Eaglecut / Birdiecut

**Shortening the process!**
- By using our original Geometric insert, we successfully secured shortening time and saving manufacturing cost tremendously.

**Geometric Insert**
- Lower stage when using corner
- Upper stage when using corner
- Our own geometric insert realized cost down and shorten the working time very much.

1. **Eaglecut**
   - M4~M6
   - Body: EC12-BX-M4
   - Insert: XX21MN-X4 NK2020
   - Material: SKD11
   - Cutting Conditions: S3000 F100
   - Water-soluble coolant
   - 0.5 step sends

   **Result**
   - 1760 places / 1 Corner
   - Good surface finish and a stable cutting result is obtained

2. **Eaglecut**
   - M8~M30
   - Body: EC12-14XS-M8
   - Insert: XS22MN-X8 NK6060
   - Material: SUS304
   - Cutting Conditions: S1600 F70
   - Water-soluble coolant
   - 0.5 step sends

   **Result**
   - 510 places / 1 Corner
   - Good surface finish and a stable cutting result is obtained

3. **Birdiecut**
   - M8~M30
   - Body: EC12-14XS-M8
   - Insert: XS22MN-X8 NK6060
   - Material: SUS304
   - Cutting Conditions: S1600 F70
   - Water-soluble coolant
   - 0.5 step sends

**Processing Example**
### Cutting Conditions

<table>
<thead>
<tr>
<th>Material</th>
<th>Feed per blade (µm)</th>
<th>NK2020 Cutting speed (m / min)</th>
<th>NK606 Cutting speed (m / min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General steel</td>
<td>0.05~0.1</td>
<td>50~100</td>
<td>50~100</td>
</tr>
<tr>
<td>Alloy steel</td>
<td>0.05~0.1</td>
<td>50~100</td>
<td>50~100</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>0.25~0.1</td>
<td>40~80</td>
<td>40~80</td>
</tr>
<tr>
<td>Aluminum, brass</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Cast steel</td>
<td>0.05~0.1</td>
<td>50~100</td>
<td>50~100</td>
</tr>
</tbody>
</table>

- Feed per blade: Recommended feed per blade for each material.
- Cutting speed: Range of cutting speed in NK2020 and NK606 models.

According to workpiece shape, large or small chamfering amount and position of blade the cutting conditions will have to be adjusted.

When chamfering in large amount, please take lowering cutting condition.

Coolant will be recommended.

Insert recommended for the workpiece.

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### Eaglecut Processing Dimensional Drawing

- Model: M6, M9, M12, M14, M16, M18, M20, M22, M24, M26, M28, M30
- Dimensions: \( \phi D, \phi D1, \phi D2, \phi D3, \phi d, L, \phi s, \phi t \)
- Inserts: NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N

### Birdiecut Processing Dimensional Drawing

- Model: M8, M10, M12, M14, M16, M18, M20, M22, M24, M26, M28, M30
- Dimensions: \( \phi D, \phi D1, \phi D2, \phi D3, \phi d, L, \phi s, \phi t \)
- Inserts: NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N, NN2111N