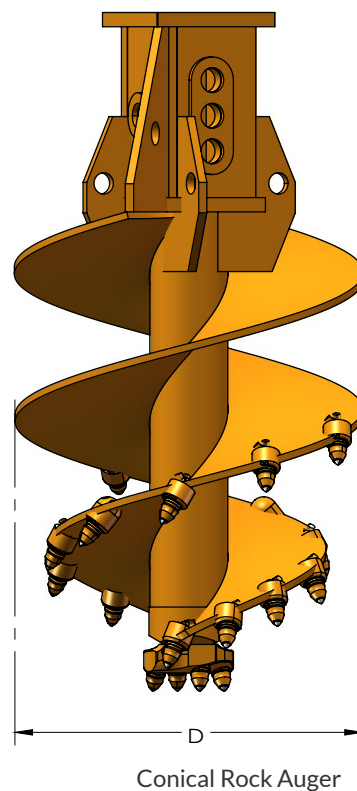
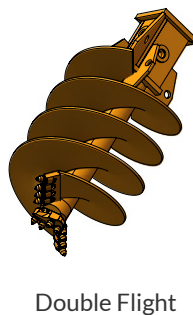
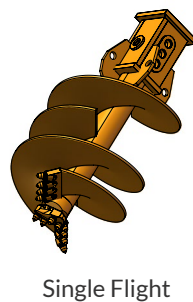
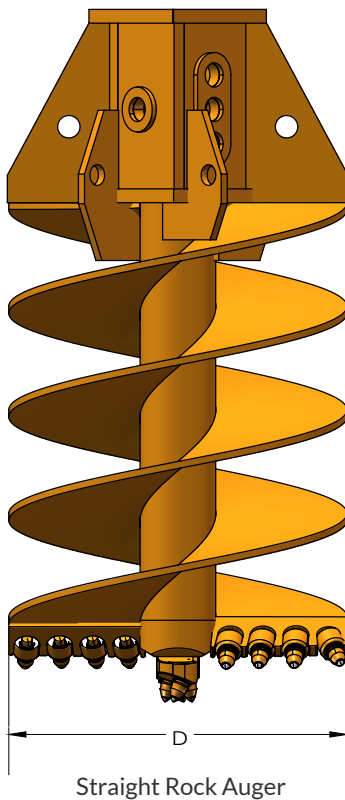
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Straight Rock Auger Conical Rock Auger

- Kellybox 200 mm / 250mm
- Round shank chisel pilot bit RP4 available
- Auger flight thickness of 25/30 mm
- Straight Rock Auger is equipped with flat teeth applicable to soft soil; Conical Rock Auger is fitted with common chisels and interchangeable bit
- Application: Straight Rock Auger apply to Very dense sand and gravel, moderately weak to moderately strong rock (upto 25 Mpa); Conical Rock Auger apply to Moderately strong to strong rock (12.5 - 50 MPa), Strong rock (50 - 100 MPa).

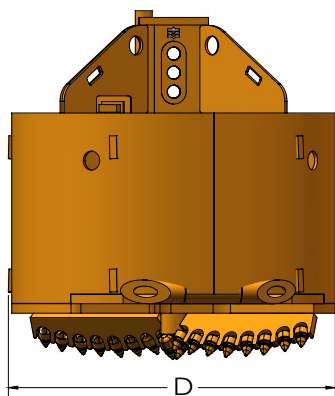
Tool diameter D (mm)	Straight Rock Auger	Conical Rock Auger (Single Flight)	Conical Rock Auger (Double Flight)
	Weight (kg)	Weight (kg)	Weight (kg)
600	590	530	760
700	710	580	940
800	810	670	990
900	970	750	1100
1000	1100	960	1300
1100	1150	1050	1450
1200	1210	1100	1720
1300	1395	1260	1960
1400	1685	1530	2375
1500	1820	1700	2550

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



Drilling Bucket

- Kellybox 200 mm / 250mm
- Round shank chisel pilot bit RP4 available
- Soil Bucket available equipped with flat teeth
- Cleaning Bucket available
- Application: Very dense sand and gravel, weak rock (12.5 - 50 Ma)



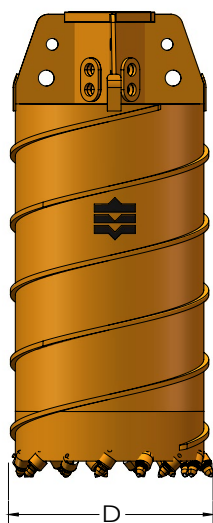
Tool diameter D (mm)	Weight (kg)
600	760
700	880
800	1040
900	1150
1000	1280
1100	1430
1200	1580
1300	1740
1400	1990
1500	2150
1600	2275
1700	2575
1800	2750
1900	3050
2000	3150
2100	3375
2200	3600
2300	3950
2400	4150
2500	4350

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

Core Barrel

Bullet Teeth Core Barrel

- Kellybox 200 mm / 250mm
- Full Helix
- Chisel holders are welded to the base body
- Application: Up to strong rock (50 - 100 MPa) suitable for cutting through fissured rock.

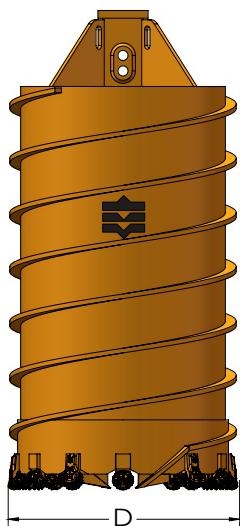


Tool diameter D (mm)	Bullet Teeth Core Barrel	Roller Bit Core Barrel
	Weight (kg)	Weight (kg)
600	640	690
700	770	840
800	850	980
900	950	1150
1000	1120	1290
w1100	1220	1390
1200	1320	1590
1300	1500	1750
1400	1750	1950
1500	1900	2090
1600	2040	2170
1700	2280	2450
1800	2380	2580
1900	2700	2800
2000	2850	3000
2100	2925	3200
2200	3100	3350
2300	3300	3450
2400	3475	3600
2500	3650	3800

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

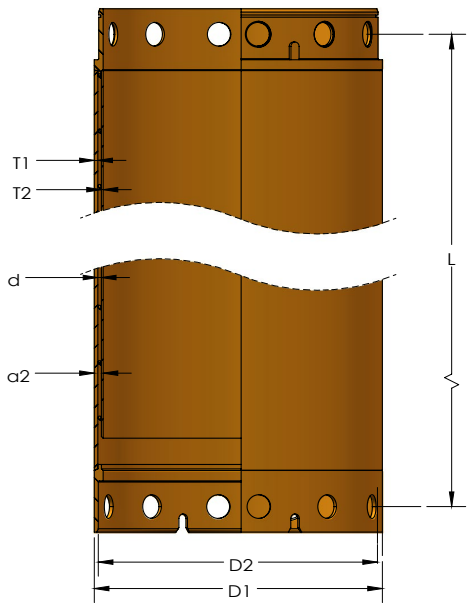
Roller Bit Core Barrel

- Kellybox 200 mm/ 250mm
- Outside helix and flat teeth to optimize drilling performance
- Replaceable type available
- Application: Roller bit core barrel is used in very strong rock formations (compressive strength > 100 MPa). It uses rock roller bits to cut the 120 - mm - wide annular groove. The core barrel is removed from the bore after coring 1 - 2.5 m.



Piling Casing

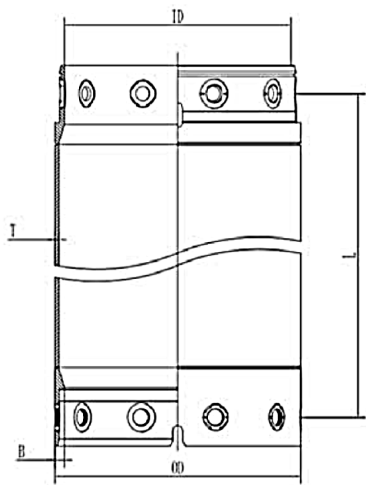
Double Wall Segmental Casing



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

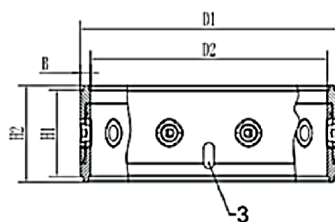
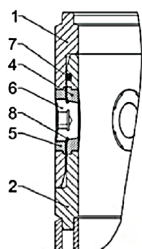


DIAMETER	LENGTH L (WEIGHT)						CASING WALL THICKNESS		BOLTS
D1/D2 (mm)	1m(kg)	2m(kg)	3m(kg)	4m(kg)	5m(kg)	6m(kg)	T(mm)	B(mm)	Bolt qty (nos)
1300/1220	845	1475	2105	2735	3365	3995	20	40	12
1500/1400	1310	2220	3130	4040	4950	5860	25	50	12
1800/1700	1580	2675	3770	4865	5960	7055	25	50	12
2000/1880	2140	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.

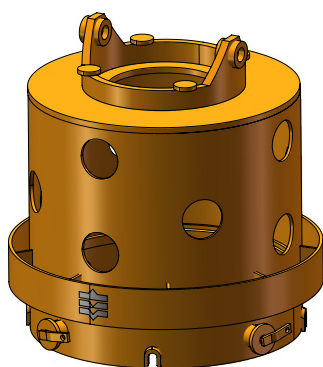


1	Female Part	5	Threaded Ring
2	Male Part	6	Bolt
3	Locating Key	7	Sealing
4	Conical Ring	8	O-Ring

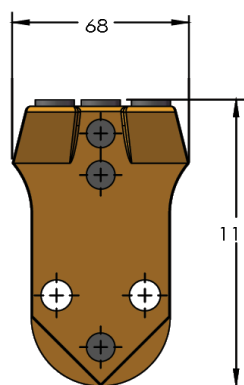
DIMENSION					BOLTS & INSERTS				KEY	O-RING
D1/D2 (mm)	H1(mm)	H2(mm)	B(mm)	Weight (kg)	Bolt Type	Bolt qty	Thread Ring qty	Conical Ring qty	Locating Key qty	O-Ring(mm)
620/540	338	378	40	179	I	8	8	8	4	10x535
750/670	338	378	40	218	I	10	10	10	4	10x665
880/800	338	378	40	261	I	10	10	10	4	10x790
1000/920	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

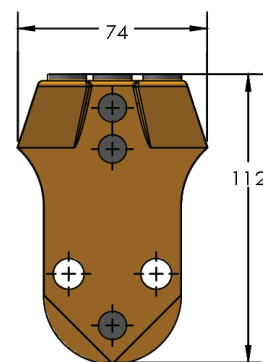
The casing drive adapter is a crucial component for transferring torque to the top of the casing string. Its upper connection is fully customizable according to the customer's specific requirements.



Casing Accessories



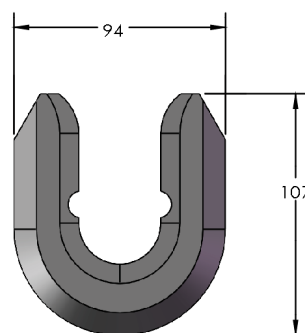
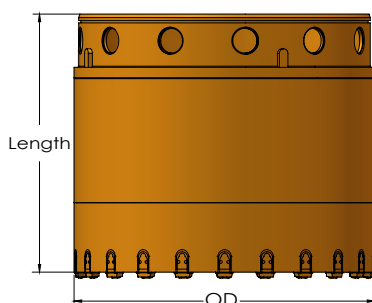
WS 39 15



WS 46 10

Casing Shoe

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



WS Holder 15



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