

套管推进系统，或称钻孔套管，是在困难的地面条件下钻井的首选方法。当套管和钻井同时进行，孔洞坍塌的风险就会降到最低，你可以更快地工作，获得更好的结果。DrillMore 提供一系列的解决方案，以最有效的方式满足您的项目需求。

Casing advancement systems, or drilled casings, are the preferred method for drilling in difficult ground conditions. When casing and drilling occur at the same time, the hole collapsing risk is minimized and you can work faster and with better results. DrillMore offers a spectrum of solutions to meet your project demands in the most efficient way.



Eccentric Casing System

偏心扩孔钻具

零件表面的硬化处理

Hardening treatment of the part's surface

具有较长的使用寿命和优异的抗磨性能。

with longer operating life and excellent anti-wear properties.

优越性能

Superior performance

性能稳定可靠，钻进速度快。

Stable and reliable performance, high drilling speed

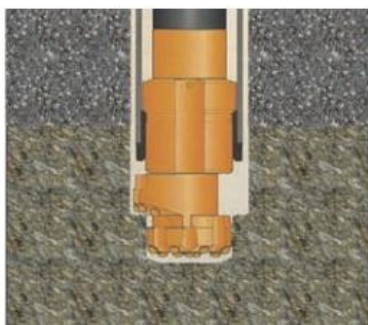


Working Principle of Drill

钻具工作原理

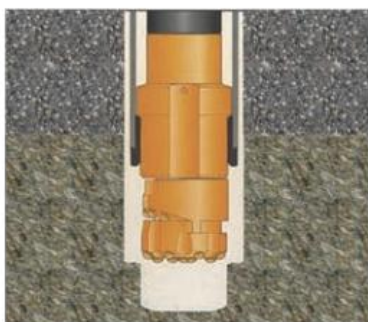
- 01 凿岩工作开始时，偏心扩孔套沿偏心导向钻头旋出，同时开始扩孔以保证套管和钻进系统同时前进。

When starting drilling, the reamer swings out and reams the pilot-hole wide enough for the casing tube to slide down behind the drill bit assembly.



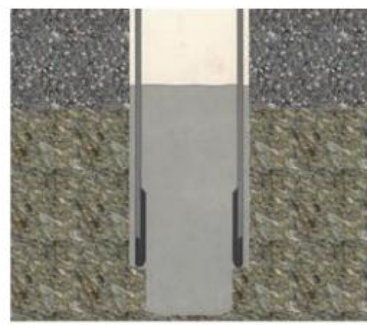
- 02 跟管钻进到位后，小心地反转，偏心扩孔套旋回，并将偏心钻具系统从套管中拔出。

When the required depth is reached, rotation is reversed carefully, whereupon the reamer swings in. Allowing the drill bit assembly to be pulled up through the casing



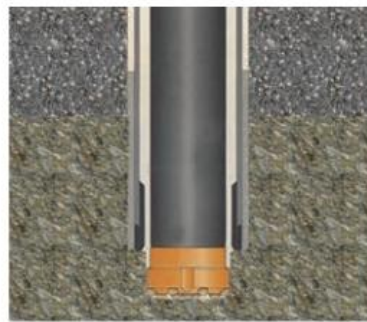
- 03 套管向上拔，同时在孔底喷灌砂浆或其它填充物。

Casing tubes that are to be left in the drill hole should be sealed at the bottom of the hole by means of cement grout or some other sealing agent.

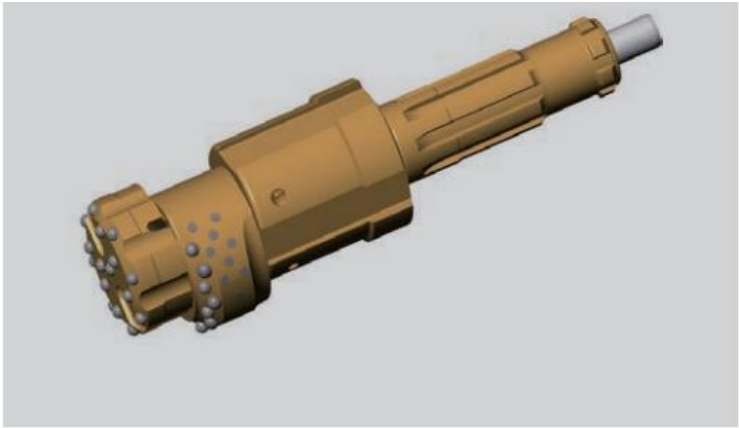


- 04 在基岩中采用常规钻具钻进以达到所需深度。

Drilling continues to the desired depth in the bedrock using a conventional drill string.



ODEX Casing System



偏心扩孔钻具规格/ODEX Casing System/Eccentric Overburden Casing System

	规格型号 Model	套管外径(mm) Casing Tube O.D	稳杆器最大外径D (mm) Maximum O.D. of Guide Device	钻头含齿直径D1(mm) Bit Diameter(Button Included)	管靴内径(mm) Casing Shoe I.D.	扩孔最大直径D2 (mm) Maximum Reaming O.D.	所配冲击器规格 Hammer Style
	108偏心钻具	¢ 108	¢ 92	¢ 84	¢ 86	¢ 118	3寸
	114偏心钻具	¢ 114	¢ 100	¢ 92	¢ 94	¢ 124	3寸
	127偏心钻具	¢ 127	¢ 110	¢ 100	¢ 102	¢ 136	3~4寸
	146偏心钻具	¢ 146	¢ 124	¢ 115	¢ 117	¢ 156	4寸
	168偏心钻具	¢ 168	¢ 146	¢ 134	¢ 138	¢ 178	5寸
	178偏心钻具	¢ 178	¢ 156	¢ 144	¢ 148	¢ 193	5寸
	183偏心钻具	¢ 183	¢ 160	¢ 144	¢ 152	¢ 193	5寸
	194偏心钻具	¢ 194	¢ 178	¢ 165	¢ 167	¢ 208	6寸
	219偏心钻具	¢ 219	¢ 203	¢ 189	¢ 193	¢ 237	6~7寸
	245偏心钻具	¢ 245	¢ 220	¢ 206	¢ 210	¢ 260	6~8寸
	273偏心钻具	¢ 273	¢ 256	¢ 238	¢ 242	¢ 308	8寸
	325偏心钻具	¢ 325	¢ 297	¢ 280	¢ 285	¢ 355	8~10寸
	377偏心钻具	¢ 377	¢ 351	¢ 328	¢ 333	¢ 420	10~12寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

Concentric Casing System

同心跟管钻具

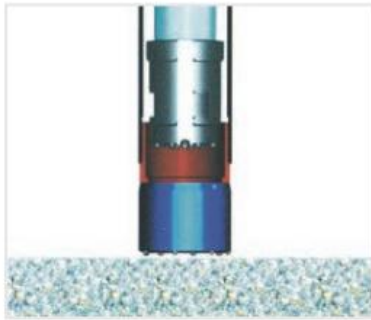


Working Principle of Drill

钻具工作原理

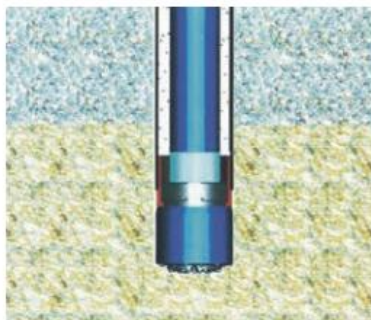
- 01 钻孔之前，将环形钻头和管靴组件与套管焊好，然后将导向钻头与环形钻头管靴组件锁好，导向钻头肩部与管靴啮合。

Ring bit and casing shoe assembly is welded to casing prior to drilling. Lock the assembly into pilot bit with hammer. The pilot bit's shoulder engages the shoulder of the casing shoe.



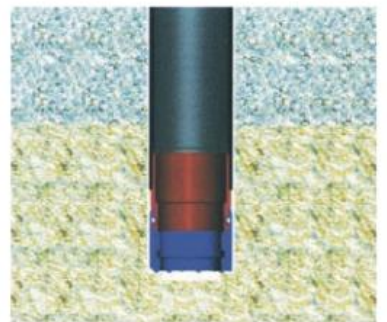
- 02 冲击器的冲击能传至导向钻头和环形钻头开始破岩，部分能量带动套管向前。

Hammer's percussive energy is transferred through the pilot and ring bit, crushing rock. Part of impact energy advances casing.



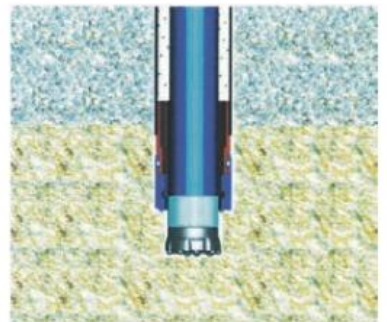
- 03 在钻进结束之后，通过轻轻反转让卡口连接解锁而取回钻具。环形钻头留在孔内，当孔进行注浆完毕，套管拔出时，环形钻头一起取出。

On completion of drilling and casing, the drill string with pilot bit is retrieved by a slight reverse rotation to unlock the bayonet coupling. The ring bit stays in the hole, and can be recovered only if the casing is retrieved.



- 04 在基岩中，如果需要进一步钻进，将导向钻头换成尺寸合适的标准钻头。

If further drilling is required on the bedrock, the pilot bit is simply replaced by an appropriate size of standard DTH bit.



Advantages of Concentric Casing System

1 成孔直线度好，钻进速度快。

对心钻进的工作原理能保证在砾石层、砂层和卵石层等所有地层中钻出较直的孔，并且钻进速度快。

2 钻进中扭矩较小。

对心钻进比偏心钻进需要的扭矩小得多。环形钻头保证在所有条件下顺利地钻进，即使用小钻机也能钻较大的孔。

3 解锁-重新锁定比较容易。

钻孔过程中有时需要将系统解锁，对心钻进容易重新锁定，因为该系统中没有必须在孔内打开和关闭的偏心构件。

4 可以进行任何角度的钻孔。

对心钻具能钻任何角度的孔。

5 排渣效果好。

对心钻进中用于排渣的气流从导向钻头喷出后立即沿套管上升，因此，对孔壁损害较小，排渣效果好。

6 操作容易，系统安全。

由于对心钻进工作较顺利，钻孔工人不需要持续关注钻进工作。

7 经济，成本低。

对心钻进系统的结构和工作原理能保证显著减少停机时间，消耗品少，运转成本低。

1 Drilling Straight and fast

Theoretically, Concentric drilling makes sure the hole in all formations such as gravel bed, sand bed and pebble bed etc. is considerably straight, the drilling speed fast and the drilling torque relatively small.

2 The torque for Concentric drilling is much less than for eccentric drilling.

A smooth and steady drilling may be achieved using ring bit on all conditions and create big hole even if a small drilling rig is used.

3 Easily Unlocking-relocking

Unlocking the system is sometimes required during process. Relocking is easy since there are no eccentric components that must be opened or closed inside the hole.

4 Drilling in any angle.

Concentric drilling system can drill the hole at any angle.

5 Effective cuttings discharge.

The airflow for cutting discharge purpose during the Concentric drilling will instantly ascend along the casing pipe after spurting out from the pilot bit. Hence, the negligible damage on the wall of hole can guarantee effective cutting discharge.

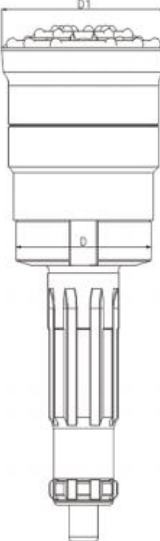
6 Easy-to-operate and system security

Drilling workers are relieved of the need to maintain their continuous and constant attention on drilling process since Concentric drilling can carry on smoothly.

7 Economical and cost-effective.

The structure and principle of operation of Concentric drilling system can guarantee considerable reduction in downtime, fewer consumable and lower operation costs.

I 同心跟管钻具规格/Concentric Casing System

	规格型号 Model	套管外径(mm) Casing Tube O.D	中心钻头 最大外径D(mm) Bit Diameter(Button Included)	管靴内径(mm) Casing Shoe I.D.	扩孔最大尺寸(mm) Maximum Reaming O.D.	所配冲击器规格 Hammer Style
	146同心钻具 Concentric Casing	φ 146	φ 123.5	φ 116	φ 156	4寸
	168同心钻具 Concentric Casing	φ 168	φ 146	φ 140	φ 184	5寸
	178同心钻具 Concentric Casing	φ 178	φ 157	φ 150	φ 194	5寸
	183同心钻具 Concentric Casing	φ 183	φ 160	φ 152	φ 198	5寸
	194同心钻具 Concentric Casing	φ 194	φ 178	φ 164	φ 208	6寸
	219同心钻具 Concentric Casing	φ 219	φ 203	φ 192	φ 234	6~7寸
	245同心钻具 Concentric Casing	φ 245	φ 217	φ 205	φ 260	6~8寸
	273同心钻具 Concentric Casing	φ 273	φ 246	φ 233	φ 291	8寸
	325同心钻具 Concentric Casing	φ 325	φ 297	φ 282	φ 340	8~10寸
	377同心钻具 Concentric Casing	φ 377	φ 351	φ 332	φ 405	10~12寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

Slide Block Casing System

滑块式跟管钻具



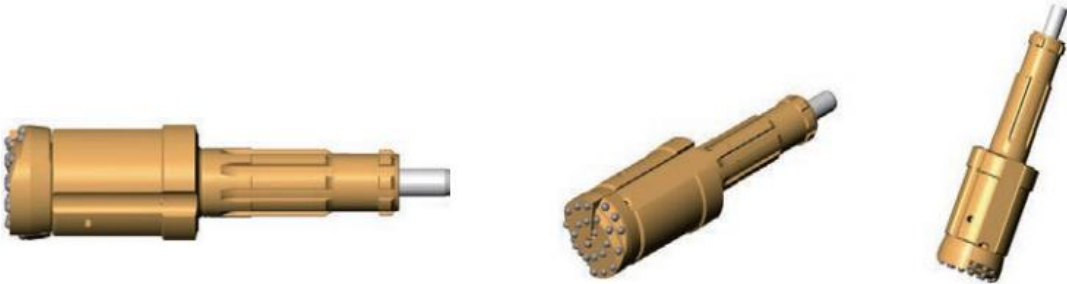
滑块式跟管钻具规格/Slide Block Casing System

	规格型号 Model	套管外径(mm) Casing OD	中心钻头 最大外径D(mm) Maximum OD of Center Bit	管靴内径(mm) Casing Shoe ID	扩孔最大尺寸(mm) Maximum OD of Reaming	所配冲击器规格 Hammer Type
	146滑块钻具 Slide Block Casing	φ 146	φ 123	φ 115	φ 156	4寸
	168滑块钻具 Slide Block Casing	φ 168	φ 146	φ 140	φ 185	5寸
	178滑块钻具 Slide Block Casing	φ 178	φ 156	φ 150	φ 193	5寸
	183滑块钻具 Slide Block Casing	φ 183	φ 160	φ 154	φ 193	5寸
	194滑块钻具 Slide Block Casing	φ 194	φ 178	φ 166	φ 211	6寸
	219滑块钻具 Slide Block Casing	φ 219	φ 203	φ 193	φ 237	6~7寸
	245滑块钻具 Slide Block Casing	φ 245	φ 220	φ 210	φ 260	6~8寸
	273滑块钻具 Slide Block Casing	φ 273	φ 251	φ 241	φ 308	8寸
	325滑块钻具 Slide Block Casing	φ 325	φ 298	φ 281	φ 378	8~10寸
	377滑块钻具 Slide Block Casing	φ 377	φ 350	φ 335	φ 430	10~12寸
	406滑块钻具 Slide Block Casing	φ 406	φ 380	φ 363	φ 426	12寸
	560滑块钻具 Slide Block Casing	φ 560	φ 530	φ 511	φ 590	18寸
	610滑块钻具 Slide Block Casing	φ 610	φ 582	φ 556	φ 640	18寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

Overburden Wing Bit

旋翼式跟管钻具



旋翼式跟管钻具规格/Overburden Wing Bit

	规格型号 Model	套管外径(mm) Casing OD	中心钻头 最大外径D(mm) Maximum OD of Center Bit	管靴内径(mm) Casing Shoe ID	扩孔最大尺寸(mm) Maximum OD of Reaming	所配冲击器规格 Hammer Type
	146旋翼钻具 Overburden Wing Bit	φ 146	φ 123	φ 115	φ 156	4寸
	168旋翼钻具 Overburden Wing Bit	φ 168	φ 146	φ 136	φ 184	5寸
	178旋翼钻具 Overburden Wing Bit	φ 178	φ 156	φ 142	φ 193	5寸
	183旋翼钻具 Overburden Wing Bit	φ 183	φ 160	φ 146	φ 198	5寸
	194旋翼钻具 Overburden Wing Bit	φ 194	φ 178	φ 162	φ 208	6寸
	219旋翼钻具 Overburden Wing Bit	φ 219	φ 203	φ 180	φ 234	6~7寸
	245旋翼钻具 Overburden Wing Bit	φ 245	φ 220	φ 202	φ 260	6~8寸
	273旋翼钻具 Overburden Wing Bit	φ 273	φ 251	φ 237	φ 300	8寸
	325旋翼钻具 Overburden Wing Bit	φ 325	φ 298	φ 280	φ 355	8~10寸
	377旋翼钻具 Overburden Wing Bit	φ 377	φ 350	φ 330	φ 407	10~12寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.



Weldable casing shoe
/Weldable crown



Threaded casing shoe/ Thread crown



Casing tube