With rigorous design and rationally selected material, this product adopts several patented technology and is perfect in workmanship.

We have a whole variety of with specification varying from 13”-21”.

It is possible to be replaced by TBM and shield machine disc cutter from Wirth, Herrenknecht, Mitsubishi, Komatsu and NFM etc.

Imported TIMKEN bearing are equipped to ensure large load capacity and long life.

Imported or domestically famous sealings and imported lubricating oil are used to ensure reliable sealing performance.

Hobs can be applied in a wide range of rock strata (from 20 to 300Mpa).

Customerized hobs can be made to meet the requirement of the customers or in according to the construction stratum conditions.
Disc Cutter
The manufacturing adopts patented technology with independent intellectual property rights. There are a variety of high-alloy steel cutter series, ball tooth cutter series, composite material cutter series, shown as in the following table.

Customized tooth shape can be designed as per the rock strata conditions or the requirement of the customers.

It is possible to be replaced by cutters from Wirth, Herrenknecht, Mitsubishi, Komatsu and NFM etc.

### Performance and application of 17’’ (cutters)

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Performance Index</th>
<th>Applicable Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy-duty steel cutter</td>
<td>HRC54-58</td>
<td>70-200Mpa hard rock strata</td>
</tr>
<tr>
<td>Common steel cutter</td>
<td>HRC52-56</td>
<td>20-100Mpa compound rock strata</td>
</tr>
<tr>
<td>Ball tooth cutter1</td>
<td>HRA86-87(alloy)</td>
<td>TBM，100-300Mpa hard rock strata</td>
</tr>
<tr>
<td>Ball tooth cutter2</td>
<td>HRA86.5-87.5(alloy)</td>
<td>20-100Mpa compound rock strata with great grind index</td>
</tr>
</tbody>
</table>
Hob Accessories

The products are manufactured with rigorous design, rationally selected material and advanced technology.

We can supply accessories and repair parts for disc cutter from different factories.

We can repair hobs and replace TIMKEN bearings, cutters and sealing for customers.
The hard alloy are of imported or home high-impact and high wear-resistant brands. The main brands are shown in the following table.

The cutter is made by high-performance air-quenching alloy steel with HRC40-50. The key position of the cutter surface will be welded with 3-5mm wear-resisting layer.

The hard alloy and the cutter will be joint with medium or high-frequency brazing or inlaying technology Silver-base or copper-base alloy is used as welding flux.

We provide interchangeable scrapers and tooth cutter for the shield machine cutters between Herrenknecht, Mitsubishi, Komatsu, NFM and LOVAT etc.

Customized tooth cutters, tearing cutters and scrapers can be made to meet the requirement of the customers or in according to the strate conditions.

### Brand and Performance of Common Hard alloy

<table>
<thead>
<tr>
<th>Brand</th>
<th>Density (g/cm³)</th>
<th>Hardness (HRA)</th>
<th>Bending Strength (N/mm²)</th>
<th>Applicable Working Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>YG10</td>
<td>14.4-14.6</td>
<td>87-87.5</td>
<td>≥2400</td>
<td>alloy for inlaying technology</td>
</tr>
<tr>
<td>YG11C</td>
<td>14.3-14.5</td>
<td>86.5-87.5</td>
<td>≥2500</td>
<td>soft-soil and fine-sand strata</td>
</tr>
<tr>
<td>YG13C</td>
<td>14.1-14.3</td>
<td>86-87</td>
<td>≥2600</td>
<td>pebbly sand strata</td>
</tr>
<tr>
<td>YG15C</td>
<td>14.0-14.2</td>
<td>85-86</td>
<td>≥2700</td>
<td>interbedding layer</td>
</tr>
</tbody>
</table>
Cutters and Scrapers
Ball teeth hobs and supporting the saddle knife seat and tank knife seat

Welding hobs and supporting the saddle knife seat and tank knife seat

Welding center hobs

Ball teeth center hobs

6", 8", 12" series of ball gear hob, welding gear hob, gear hob alloy steel, suitable for saturated uniaxial compressive strength of rock in the 10-20Mpa to use, large load capacity, long life, sealed reliable performance characteristics.
12” inlaid hob tooth carbide for mining underground excavation large section of the courtyard and the slide works well for 80Mpa-180Mpa uniaxial compressive strength of rock, with rock good effect, good abrasion resistance and long service life.
Drill cutters
According to the user’s requirements, to produce various drill bits or the cutters

φ8.3m full section shaft hob drill bit

φ3m scraper drill bit

φ3.5m full section shaft ball hob drill bit

φ3.5m full section shaft welding hob drill bit

Export the drill bit

φ2m mine drill bit
Shield Tunnel Boring Machine used on Shanghai subway

Shield machine tool in the Guanhui 6 marked soft hard gneiss strata through the tunnel

The cutting machine tool in Beijing metro line two, ten sand and gravel stratum.

The shield machine tool in chengdu Metro Line 3 rich water sand gravel stratum.

Shield machine tools in shenzhen No.9101

Shield machine tool in Nanjing latitude three passing River Tunnel
Shaft Construction Case

φ4.5m pile bit of the Pingtan sea bridge, China

φ3.4m scraper drill bit be used on bridge site construction

φ6.3m combined drill bit Zunhua Wen Jia Zhuang

φ3.4m welding hob bit be used on bridge site construction

3° welding gear hob drill bit be used on the building site

Ball gear hob drill bit on the building site of Hong Kong
“Globle Drilling Industry Experts”

No matter what kinds of soft rock, loose-medium rock, hard rock and any other special formations, just tell us what you need, our special tailored service is waiting for you upon your demand.

KEMAICO

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