APPLICATION OF CT CUTTER HEADS

Curve Tooth cutter heads can be used with all soil varieties, ranging from easy flowing sand and silt to stiff clay types and hard-packed sand. They are especially effective in light and heavy-duty rock applications.

To efficiently and cost-effectively deploy the Curve Tooth cutter head in these conditions, a wide range of optional parts and peripherals is available. These vary from several types of cutting equipment (flared or narrow chisels and pick points) to knock-off blocks on the contour ring, and from stone gratings and grizzly bars to all sorts of wear protection on the cutter head body.

OPTIONS & CONFIGURATIONS

Curve Tooth cutter heads are available in two types of applications. For medium to hard soils such as hard-packed sand or hard rock, the cutter head with shank adapters is preferred. This is available for 1,400kW up to 7,000kW.

For soft and medium hard soils up to packed sand, the Curve Tooth cutter head with wing adapters is preferred. This is available in a range fit from 375kW up to 8,000kW.

Both variants use the same design of Curve Teeth available as pick points, and narrow or flared chisels.

WHICH CUTTER HEAD IS RIGHT FOR YOUR PROJECT?

- Wide chisel, narrow chisel, and pick point connected to shank adapter
- Narrow chisel and wide chisel connected to wing adapter
IHC has extended its cutter head portfolio with a new Curve Tooth system that promises to deliver the best value for money in the market. The general shape of the cutter head is the result of a long-lasting scientific research for maximising the performance of a cutter head. Best practices from the field combined with the results of this research resulted in a long list of the most sought-after features for a state-of-the-art cutter head and makes this cutter head the new standard in the market.

**FEATURES**

- Strong teeth to be able to penetrate hard soils
- Strong adapters to withstand all cutting forces
- Durables teeth and adapters
- Easy changing of the teeth
- Hammerless locking
- Teeth as light as possible
- A locking mechanism that is covered, preventing contact with soil
- Adapters protected against abrasive action of the soil.

**USER FRIENDLY**

The cutter body is cast as a single piece including back ring, arms and hub, which makes it intrinsically strong and durable, as there are no weak points resulting from welding. A cutter head is a complex shape and demands quite some ingenuity to realise as a single-part cast. The body of the Curve Tooth cutter head is one piece of continuous material, unlike other versions where the back ring, arms and the hub are welded together after casting. To meet customer requirements, the body can also be manufactured traditionally as a welded construction if preferred.

**SINGLE-CAST BODY**

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**EXTRA STRONG STEEL**

As well as the intrinsic strength of the Curve Tooth related to its curved design, the material also contributes to its longevity. The material of the teeth and adapters is based on a specialised material used in the dry mining industry for a long time. It is strong, wear-resistant and corrosion-resistant even under extreme conditions. This makes the teeth suitable for the most demanding applications of dredging hard rock and also offers a long lifetime in all other applications.

The locking mechanism is designed with safety in mind following the current standards in the market of hammerless operation. It is integrated inside the tooth, so there is no contact between soil or other abrasive materials and the locking mechanism. The ‘locked-in’ locking enables the teeth to be easily replaced by one person. The locking mechanism is inside the tooth, so when the cutter ladder is lifted to change the teeth, it can be carried out quickly and easily. Tooth exchange is faster with the Curve Tooth system to meet market demand.

**BENEFITS**

- Stronger and more compact than straight teeth
- Able to withstand higher strains and stresses with the smallest possible cross-sectional area of the teeth
- The cutting element of the teeth is self-sharpening
- Fixation of the teeth to the adapter is maximised by its curvature of the tail preventing abrasive action and wear.

**BACK RING INSIDE**

<table>
<thead>
<tr>
<th>Type</th>
<th>Width</th>
<th>Power</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 CT</td>
<td>2,030mm</td>
<td>1,400kW</td>
<td>9,000kg</td>
</tr>
<tr>
<td>40 CT</td>
<td>2,330mm</td>
<td>2,200kW</td>
<td>12,000kg</td>
</tr>
<tr>
<td>50 CT</td>
<td>2,430mm</td>
<td>3,500kW</td>
<td>18,000kg</td>
</tr>
<tr>
<td>60 CT</td>
<td>2,600mm</td>
<td>5,000kW</td>
<td>22,000kg</td>
</tr>
</tbody>
</table>

Although worn almost halfway, the teeth show a sharp and crisp edge.