



**STRIVE TO BE THE BEST**

—UNIMATE MOTTO



**Drillmaster Engineering Technology Co.,Ltd**

Headquarters: Depu. Wuhe Enterprise Zone, Changsha, China

Tel: 86- 0731-84030163

E-mail: [info@drillmastergroup.com](mailto:info@drillmastergroup.com)

[www.drillmastergroup.com](http://www.drillmastergroup.com)



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DRILLMASTER

# CASINGS & ACCESSORIES

FOR BORED PILING CONSTRUCTION



## Company Profile



Hunan Drillmaster Engineering Technology Co.,Ltd is a leading solution provider for foundation engineering. As the main enterprise entity, Drillmaster has three subsidiary companies respectively undertaking functions of fabrication and R&D.

We have two brands "Unimate"and "Unidrill". "Unimate" brand for drilling tools products (segmental casings, drilling buckets,drilling bits ets.), "Unidrill" brand for kelly bars.

DRILLMASTER's main products include: kelly bars, drilling buckets & augers, drilling bits, casings, tremie pipe, desander, casing rotator and pile breaker etc.

Better casings, better drilling.

As the very important drilling parts, "UNIMATE" workshop produces full range of casings and accessories, such as double-wall casing, single-wall casing, casing shoe, casing drive adaptor, casing joint, WS39, WS46, welding bars, casing bolts, etc.

Unimate casings adopt the high quality steel, with complete heat treatment process, automatic submerged arc machines welding, casing joint matching test and strict quality control under quality management systems, which makes our casings have high quality and long working life.

Improving the foundation construction technology as our mission, and by depending on a group of excellent R&D teams with years of experience in foundation engineering and construction design, our casings have reached in advanced level in terms of technology and quality in China.

Now, our segmental casings have been exported to over 50 countries and regions such as the U. S, Canada, the European countries, South Asia, Australia, Middle East, etc.





## ➤ High Quality Steel Material

Casing tube and casing joint are made of international standard materials to ensure good performance and long service life of casings.

	Material	European Standard	Tensile Strength	Yield Strength
Casing Tube	Q355B	St52	≥450Mpa	≥345 Mpa
Casin Joint	25CrMo	25CrMo4	≥985Mpa	≥835Mpa

## ➤ Experienced Welding Technology

Casing tube, casing joint and casing drive adaptor take submerged arc welding to guarantee stable welding quality and uniform welding performance.

## ➤ Strict Heat Treatment For Casing Joint

Casing Joint takes twice heat treatments to have better toughness and strength. Torsion resistance of casing joint can reach 1000KN.m on rotary drilling rig, and 2000KN.m on casing rotator.

## ➤ Reasonable Structure Design

The inner side of the double-wall casings adopt the method of welding spiral ribs to make the casings have longer working life and less resistance while pressing down.

## ➤ Quality Control

With strict quality control under quality management systems during the whole process, the casing's longer life and less replacement time is guaranteed.

## ➤ Customer Service

Our team provide complete service for customer needs, special requirements and casing tube solutions, also 6 months guarantee from arriving at customer's job site.

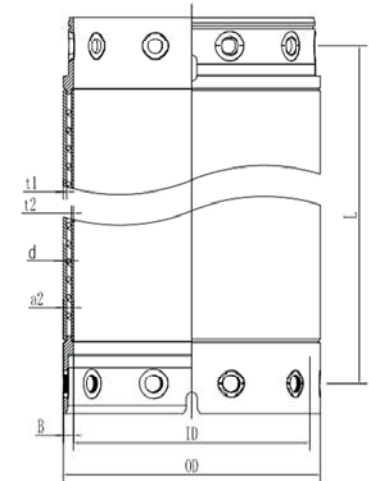
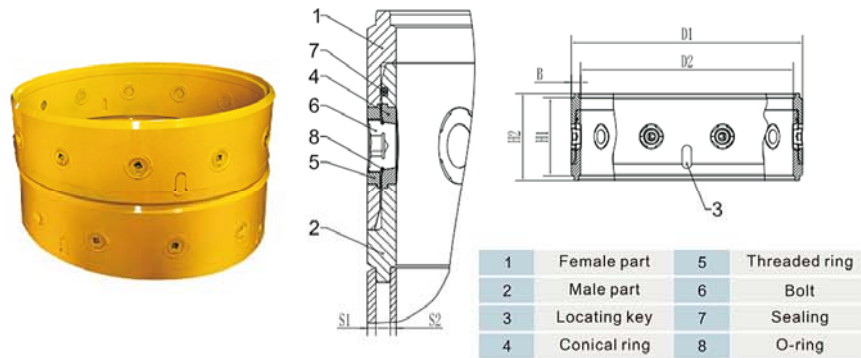


## Casing Joint

## Double Wall Segmental Casing

### SEGMENTAL CASINGS AND ACCESSORIES

The casings are designed to perform cased holes, especially for the construction of bored piles by rotary drilling rigs. The casing joints with high machining accuracy to guarantee a fast replacement and bolting of the casings as well as the best force transmission effect.



### Specifications

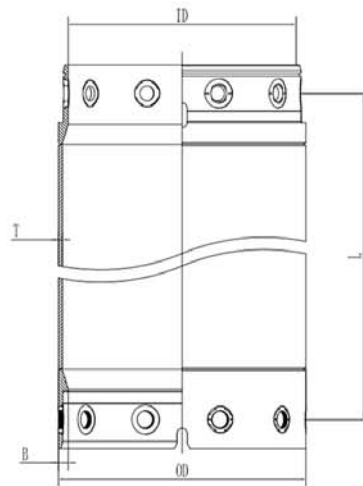
Diameter		Length						Casing-wall Thickness-1	Casing-wall Thickness-2	Total Thickness	Bolt QTY
DI/D2	mm	1m	2m	3m	4m	5m	6m	t1	t2	a2	bolts
(mm)		Weight(kg)						(mm)	(mm)	(mm)	(nos)
620/540	338	403	739	1074	1411	1747	2081	12	8	40	8
750/670	338	492	902	1311	1722	2131	2540	12	8	40	10
880/800	338	585	1069	1552	2036	2520	3005	12	8	40	10
1000/920	338	669	1221	1773	2328	2877	3429	12	8	40	10
1180/1100	338	844	1580	2316	3052	3787	4522	16	8	40	12
1200/1120	338	872	1620	2370	3120	3870	4620	16	8	40	12
1300/1220	338	933	1246	2558	3372	4184	4996	16	8	40	12
1500/1400	490	1433	2628	3817	5009	6210	7393	20	10	50	12
1800/1700	530	1730	3166	4602	6038	7474	8910	20	10	50	12
2000/1880	601	2450	4280	6110	7940	9770	11600	20	15	60	12
2200/2080	601	2700	4720	6740	8760	10780	12800	20	15	60	12
2500/2380	601	2960	5240	7520	9800	12080	14360	20	15	60	16



## Single Wall Segmental Casing

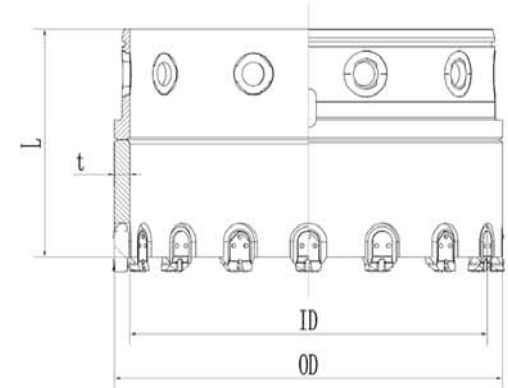
Single wall casings can be used for applications where weight reduction is important.

Drilling operation : basically, the rotary drilling tool during the working process, performs inside a mechanical protection made by the casing fixed into the ground.



Diameter	Length						Wall Thickness	Wall Thickness	Bolt
	D1/D2	1m	2m	3m	4m	5m			
(mm)							T	B	QTY
							(mm)	(mm)	(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

## Casing Shoes

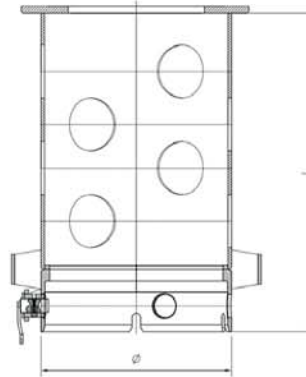


The development of changeable casing teeth is the result of years of experience drilling in difficult soil formations. The casing shoe is particularly suitable for formation of rock sockets and the construction of bored pile walls.

Diameter(mm)	620	750	880	1000	1180	1300	1500
Tooth Quantity	14	16	18	18	20	24	30
Weight(kg)	309	374	439	500	589	653	955

## Casing Drive Adapter

Casing drive adapter is the part for transferring the torque from the rotary drive onto the top of the casing string. The upper connection can be customized according to the size of the model specified by the customer.

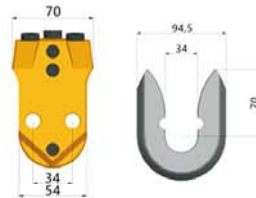


## Casing Accessories

WS39



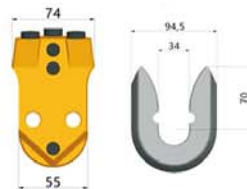
Model	WS39
Application	It is a Bauer standard changeable teeth, which can save replacement time. It has a wide range of applications, and suitable for soft to medium hardness casing construction



WS46



Model	WS46
Application	It is a Bauer standard changeable teeth, which can save replacement time. It has a wide range of applications, and suitable for soft to medium hardness casing construction



Bolt&Nut



## Successful Cases

Casing Dia. (mm)	OD1000/ID920
Type	Double-walled casing
Drilling Depth	84m
Rig Model	Liebherr LB36



Casing Dia. (mm)	OD620/ID540, OD1000/ID920
Type	Double-walled casing
Drilling Depth	50m
Rig Model	Soilmec SR80



Casing Dia. (mm)	OD620/ID540, OD750/ID670, OD880/ID800
Type	Double-walled casing
Drilling Depth	50m
Rig Model	Casagrande B200



## Successful Cases

Casing Dia.(mm)	OD1000/ID920
Type	Double-walled casing tube
Rig Model	Bauer BG38 drilling rig
Country	Australia



Casing Dia.(mm)	OD1180/ID1100 OD1280/ID1200
Type	Double-walled casing tube
Rig Model	XCMG XR400S drilling rig
Country	Singapore



Casing Dia.(mm)	OD620/ID540
Type	Double-walled casing tube
Rig Model	Bauer BG20 drilling rig
Country	Kenya



# DRILLMASTER

## Headquarters Drillmaster Engineering Technology Co.,Ltd

More than a drilling tools supplier, Drillmaster is a leading solution provider for foundation engineering. With decades of years' experience in the R&D, fabrication and sales of piling equipments: pile breaker, casing rotator, oscillator, drill bits, etc, Drillmaster has established a complete factory production system. Unimate, Unidrill and Fountech are subsidiaries of Drillmaster, respectively responsible for the R&D and production of different foundation engineering products.



### Unimate Heavy Industry Co.,Ltd

With factory in Wuhan, China, more than 10 years of production experience, specializes in the production of drilling tools, casings and drilling accessories as well as the rent of drill rig and sales of used drill rig.



### Unidrill Technology Co.,Ltd

Factories are located in Hebei and Wuhan, mainly responsible for the production of Kelly Bars, Drilling Tools and Desanders, well known by its strict quality control.



### Hunan imachine Technology Co., Ltd

A technology and service oriented company focusing on the recycling, maintenance and export of used construction machinery.