TOOL HOLDERS
TSUGAMI P03.
PCM WILLEN SA

For over 40 years, PCM Willen SA is one of the world’s leading manufacturers of special tool holders for automatic lathes. All our products are developed and manufactured in Switzerland and bear the label «Swiss Made», which is synonymous with precision, quality and reliability.

Our company is located in the middle of French-speaking part of Switzerland at the edge of Lake Geneva near Montreux. Our international dealer network ensures continued after sales support. We offer training courses, which we tailor to individual customer requirements.

PCM stays for innovation and progress. Our superbly qualified engineering staff ensures finest quality of manufacturing solutions and keeps our customers ahead of the competition.

In close cooperation with machine builders and end users, we stay on the way to satisfied customers. We will keep this track in the future.

The best quality toolholders can only provide optimum performance if they are maintained or repaired with first class replacement parts. PCM experts emphasize professional after sale support for all PCM equipment.
YOUR CHOICE N°1 IN TOOLING SYSTEMS

- Long service life
- Very gentle transmission even at high speed operation
- 100% tested
- Customised tool available

Advantages

- High performance seal for an hermetic tool holder
- High precision preloaded spindle ball bearings class P4S
- Low backlash and high transmission accuracy
- Different clamping systems in high precise concentricity
- Case-hardened and grinded spindle
- High flexible coolant system (Hirt Line)
- Different ratios available
- Available with coolant through the spindle
- Case-hardened and paired bevel gears system

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# TSUGAMI P034H

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Rotation:  
- CW Clockwise  
- CCW Counterclockwise  

Cooling:  
- INT Interior  
- EXT Exterior  
- Without
P03-GSC-117-S

**ER11**

**1:2**

**RPM max.** 16'000

**Machines Types** P034H

**Note:**

Original main block is to replace by this tool. To adjust the offset please contact your local TSUGAMI dealer.

Tool N°01 cutter carrier 8mm x 8mm

Tool N°02 cutter carrier 8mm x 8mm

Tool N°03 high frequency Ø25

Tool N°04 in ER11 with RPM 16’000.

Tool N°05 is a modular quick change for different operation.

P03-GDF-416

**Ø** 3x16

**Machines Types** P034H

**Note:**
**PO3-GDF-516**

<table>
<thead>
<tr>
<th>Ø</th>
<th>3x16</th>
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**Machines Types**

P034H

**Note:**

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**PO3-GTF-018**

<table>
<thead>
<tr>
<th>7x(8x8)</th>
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**Machines Types**

P034H

**Note:**
TSUGAMI P034H
Face drill/mill tools

P03-GSE-207-II

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Connections</td>
<td>2xER11</td>
</tr>
<tr>
<td>Reduction Ratio</td>
<td>1:1</td>
</tr>
<tr>
<td>RPM max.</td>
<td>8,000</td>
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<tr>
<td>Machines Types</td>
<td>P034H</td>
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Note:
### P03-GSC-015

<table>
<thead>
<tr>
<th>ER08</th>
<th>1:1</th>
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<tbody>
<tr>
<td>RPM max.</td>
<td>8,000</td>
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<td>Machines Types</td>
<td>P034H</td>
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</table>

**Note:**

CW

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# P03-GSH-135-L

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Diameter</td>
<td>3.5</td>
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<tr>
<td>Gear Ratio</td>
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<tr>
<td>RPM max.</td>
<td>8'000</td>
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<tr>
<td>Machines Type</td>
<td>P034H</td>
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</tbody>
</table>

**Note:**
Adjustable ±2.5°
PO3-GSP-118

- [ ]
- [ ]
- [ ]
- [ ]

RPM max. 8’000

Machines Types P034H

Note:
Adjustable ±2.5°
Max. tool Ø45 mm

PO3-GSP-218

- [ ]
- [ ]
- [ ]
- [ ]

RPM max. 8’000

Machines Types P034H

Note:
Adjustable ±2.5°
Max. tool Ø45 mm
Cutter-saw has the same offset as the cutter carrier
**PO3-GSP-318**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
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<tbody>
<tr>
<td>RPM max.</td>
<td>8’000</td>
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<td>Machines Types</td>
<td>P034H</td>
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<tr>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td>Adjustable in X ±2.5°</td>
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</tr>
<tr>
<td>Adjustable in Y ±1.5°</td>
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<tr>
<td>Max. tool Ø45 mm</td>
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</tbody>
</table>

**Specifications**

- **RPM max.:** 8'000
- **Machines Types:** P034H
- **Note:**
  - Adjustable in X ±2.5°
  - Adjustable in Y ±1.5°
  - Max. tool Ø45 mm
<table>
<thead>
<tr>
<th>Name</th>
<th>P03-GSW-220</th>
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<tbody>
<tr>
<td>RPM max.</td>
<td>8'000</td>
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<td>Machines Types</td>
<td>P034H</td>
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<tr>
<td>Note</td>
<td>Adjustable 0°-20°</td>
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</tbody>
</table>

**TSUGAMI P034H**

- **Whirling tools**
- **P03-GSW-220**

- **1:1**
- **CW**
- **RPM max.** 8'000
- **Machines Types** P034H
- **Note**: Adjustable 0°-20°