



INTERNATIONAL  
**DRILLING**  
EQUIPMENT, INC.



**Rotary  
Drilling  
Tools**



## CASINGS

IDE rotary drilling tools range includes European style sectional **casing** joints and pipes for piling protection of collapsing in unstable soil. Casing joints are composed of one male joint and one female joint applied at each end of the casing pipe for easy pipe connections. Joints include two main coupling systems:

- Conical screw type joints for single wall casings

- Conical screw type joints for double wall casings

Screw joints are made of a special high quality special steel that has been designed for heavy duty double and single wall casing connections. Screw type casings joints are available for columns having an outer diameters from 600 mm to 2500 mm and larger or smaller upon request. Joints thickness may vary from 40 to 70 mm thick, according to required casing diameters and to the soil parameters.

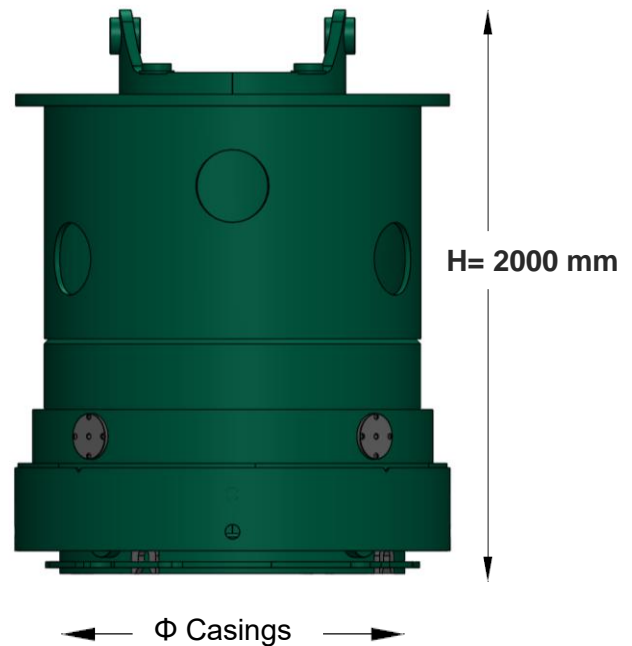
Sectional casings are especially designed to be used with casing oscillators and rotary systems. Casing joints coupling operations is by means of conical threaded screws and locating keys applied for an easy quick connection of the two half joints.

Casing pipe columns are complete with casing shoes that are cutting rings equipped with widia inserts or other types of cutting teeth.

Another option for casing operations is to drive casing by a casing driver (twister) complete with half joint to be applied directly to the rotary head of the base rig or to use a casing twister to help coupling operations of the pipe sections when a casing oscillator is operated.

# Automatic Mechanical Casing Drivers with adapter plate

## Technical data



Φ Casings mm	Weight kg
620/540	1722
750/670	2100
880/800	2450
1000/920	2660
1080/1000	2870
1180/1100	3080
1300/1220	3290
1500/1400	4200
1800/1700	5485
2000/1880	6410

Custom lengths and diameters are available upon request

### Features

- The casing adapters consist of an adapter flange and the extension pipe with relief holes.
- Adapter flange for rotary drive with cardan joint
- The automatic mechanical casing drive is a new development of the company Comacchio.
- This system replaces the manual coupling of the casing tubes.
- It is a brilliant system, that's easy to operate.
- Highest safety and productivity are its main advantages

### Application

The automatic mechanical casing drive adapter serves to connect/disconnect casings directly from the operator in the rig. It increases safety and productivity in the execution of lining piles, reducing danger and waste of time due to the manual phase of coupling the casings

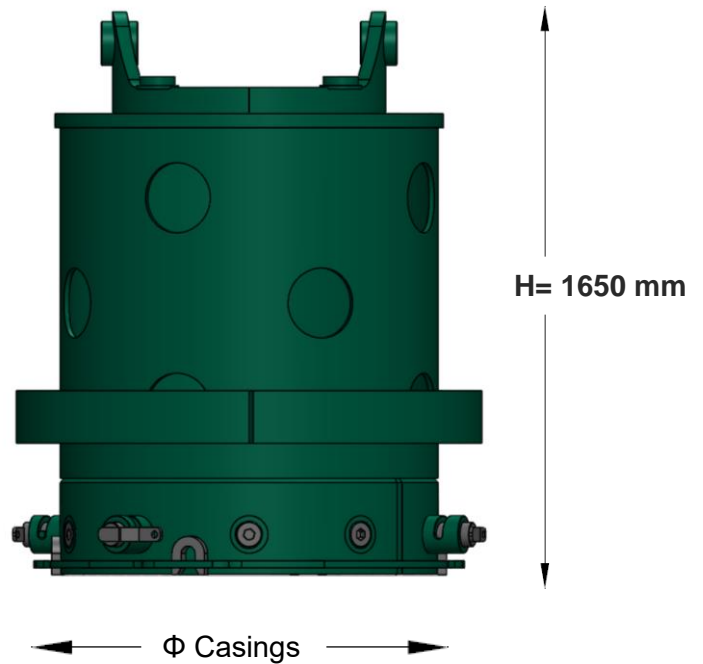
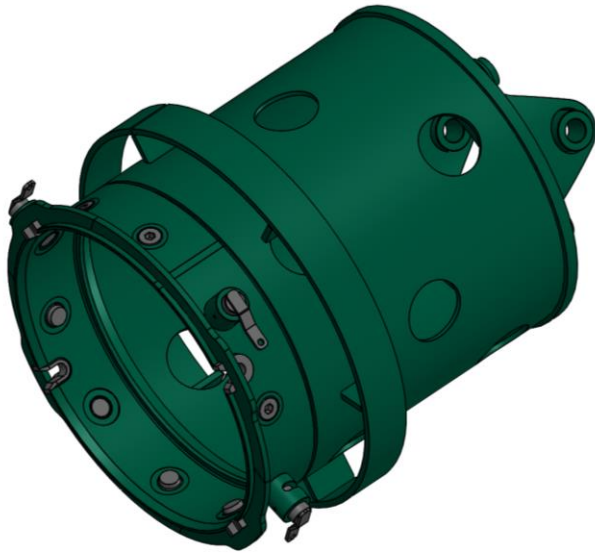
The adapter flange constitutes the connecting part "Candan joint" between rotary drive and casing driver





# Casing Drivers with adapter plate

## Technical data



Φ Casings mm	Weight kg
620/540	860
750/670	920
880/800	1020
1000/920	1200
1080/1000	1270
1180/1100	1330
1300/1220	1530
1500/1400	1960
1800/1700	2550
2000/1880	2980

Custom lengths and diameters are available upon request

### Features

- The casing adaters consist of an adapter flange and the extension pipe with relief holes.
- Adapter flange for rotary drive with cardan joint
- Reinforced female joint with manual locking pins

### Application

The powerful rotary drives are able to drill casings into the ground completely or partially and extract them again without using a casing oscillator

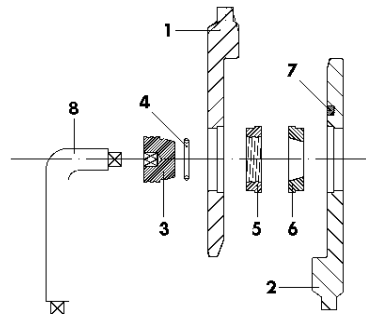
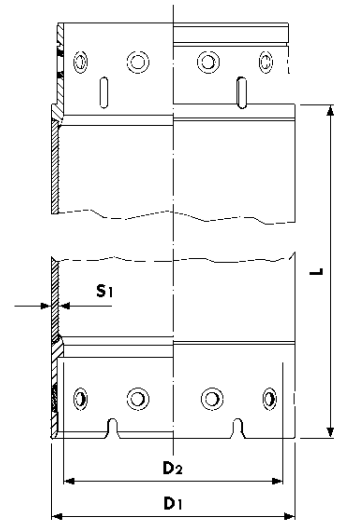
The adapter flange constitutes the connecting part between rotary drive and casing

# Casings – Single Wall

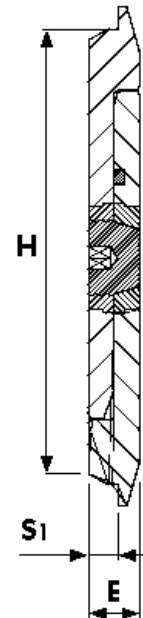
## Technical data

### EFFECTIVE LENGHT

D1 / D2 mm	1m kg	2m kg	3m kg	4m kg	5m kg	6m kg	S1 mm	E mm	Bolt Num.
620 / 540	360	510	660	810	960	1110	12 / 15	40	8
750 / 670	435	615	795	975	1155	1335	12 / 15	40	10
880 / 800	500	710	930	1250	1570	1890	15	40	10
1000 / 920	570	935	1300	1685	2030	2380	15	40	10
1180 / 1100	735	1320	1900	2490	3075	3660	15 / 20	40	12
1300 / 1220	845	1475	2105	2735	3365	3995	15 / 20	40	12
1500 / 1400	1310	2220	3130	4040	4950	5860	15 / 25	50	12
1800 / 1700	1580	2675	3770	4865	5960	7055	20 / 25	50	16
2000 / 1880	2140	3355	4570	5785	7000	8515	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



- |                |                |
|----------------|----------------|
| 1 Female part  | 5 Thread ring  |
| 2 Male part    | 6 Conical ring |
| 3 Conical bolt | 7 Sealing      |
| 4 O-ring       | 8 Wrench       |



Custom lengths and diameters are available upon request

### Features

- The casing are made of single-wall pipes
- Casing connections on both sides with female and/or male joint and conical and/or threaded rings with O-ring
- Betek screw connections

### Application

Single-wall casings can be used for applications where weight reduction is necessary

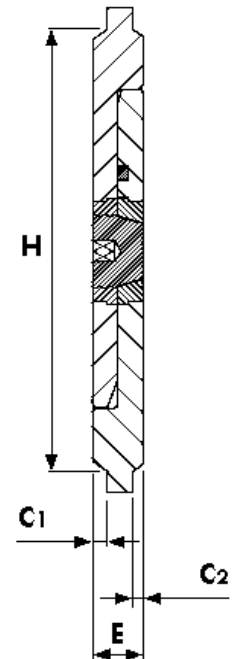
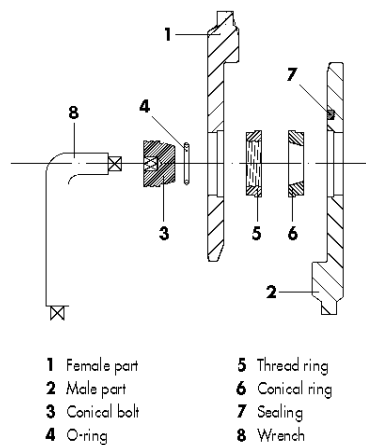
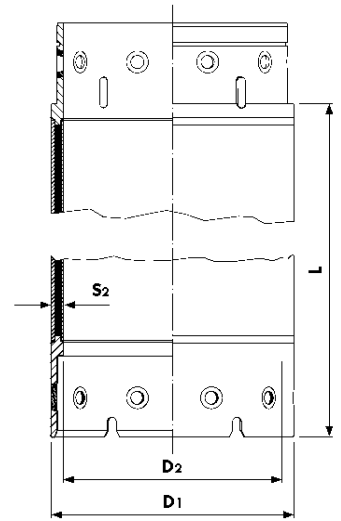


# Casings – Double Wall

## Technical data

### EFFECTIVE LENGHT

D1 / D2 mm	1m kg	2m kg	3m kg	4m kg	5m kg	6m kg	C1 mm	C2 mm	S2 = E mm	Bolt Num.
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	2326	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	4995	16	8	40	12
1500 / 1400	1433	2625	3817	5009	6201	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



Custom lengths and diameters are available upon request

### Features

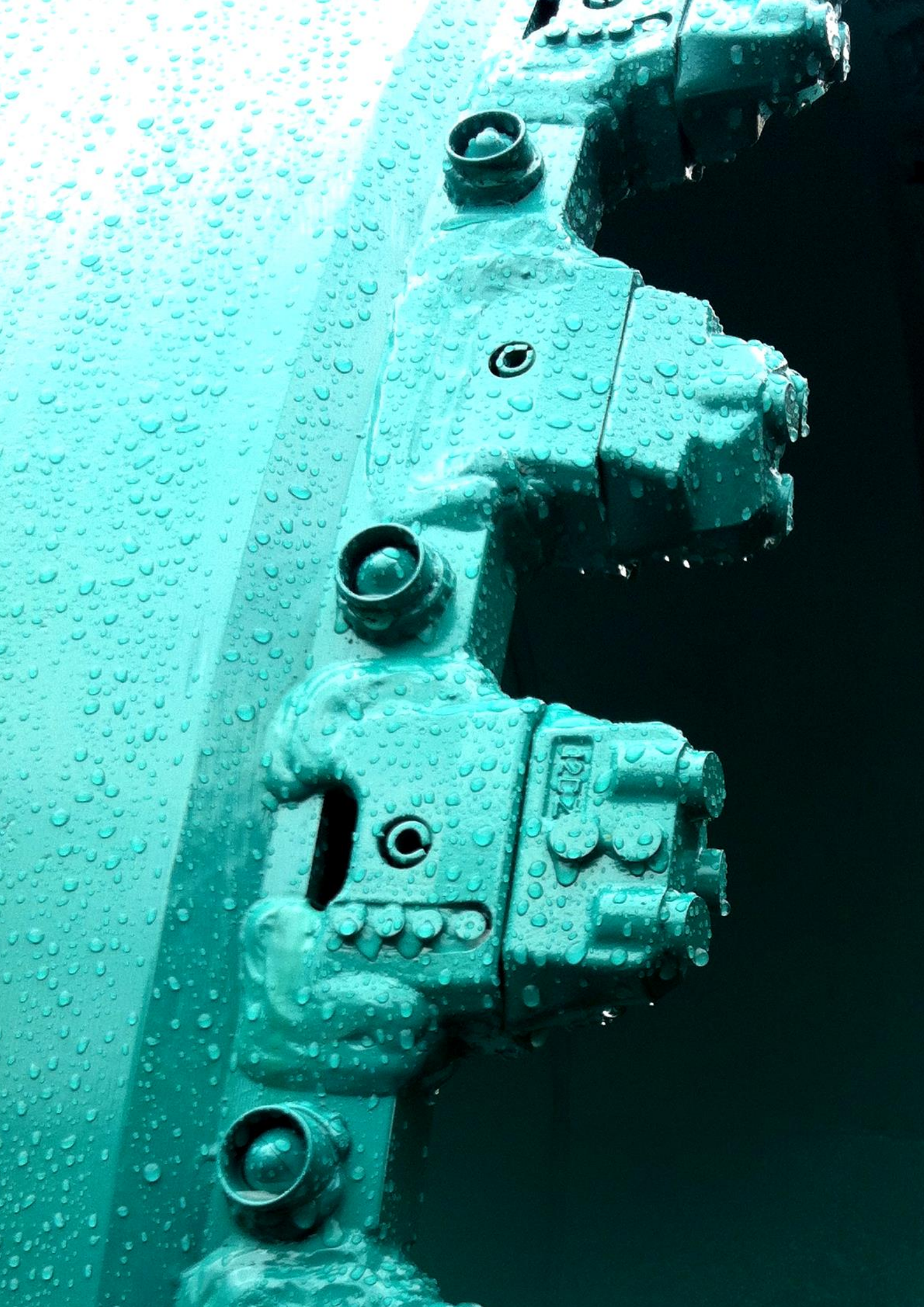
- The casing are made of double-wall pipes
- Casing connections on both sides with female and/or male joint and conical and/or threaded rings with O-ring
- Betek screw connections

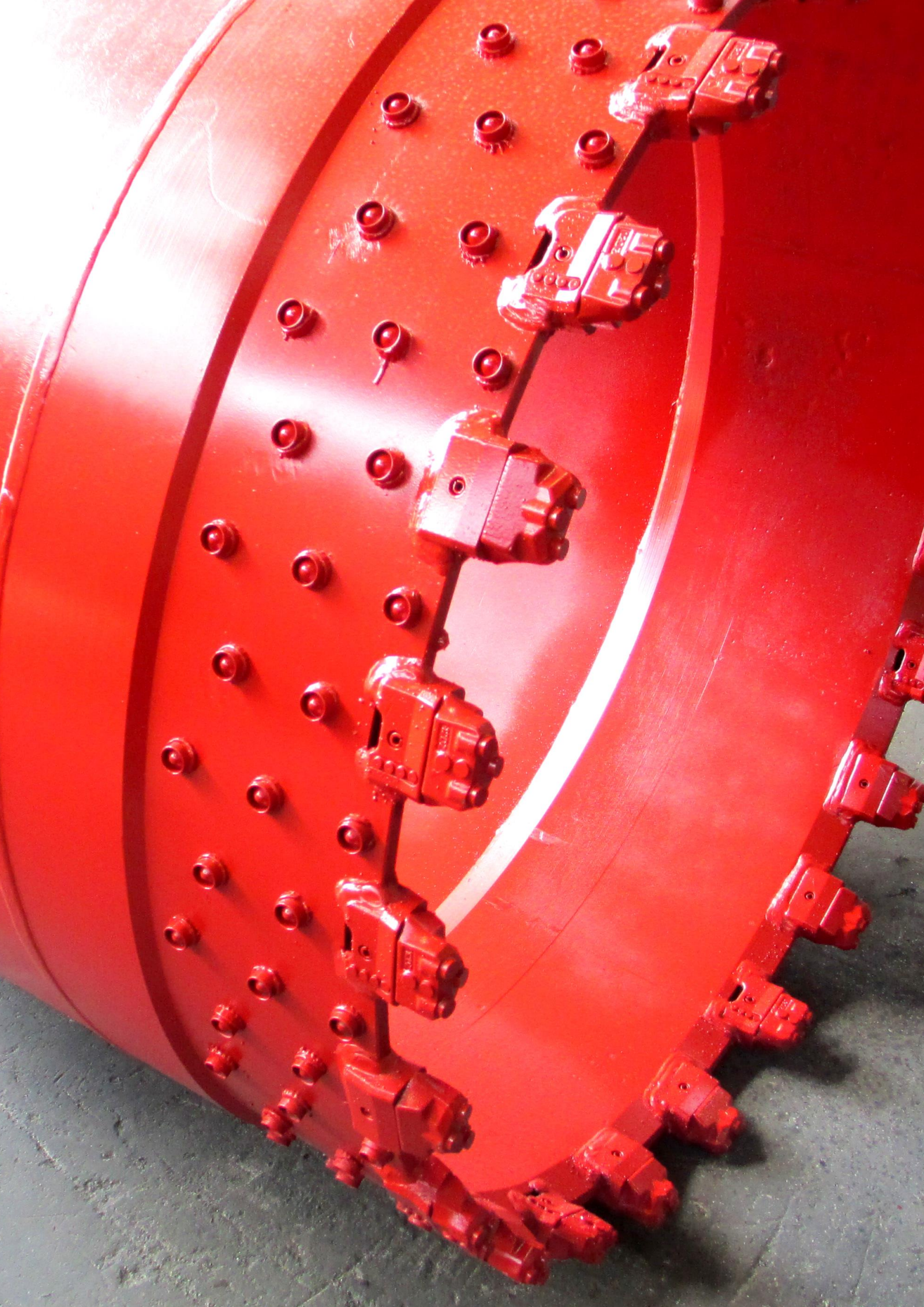
### Application

Double-walled casings can be used universally, as they are designed especially for transmitting high rotational and vertical forces as created by the rotary drives and oscillators

The use of double-walled casings allows for a flush drill string







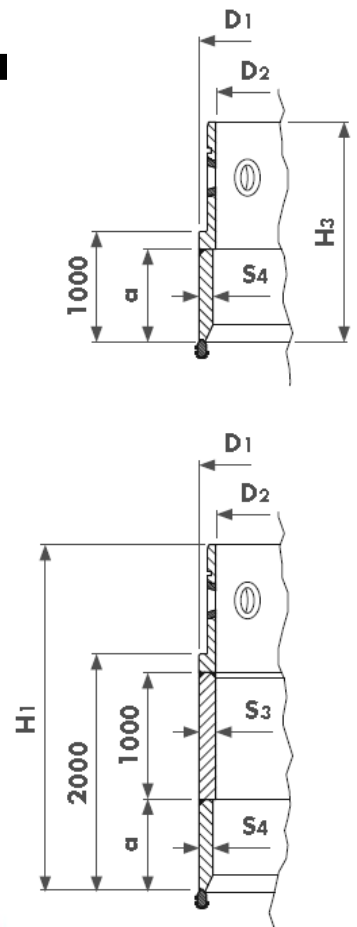
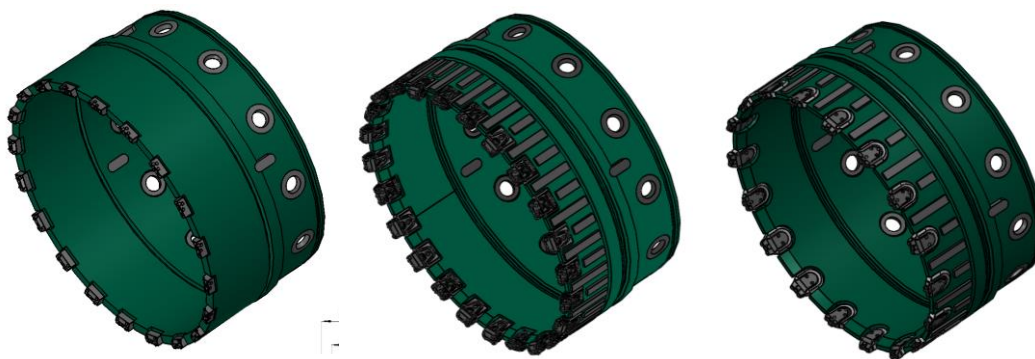
# Casing Cutting Shoe

## Technical data

### CASING SHOES

D1 / D2 mm	LONG VERSION (Length = 2 m)				SHORT VERSION (Length = 1 m)		
	H1 mm	S3 / S4 mm	Weight kg	Teeth Nos.	H3 mm	a mm	Weight kg
620 / 540	2232	40 / 35	1300	16	1232	948	716
750 / 670	2232	40 / 35	1594	16	1232	948	880
880 / 800	2232	40 / 35	1882	18	1232	948	1037
1000 / 920	2232	40 / 35	2150	18	1232	948	1184
1180 / 1100	2232	40 / 35	2550	20	1232	948	1405
1200 / 1120	2232	40 / 35	2596	20	1232	948	1430
1300 / 1220	2232	40 / 35	2820	24	1232	948	1552
1500 / 1400	2352	50 / 45	4312	30	1352	933	2490
1800 / 1700	2352	50 / 45	5203	36	1352	933	3005
2000 / 1880	2400	60 / 55	7024	36	1400	900	4100
2200 / 2080	2400	60 / 55	7736	40	1400	900	4510
2500 / 2380	2400	60 / 55	8728	46	1400	900	5050

Other dimensions are available on request.



Custom lengths and diameters are available upon request

#### Features

- Optimum shape for milling of soil, for cutting and reaming
- Round milling front with hard metal inserts allows variable tooth inclination
- Hard metal tips on the outside of the inclined shoulder
- Eases extraction of casing
- Aggressive cutting behaviour

#### Application

Cutting shoe can be fitted with different Betek/Kennametal bars

Welded bars suitable for heavy oscillator work in hard soil, gravel, rock, concrete in secant pile wall

Quick change bars suitable for rotary drilling in sand, cohesive soil, marl, soft rock like, claystone and formation of rock sockets and the construction of bored pile walls





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