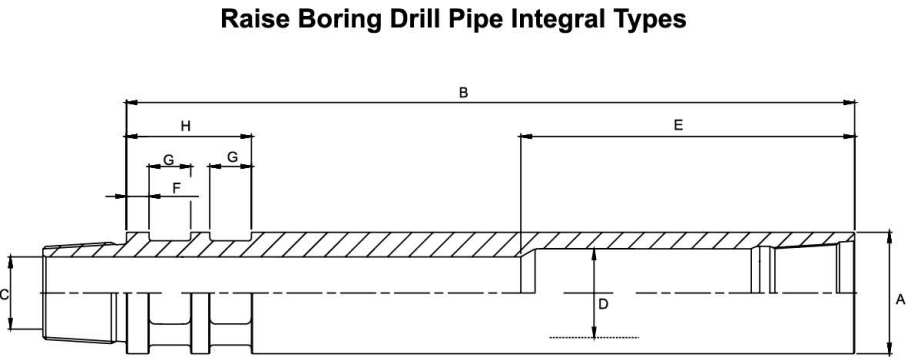
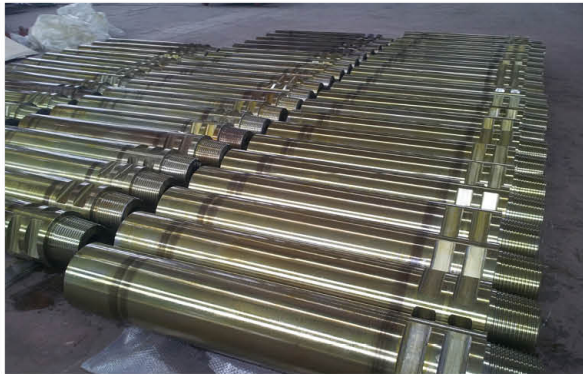


» 钻杆 Raise Boring Drill Pipe Integral Types

Drill pipe:

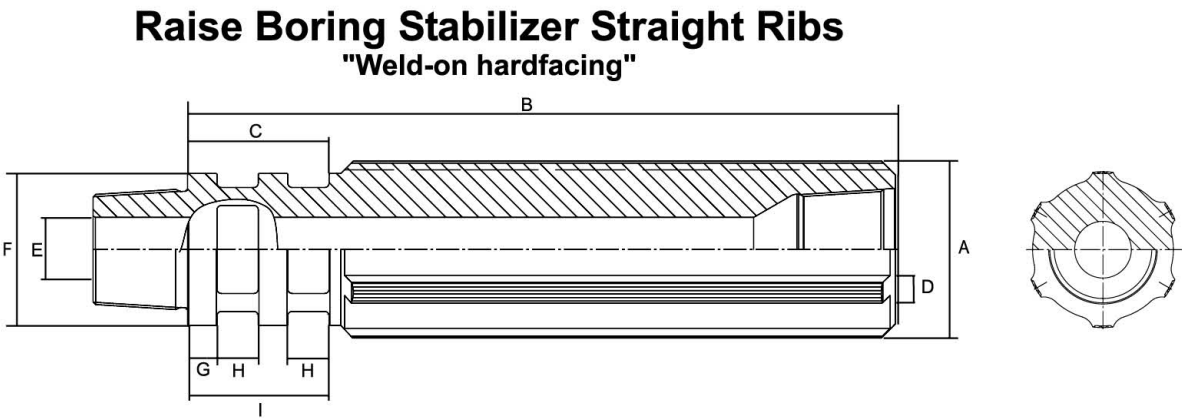
This kind of drill pipe is used for raise boring machine . Raise boring machine is always to make all kinds of tunnel,including mine tunnel and mine shaft . We could manufacture such drill pipe ,which diameter from 8” to 15” , it chooses high strength alloy steel forgings material and heat treatment , therefore it has excellent mechanical property and impact value .

主要技术参数 / Main technical specification										
名义尺寸 Nominal size	台肩到尾部的尺寸 shoudlder to shoulder length	小孔直径 Small bore diam	大孔直径 Diam.of boreback	大孔的长度 Length of boreback	台肩到第一个扳手的宽度 shoudlder to first spanner flat	扳手的宽度 Width of spanner flat	台肩到第二个扳手末端的宽度 shoudlder to end of spanner flats	扳手截面之间的高度 Dimension across spanner flat	螺纹连接方式 Connections*	重量 Weight
A	B	C	D	E	F	G	H			
in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm	in mm		kg
8" 203.2	48" 1219.2	4 3/4" 120.7	6 5/32" 156.4	22" 558.8	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	6 7/8" 174.6	6 3/4" R.B.-DI22	170
10" 254	60" 1524	4 3/4" 120.7	7 7/16" 188.9	36" 914.4	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	8" 203.2	8 1/4" R.B.-DI22	345
11 1/4" 286.8	60" 1524	4 3/4" 120.7	7 11/16" 195.3	36" 914.4	1 1/2" 38.1	3 1/2" 88.9	10" 254	9" 228	9 1/4" R.B.-DI22	480
12 7/8" 323.9	60" 1524	5 7/16" 138.1	9" 228.6	36" 914.4	1 9/16" 39.7	3 15/16" 100	11" 279	10 1/2" 266.7	10 1/2" R.B.-DI22	640
12 7/8" 323.9	120" 3048	5 7/16" 138.1	9" 228.6	96" 2438.4	1 9/16" 39.7	3 15/16" 100	11" 279	10 1/2" 266.7	10 1/2" R.B.-DI22	1270



» 硬面堆焊稳定器 Raise Boring Stabilizer Straight Ribs "Weld-on hardfacing"

主要技术参数 / Main technical specification											
名义尺寸 Norminal size	台肩到部的距离 Shoulder to shoudler length	台肩到筋的距离 shoulder to start of ribs	筋的宽度 Rib width	小孔的距离 Bore diam.	筋的数量 No. of ribs	左侧管体的直径 Body diam.	台肩到第一个扳手的距离 Shoudler to first flat	扳手之间的宽度 Width of spanner flat	台肩到扳手末端的距离 Shoulder to end of spanner flats	螺纹连接方式 connections*	重量 Approx weight
A	B	C	D	E		F	G	H	I		
in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	in mm		kg
6 3/4" 171.5	48" 1219.2	9 1/4" 235	1 3/8" 35	2 13/16" 71.4	4	5 3/4" 146.1	1" 25.5	2" 51	7" 177.8	4 3/4" R.B.-DI22	165
7 7/8" 200	48" 1219.2	9 1/4" 235	1 3/8" 35	2 13/16" 71.4	4	6 3/4" 171.5	1" 25.5	2" 51	7" 177.8	5 3/4" R.B.-DI22	202
9" 228	48" 1219.2	10 1/2" 266.7	1 3/8" 35	3" 76.2	6	8" 203.2	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	6 3/4" R.B.-DI22	280
9 7/8" 250.8	48" 1219.2	10 1/2" 266.7	1 3/8" 35	3" 76.2	6	8" 203.2	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	6 3/4" R.B.-DI22	320
11" 279.4	60" 1524	11" 279.4	1 3/8" 35	4 3/4" 120.7	6	10" 254	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	8 1/4" R.B.-DI22	485
12 1/4" 311.2	60" 1524	13 5/8" 346.1	2 1/4" 57.2	4 3/4" 120.7	6	11 1/4" 286.8	1 1/2" 38.1	3 1/2" 88.9	10" 254	9 1/4" R.B.-DI22	750
13 3/4" 349.3	60" 1524	13 3/4" 349.3	2 1/4" 57.2	5 7/16" 138.1	6	12 7/8" 327	1 9/16" 39.7	3 15/16" 100	11" 279.4	10 1/2" R.B.-DI22	864
15" 381	60" 1524	13 3/4" 349.3	2 5/8" 66.7	5 7/16" 138.1	6	12 7/8" 327	1 9/16" 39.7	3 15/16" 100	11" 279.4	10 1/2" R.B.-DI22	1050

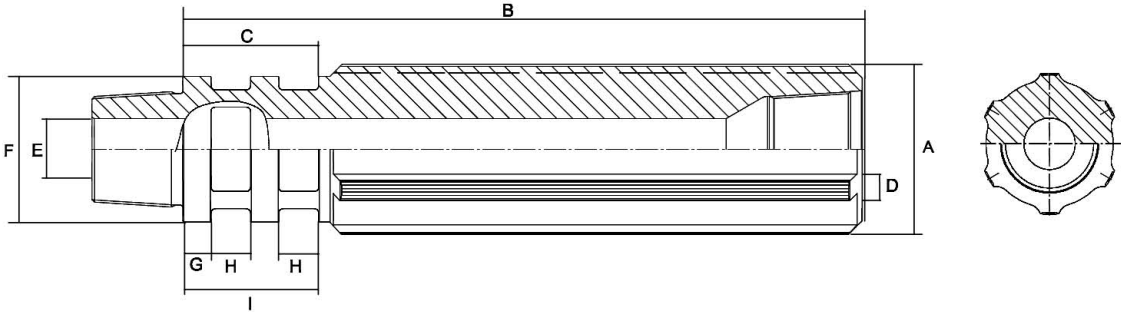


» 硬质合金堆焊稳定器 Raise Boring Stabilizer Straight Ribs "Tungsten carbide hardfacing"

主要技术参数 / Main technical specification											
名义尺寸 Norminal size	台肩到尾部的 长度Shoulder to shoudler length	台肩到筋之 间的距离 shoulder to start of ribs	筋的宽度 Rib width	小孔的直径 Bore diam.	筋的数量 No. of ribs	左侧管体的直径 Body diam.	台肩到第一个 扳手的距离 Shoudler to first flat	扳手之间的宽 度Width of spanner flat	台肩到扳手 末端的距离 Shoulder to end of spanner flats	螺纹连接方式 connections*	重量 weight
A	B	C	D	E		F	G	H	I		kg
in mm	in mm	in mm	in mm	in mm		in mm	in mm	in mm	in mm		
6 3/4" 171.5	48" 1219.2	9 1/4" 235	1 3/8" 35	2 13/16" 71.4	4	5 3/4" 146.1	1" 25.5	2" 51	7" 177.8	4 3/4" R.B.-DI22	165
7 7/8" 200	48" 1219.2	9 1/4" 235	1 3/8" 35	2 13/16" 71.4	4	6 3/4" 171.5	1" 25.5	2" 51	7" 177.8	5 3/4" R.B.-DI22	202
9" 228	48" 1219.2	10 1/2" 266.7	1 3/8" 35	3" 76.2	6	8" 203.2	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	6 3/4" R.B.-DI22	280
9 7/8" 250.8	48" 1219.2	10 1/2" 266.7	1 3/8" 35	3" 76.2	6	8" 203.2	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	6 3/4" R.B.-DI22	320
11" 279.4	60" 1524	11" 279.4	1 3/8" 35	4 3/4" 120.7	6	10" 254	1 1/2" 38.1	2 3/4" 69.9	8 1/4" 209.6	8 1/4" R.B.-DI22	485
12 1/4" 311.2	60" 1524	13 5/8" 346.1	2 1/4" 57.2	4 3/4" 120.7	6	11 1/4" 286.8	1 1/2" 38.1	3 1/2" 88.9	10" 254	9 1/4" R.B.-DI22	750
13 3/4" 349.3	60" 1524	13 3/4" 349.3	2 1/4" 57.2	5 7/16" 138.1	6	12 7/8" 327	1 9/16" 39.7	3 15/16" 100	11" 279.4	10 1/2" R.B.-DI22	864
15" 381	60" 1524	13 3/4" 349.3	2 5/8" 66.7	5 7/16" 138.1	6	12 7/8" 327	1 9/16" 39.7	3 15/16" 100	11" 279.4	10 1/2" R.B.-DI22	1050



Raise Boring Stabilizer Straight Ribs
" Tungsten Carbide "



» 滚刀 Roller Cutter



这种滚刀主要用于 TBM 掘进机或者 Raise boring 掘进机的刀盘上 . 我们可以生产的滚刀尺寸范围为 7" ~19" , 根据球齿的安装方式, 他们可以分为 3 排 ,4 排, 和 5 排. 壳体采用高强度锻造材料 , 表面镶嵌碳化钨硬质合金 , 滚刀的里面安装有滚柱或者圆锥滚子轴承 . 根据掘进岩石的不同状况 , 我们可以选用不同的碳化钨硬质合金 , 他们可以有不同的强度和抗冲击性能 , 同时选择不同载荷的轴承 . 这样可以提高刀具的寿命 , 加快掘进的速度 , 降低掘进的成本 .

This kind of cutter is installed on TBM machine and raise boring machine cutter head . We could manufacture such roller cutter , which size is from 7" to 19" , they could be divided into 3-Row cutter, 4-Row cutter ,5-Row cutter. Its cutter shell chooses high strength alloy steel forging material , its surface is inserted with Tungsten carbide button . Inside the cutter shell we choose excellent tapered roller bearing .We could choose different tungsten carbide button according to different rock condition , therefore our roller cutter has long lifetime .



主要技术参数 Main technical specification :

1. 尺寸范围 : Size range :7" ~19"
2. 壳体材料 : 4330V
3. 表面球齿选用碳化钨 , 根据不同的岩石状况 , 可以选择不同强度和承受不同冲击的材料
Surface tooth choose Tungsten Carbide button, , different strength and impact property could be adjusted inside tungsten carbide material according to different rock condition .
4. 传动方式 Transmission method :
滚柱型或者圆锥滚子轴承
Rolling pin or Tapered roller bearing

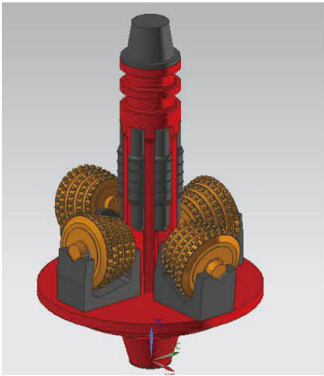
» 刀盘 Reamer Head



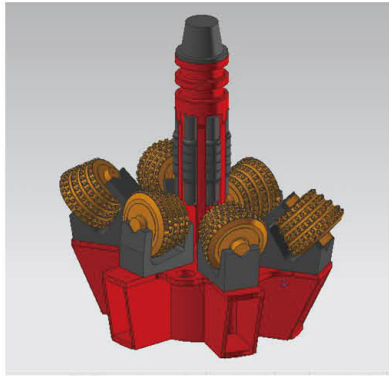
这种刀盘是用于 Raise boring 掘进机专用工具, 我们可以生产孔径从 1.2 米 ~6 米的刀盘。根据客户的不
同工况, 我们可以为客户设计不同的刀盘和滚刀安装位置。

The reamer is used for raise boring machine .
We could manufacture all kinds of reamer head
installed with cutters and saddles , diameter from
1.2Meter to 6Meter .According to different rock
condition , we could design different reamer head
and cutter installation position .

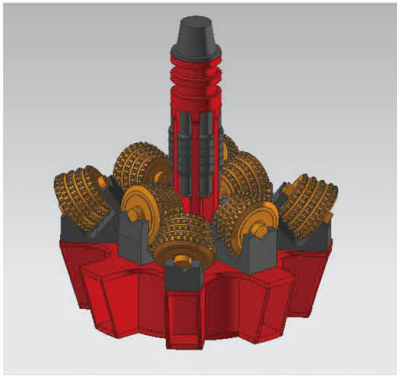
主要技术参数 / Main technical specification						
Reamer head model	Head diameter mm	Roller cutters quantity	Roller cutter type	Pilot hole	Thread diameter	Weight KGS
RBM-26"	660	2	CR4+CR5			1050
RBM-42"	1060	4	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	2350
RBM-56"	1420	6	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	3250
RBM-60"	1524	8	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	4450
RBM-72"	1829	10	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	4850
RBM-74"	1870	10	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	4900
RBM-84"	2134	12	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	5600
RBM-96"	2440	14	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	6500
RBM-108"	2743	14/16	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	8350
RBM-120"	3058	18	CR4+CR5	9-12 1/4"	6 3/4"- 9 1/4"	16000
RBM-122"	3094	16	CR4+CR5	12 1/2-13 3/4"	9 1/4"-10 1/2"	10250
RBM-123"	3130	16	CR4+CR5	12 1/2-13 3/4"	9 1/4"-10 1/2"	11100
RBM-134"	3412	20	CR4+CR5	12 1/2-15"	10 1/2"	16950
RBM-146"	3720	22	CR4+CR5	12 1/2-15"	10 1/2"	18700
RBM-150"	3824	20	CR4+CR5	12 1/2-15"	10 1/2"	14750
RBM-160"	4074	24	CR4+CR5	12 1/2-15"	10 1/2"	20450
RBM-172"	4383	26	CR4+CR5	12 1/2-15"	10 1/2"	21400
RBM-186"	4737	28	CR4+CR5	12 1/2-15"	10 1/2"	22550
RBM-197"	5000	26	CR4+CR5	13 3/4-15"	10 1/2"	31300
RBM-217"	5520	28	CR4+CR5	13 3/4-15"	10 1/2"	32250
RBM-231"	5876	32	CR4+CR5	13 3/4-15"	10 1/2"	32550



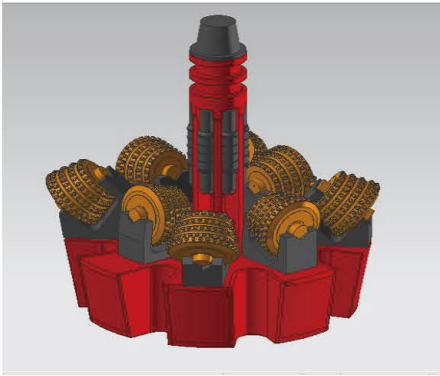
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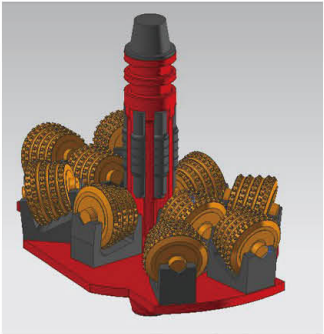
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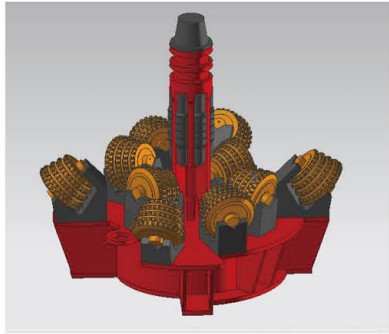
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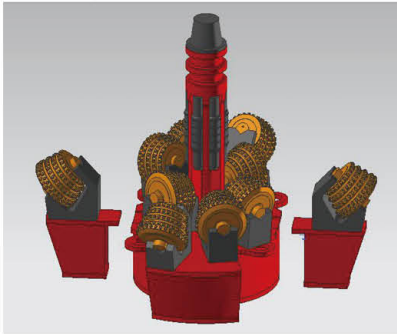
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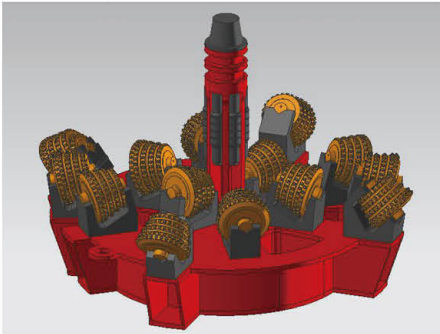
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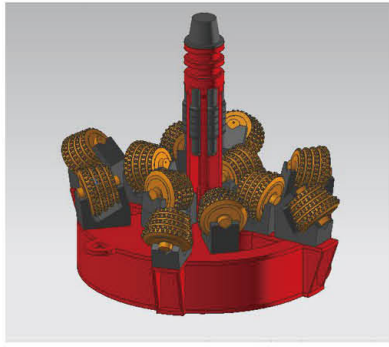
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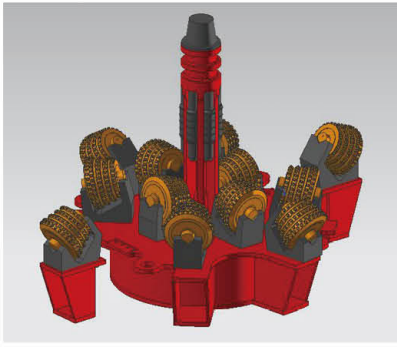
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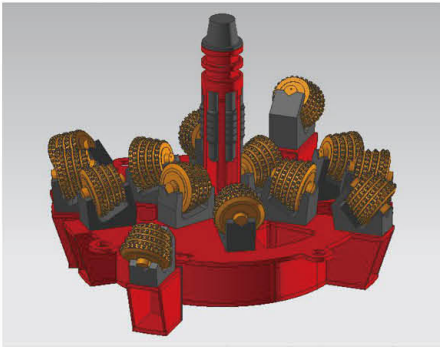
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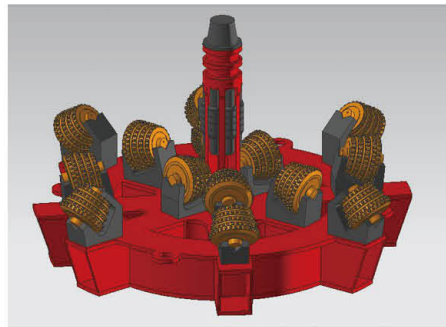
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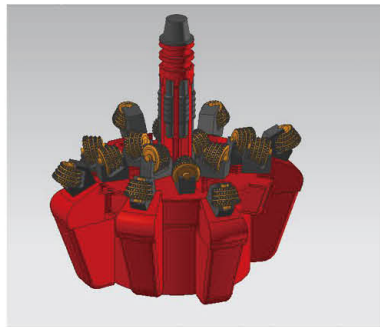
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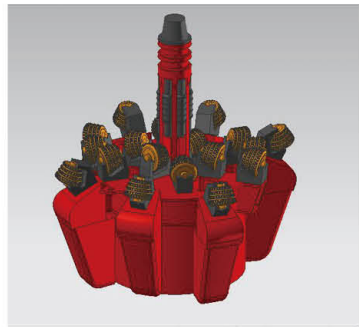
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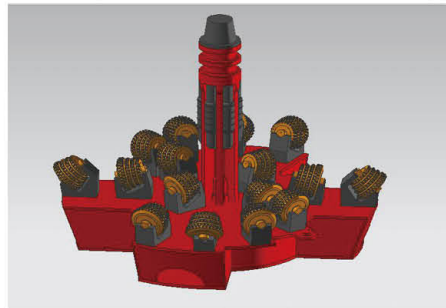
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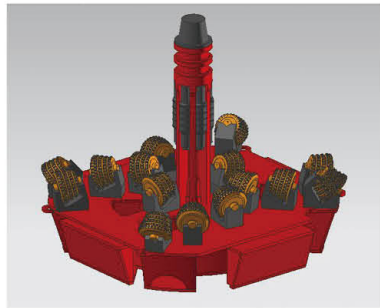
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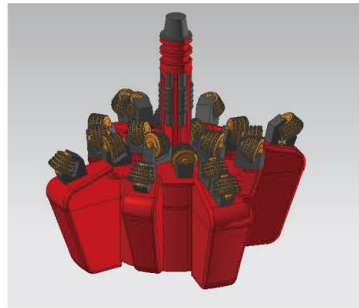
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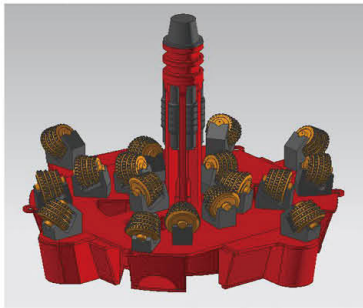
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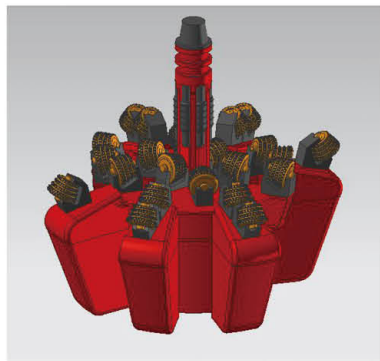
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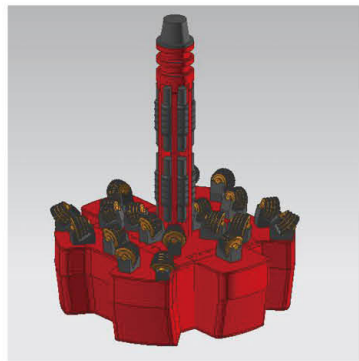
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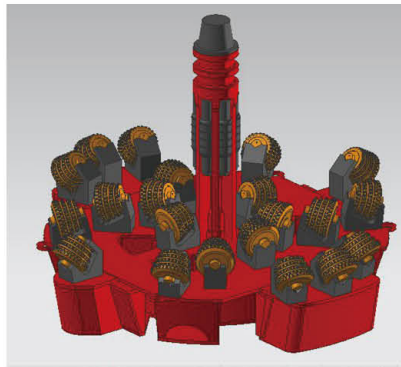
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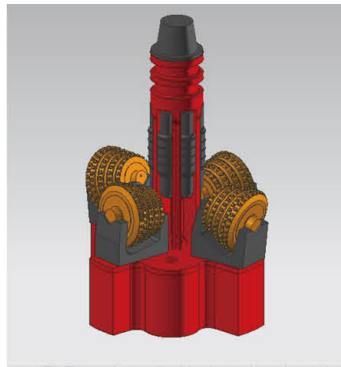
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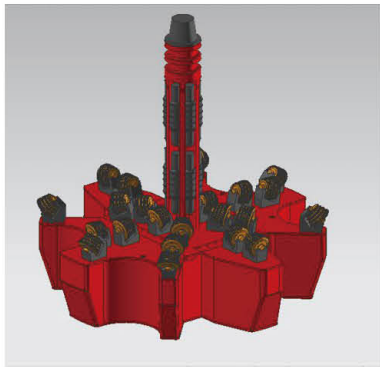
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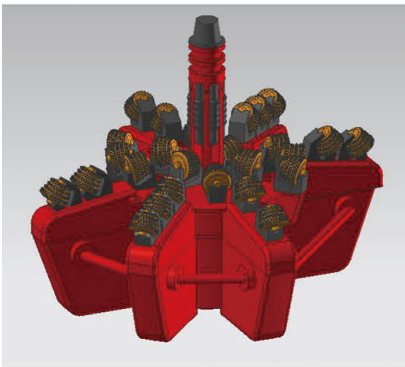
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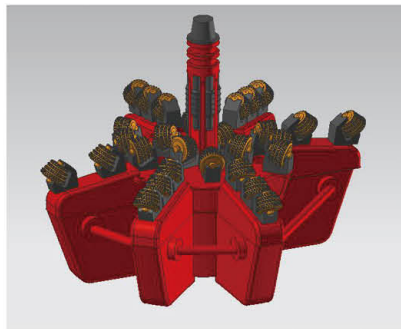
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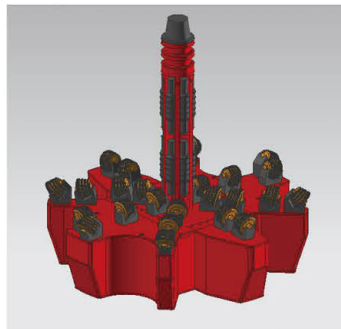
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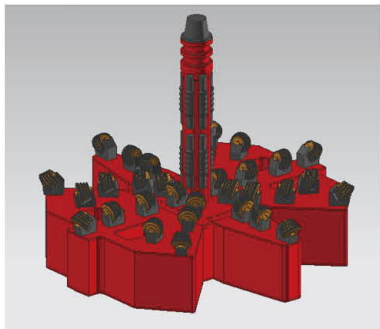
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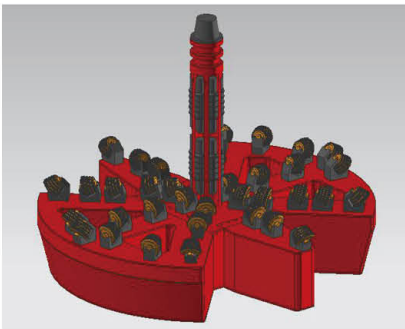
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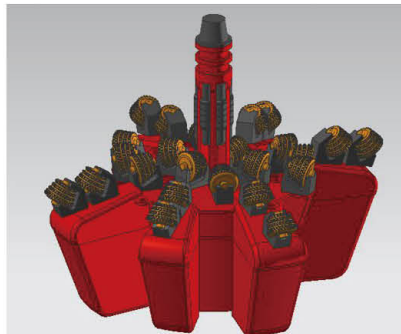
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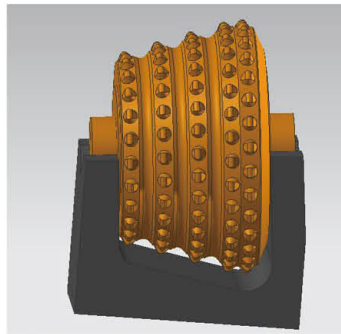
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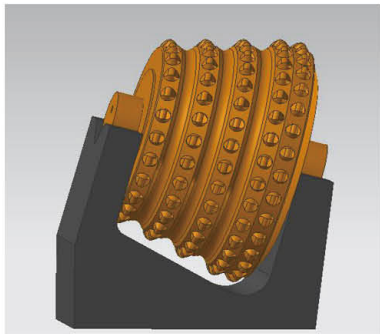
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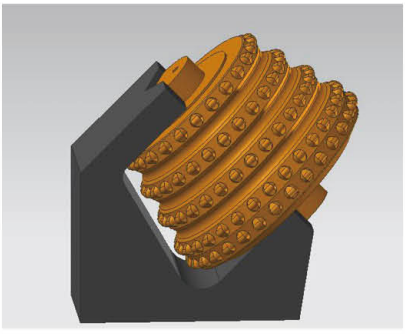
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STEM POSITION CUTTER



MIDDLE POSITION CUTTER



GAUGE POSITION CUTTER

» 钻孔器芯棒 Reamer stem bar

主要技术参数 / Main technical specification							
名义尺寸 Size	台肩到末端的记录 shoulder to shoulder length	内孔的直径 Bore diam.	颈部的直径Neck diam.	筋的直径 Diam. Over ribs	扳手对面的距离 Diemensions across spanner flats	螺纹的连接方式Pin and box connections*	重量 weight
A	B	C	D	E	F		
in mm	in mm	in mm	in mm	in mm	in mm		kg
8" 230.2	48" 1219.2	2 13/16" 71.4	6 1/4" 158.8	9"or9 7/8" 235or 250.8	6 7/8" 174.6	6 3/4" R.B.-DI22	160
10" 245	60" 1524	2 13/16" 71.4	7 7/8" 200	11" 279.4	8" 203.2	8 1/4" R.B.-DI22	315
11 1/4" 286.8	60" 1524	3 3/4" 95.3	9" 228	12 1/4" 311.2	9" 228	9 1/4" R.B.-DI22	450
12 7/8" 323.9	60" 1524	4 3/4" 120.7	10 1/2" 266.7	13 3/4" 349.3	10 1/2" 266.7	10 1/2" R.B.-DI22	700

» 钻杆的旋转工具 / Wrench

主要技术参数 Main technical specification :

1. Size : 8" ~12-7/8"
2. 选用材料 Raw material ;
HARDOX , EN26, EN36 etc .



TBM 刀具 | TBM cutter head and cutter

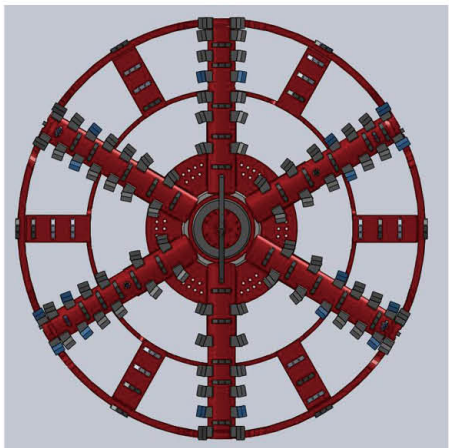
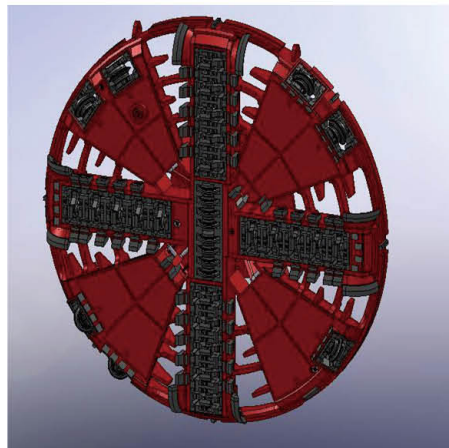
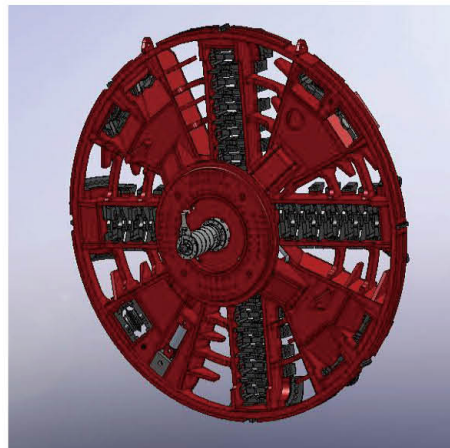
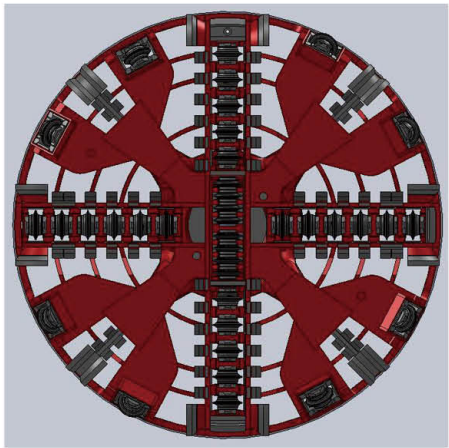
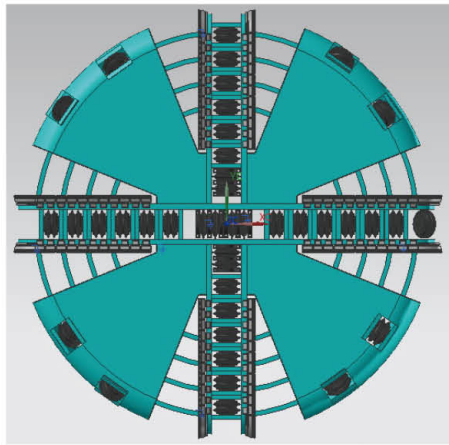
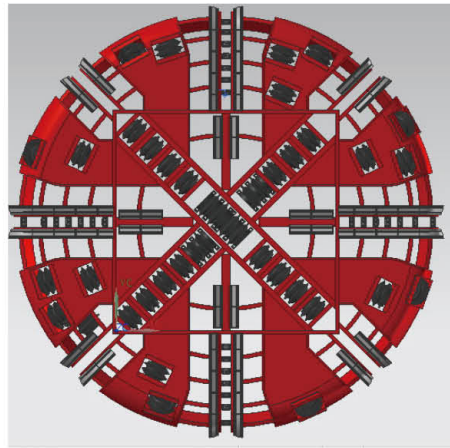
TBM 刀盘和刀具

我们公司能够生产盾构机的刀盘，根据岩石和泥浆的不同特点，我们可以提供不同的形式，最大的直径可以达到 14 米。同时我们可以生产刀盘上不同的滚刀和其他各种刀具。

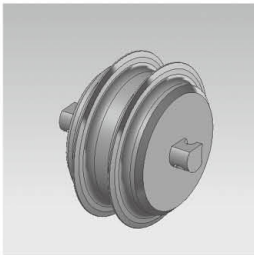
TBM Cutter Head and Cutter

This kind of cutter head is used for TBM machine . We could manufacture all kinds of cuter head according to different tunnel rock and slurry condition, diameter from 1Meter to 14M . At the same time we could manufacture all kinds of cutters on the cutter head, including single disc cutter, double disc cutter, triple disc cutter, scraper tools, breaker tools, loading tools, ripper tools , shoe type tools .

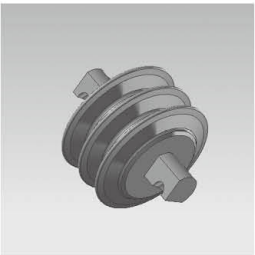
» TBM 刀盘 TBM CUTTER HEAD



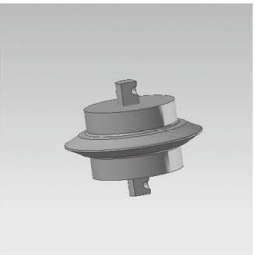
» TBM 滚刀



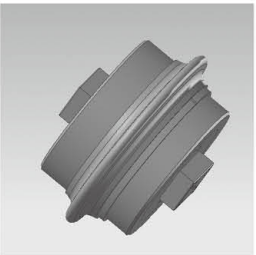
HD 双刃滚刀
HD Double Disc Cutter



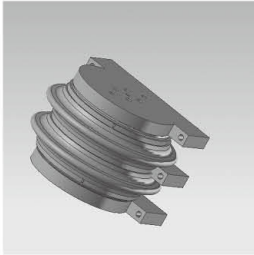
TCL 三刃滚刀
TCL Triple Disc Cutter



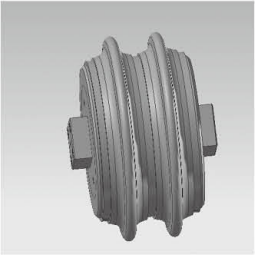
TCL 单刃滚刀
TCL Disc Cutter



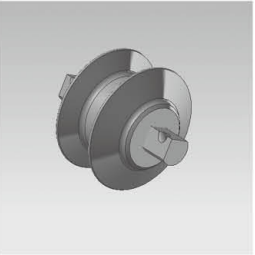
单刃滚刀
Single Disc Cutter



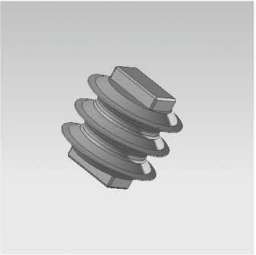
双刃中心滚刀
Twin Disc Center Cutter



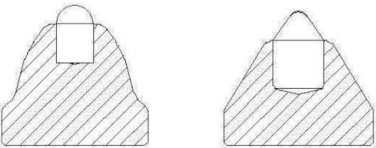
双刃滚刀
Double Disc Cutter



硬面双刃滚刀
Hardfaced Double Disc Cutter



硬面三刃滚刀
Hardfaced Triple Disc Cutter



刀头 - Mode

刀圈材料主要技术参数 / Cutter Ring Main Technical Specification

	化学成分 Chemical Specification %							
	C	Si	Mn	Cr	Mo	Ni	W	V
4Cr5MoSiV1	0.32-0.45	0.8-1.2	0.2-0.5	4.75-5.5	1.1-1.75			0.8-1.2
40CrNiMo	0.37-0.44	0.60-0.95	0.60-0.95	0.65-0.95	0.2-0.3	1.55-2.0		
5Cr5MoSiV	0.45-0.55	0.80-1.20	0.30-0.80	4.5-5.5	0.8-1.5			0.6-1.2
50CrMoV	0.48-0.53	0.80-1.10	0.20-0.40	4.8-5.2	1.25-1.45			0.8-1.0
6Cr4Mo2W2V	0.55-0.65	0.8-1.2	0.8-1.2	4.2-4.8	2.2-2.6		1.8-2.2	0.8-1.2
9Cr2Mo	0.85-0.95	0.2-0.45	0.2-0.35	1.7-2.1	0.2-0.4			

表面硬度 HRC56-60 淬火深度可达 20mm 以上
Surface hardness HRC56-60 , quenching depth above 20mm

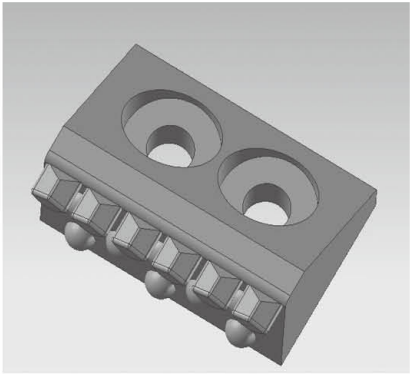
»

滚刀技术参数 / Roller Cutter Specification

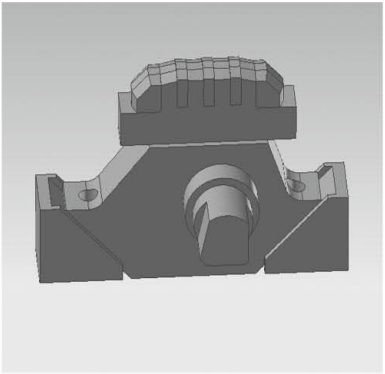
尺寸 Size inch/mm	载荷Capacity Tonnes	“安装方式 Mounting Method”	“滚刀类型 Cutter Type”	“刀圈特点 Hub Feature”
19” 483mm	35	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
18” 457mm	28	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
17”Special	35	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
17” 432mm	25	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
16 1/4” 406mm	25	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
15 1/2” 394mm	25	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
15” 381mm	20-25	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
14” 356mm	20	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
13” 330mm	16	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
12” 305mm	12-16	前/后 front/back	单/双 single/double	整体/可更换 monoblock/removable
12 1/2” 320mm	14	前/后 front/back	单/双/三 single/double/triple	整体/可更换 monoblock/removable
12” 305mm	12-16	前/后 front/back	单/双/三 single/double/triple	整体/可更换 monoblock/removable
11” 280mm	13	前/后 front/back	单/双/三 single/double/triple	整体/可更换 monoblock/removable
10” 250mm	10	前/后 front/back	单/双/三 single/double/triple	整体/可更换 monoblock/removable
9” 220mm	8-10	前/后 front/back	单/双/三 single/double/triple	整体 monoblock
8” 200mm	8	前/后 front/back	单/双/三 single/double/triple	整体 monoblock
7” 180mm	8	前/后 front/back	单/双/三 single/double/triple	整体 monoblock
6 1/2” 165mm	5	前 front	单/双/三 single/double/triple	整体 monoblock
6” 150mm	4	前 front	单/双/三 single/double/triple	整体 monoblock

»

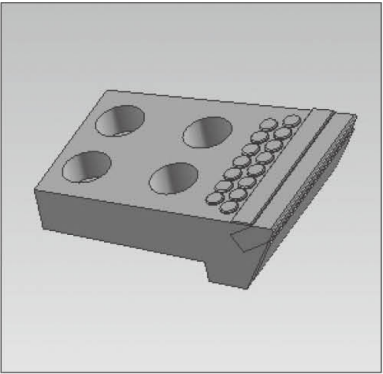
TBM 其他刀具



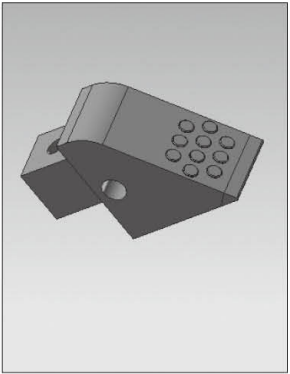
保径刀
Diameter Preserving Knife



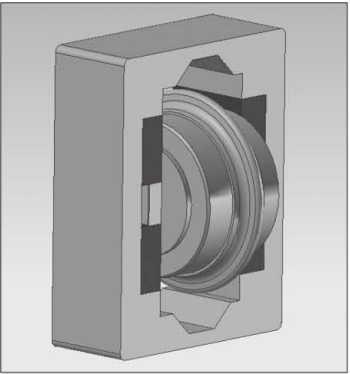
正面撕裂刀
Front Tearing Knife



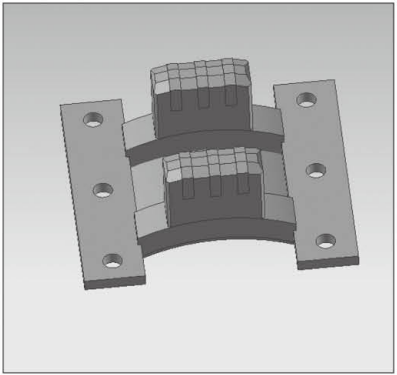
刮刀
Loading Tools



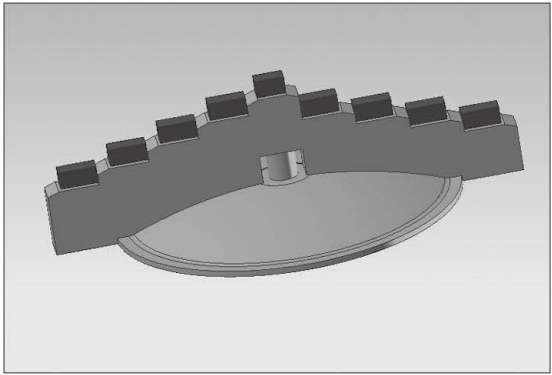
刮刀
Scraper Tools-2



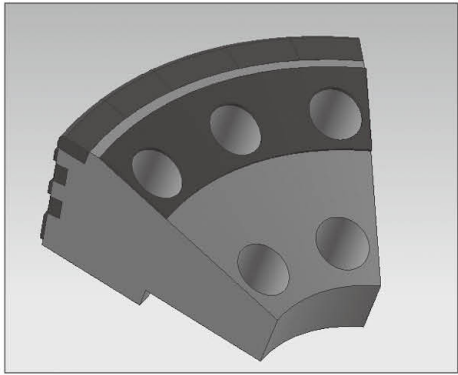
滚刀
Mounting Cutter



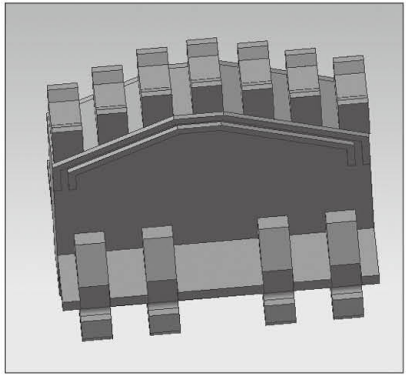
双联撕裂刀
Double Tearing Knife



鱼尾刀
Fish Knife



边缘刮刀
Edge Scraper



中心刀
Center Knife