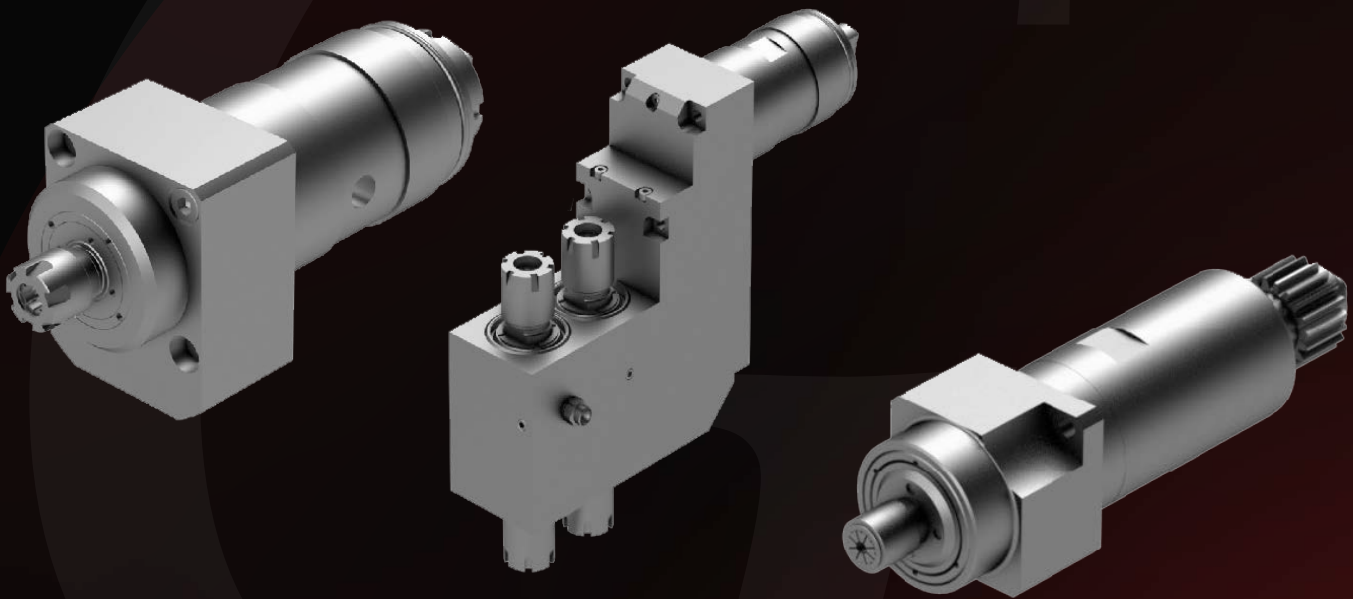




# Live Tooling

For TSUGAMI Swiss Machines

by  **PCM**  
*be driven.*



- Exceptionally Accurate Spindle Concentricity
- Hardened And Ground Gearing For Smooth And Quiet Service Life
- Maintenance Friendly Designs Are Serviceable
- Innovative Sealing System Protects Internals From Debris And Cutting Oil Contamination
- Includes REGO-FIX Hi-Q Collet Nuts

[www.genswiss.com](http://www.genswiss.com) | 1-(413)-562-4800

[sales@genswiss.com](mailto:sales@genswiss.com)

# Live Tooling For TSUGAMI Swiss-Style Machines

| Machine  | Page          | Operation                 | Product No.        | (#Tools)Size  | Output | Notes  |
|--|---------------|---------------------------|--------------------|---|--------|--|
| BW207<br>BW208<br>BW208Z<br>BW209Z   | Pg. 3         | Radial Drilling / Milling | BW20-GSC-105-4X    | (1) ER08  | 1:3.8  | High Speed Spindle Up To 30,400 RPM  |
| B073-III<br>B074-III<br>B075-III<br>B0123-III<br>B0124-III<br>B0125-III<br>B0126-III<br>B0203-III<br>B0204-III<br>B0205-III<br>B0206-III | Pg. 3 - 4     | Radial Drilling / Milling | B07-GSC-105-4X     | (1) ER08  | 1:3.8  | High Speed Spindle Up To 22,800 RPM  |
|  |               |                           | B07-GSC-107-4X     | (1) ER11  | 1:3.8  | High Speed Spindle Up To 22,800 RPM  |
|  |               |                           | B07-GSC-110        | (1) ER16  | 1:1    |  |
|  |               | Axial Drilling / Milling  | B07-RSE-207        | (2) ER11  | 1:1    |  |
|  |               |                           | B07-RSE-207-IK     | (2) ER11  | 1:1    | Internal Coolant-Thru  |
|  |               |                           | B07-RSE-207-2X     | (2) ER11  | 1:2    | High Speed Spindle Up To 16,000 RPM  |
|  |               |                           | B07-RSE-207-IK-2X  | (2) ER11  | 1:2    | High Speed Spindle Up To 16,000 RPM, Internal Coolant-Thru                 |
|  |               |                           | B07-GSA-207        | (2) ER11  | 1:1    | Adjustable 90°   |
|  |               | Angled Drilling / Milling | B07-GSA-207-IK     | (2) ER11  | 1:1    | Adjustable 90°, Internal Coolant-Thru                                      |
|  |               |                           | B07-GSA-207-2X     | (2) ER11  | 1:2    | High Speed Spindle Up To 16,000 RPM, Adjustable 90°                        |
|  |               |                           | B07-GSA-207-IK-2X  | (2) ER11  | 1:2    | High Speed Spindle Up To 16,000 RPM, Adjustable 90°, Internal Coolant-Thru |
|  |               | Slitting Saw              | B07-GSS-110        | (1) ER16  | 1:1    | Max Tool Ø70mm   |
| Thread Milling   | B07-GSF-418   | (1) 8mm                   | 1:1                | Max Tool Ø72mm<br>Tool Width 3-5mm  |        |  |
|  | B07-GSF-518   | (1) 8mm                   | 1:1                | Max Tool Ø72mm<br>Tool Width 3-5mm<br>Adjustable 1.5°   |        |  |
| B0265 II<br>B0265B II<br>B0266 II<br>B0325 II<br>B0325B II<br>B0326 II   | Pg. 4 - 5     | Radial Drilling / Milling | B026-GSC-105-4X    | (1) ER08  | 1:3.8  | High Speed Spindle Up To 22,800 RPM  |
|  |               |                           | B026-GSC-107-4X    | (1) ER11  | 1:3.8  | High Speed Spindle Up To 22,800 RPM  |
|  |               |                           | B026-GSC-107-3X    | (1) ER11  | 1:3    | High Speed Spindle Up To 15,000  |
|  |               |                           | B026-BSC-110-HP    | (1) ER11  | 1:1    | Internal Coolant-Thru  |
| B026<br>B032<br>B038   | Pg. 5 - 6     | Axial Drilling / Milling  | B026-RSE-110       | (2) ER16  | 1:1    | Double-Ended   |
|  |               |                           | B026-RSE-110-IK    | (2) ER16  | 1:1    | Double-Ended, Internal Coolant-Thru  |
|  |               |                           | B026-RSE-110M      | (1) ER16  | 1:1    |  |
|  |               |                           | B026-RSE-110M-IK   | (1) ER16  | 1:1    | Internal Coolant-Thru  |
|  |               |                           | B026-RSE-210       | (4) ER16  | 1:1    | Double-Ended   |
|  |               |                           | B026-RSE-210-IK    | (4) ER16  | 1:1    | Double-Ended, Internal Coolant-Thru  |
|  |               |                           | B026-RSE-210M      | (2) ER16  | 1:1    |  |
|  |               |                           | B026-RSE-310       | (6) ER16  | 1:1    | Double-Ended   |
|  |               |                           | B026-RSE-310-IK    | (6) ER16  | 1:1    | Double-Ended, Internal Coolant-Thru  |
|  |               |                           | B026-RSE-310M      | (3) ER16  | 1:1    |  |
|  |               |                           | B026-RSE-310M-IK   | (3) ER16  | 1:1    | Internal Coolant-Thru  |
| S205<br>S206   | Pg. 6         | Radial Drilling / Milling | S20-RSC-107-3X     | (1) ER11  | 1:3    | High Speed Spindle Up To 24,000 RPM  |
|  |               | Axial Drilling / Milling  | S20-RSE-107-3X     | (1) ER11  | 1:3    | High Speed Spindle Up To 24,000 RPM  |
|  |               | Polygon Milling           | S20-GSP-613        | (1) 13mm  | 1:1    | Max Tool Ø72mm<br>Max Tool Thickness 8.3mm                                 |
|  |               | Slitting Saw              | S20-RSS-110        | (1) ER16  | 1:1    | Max Tool Ø70mm   |
|  |               | Thread Whirling           | TSUGAMI1-GSW-220   | (1) Utilis Ring   | 1:1    | Adjustable 0-20°<br>Utilis Ring: 6mm Flight Circle                         |
| SS20<br>SS32<br>HS20<br>HS32   | Pg. 6 - 7     | Radial Drilling / Milling | HS20-GSC-107-3X-II | (1) ER11  | 1:3    | High Speed Spindle Up To 15,000 RPM  |
|  |               | Axial Drilling / Milling  | HS20-GSE-107-3X-II | (1) ER11  | 1:3    | High Speed Spindle Up To 15,000 RPM  |
|  |               | Polygon Milling           | HS20-GSP-613       | (1) 13mm  | 1:1    | Max Tool Ø72mm<br>Max Tool Thickness 8.3mm                                 |
| P034H  | Pg. 7 - 8     | Axial Drilling / Milling  | P03-GSE-207-II     | (2) ER11  | 1:1    |  |
|  |               | Radial Drilling / Milling | P03-GSC-015        | (1) ER08  | 1:1    |  |
|  |               | Gear Hobbing              | P03-GSH-135-L      | (1) 3.5mm   | 1:1    | Adjustable ±2.5°   |
|  |               | Polygon Milling           | P03-GSP-118        | (1) 8mm   | 1:1    | Adjustable ±2.5°<br>Max Tool Ø45mm   |
|  |               |                           | P03-GSP-218        | (1) 8mm   | 1:1    | Adjustable ±2.5°<br>Max Tool Ø45mm<br>Cutter Offset                        |
|  |               |                           | P03-GSP-318        | (1) 8mm   | 1:1    | Adjustable In X ±2.5°<br>Adjustable In Y ±1.5°<br>Max Tool Ø45mm           |
|  |               | Thread Whirling           | P03-GSW-220        | (1) Utilis Ring   | 1:1    | Adjustable 0-20°   |
|  |               | Static Holders & Blocks   | P03-GDF-416        | (3) 16mm  |        |  |
|  |               |                           | P03-GDF-516        | (3) 16mm  |        |  |
|  |               |                           | P03-GTF-018        | (7) 8x8mm   |        |  |
| Main Block Tool Holder with Gang Slide and High Speed Spindle  | P03-GSC-117-S | See Notes To The Right    | 1:2                | (2) 8x8mm Square Shank<br>(1) Ø25mm Holder For High Speed Spindle<br>(1) ER11 High Speed Spindle, Up To 16,000 RPM<br>(1) Modular |        |  |

High Speed!



Radial Drilling & Milling

**BW20-GSC-105-4X**

- ER08 Spindle
- 30,400 Max RPM
- 1:3.8 Gear Ratio
- Gang Tool T01, T02, T11, T12

TSUGAMI BW20

High Speed!



Radial Drilling & Milling

**B07-GSC-105-4X**

- ER08 Spindle
- 22,800 Max RPM
- 1:3.8 Gear Ratio
- Gang Tool T01

TSUGAMI B01, B02, B07

High Speed!



Radial Drilling & Milling

**B07-GSC-107-4X**

- ER11 Spindle
- 22,800 Max RPM
- 1:3.8 Gear Ratio
- Gang Tool T01

TSUGAMI B01, B02, B07

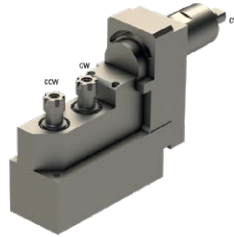


Radial Drilling & Milling

**B07-GSC-110**

- ER16 Spindle
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01

TSUGAMI B01, B02, B07

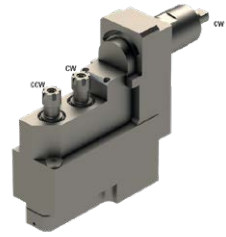


Axial Drilling & Milling

**B07-RSE-207**

- 2 ER11 Spindles
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01

TSUGAMI B01, B02, B07



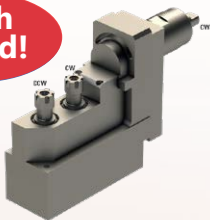
Axial Drilling & Milling

**B07-RSE-207-IK**

- 2 ER11 Spindles
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01
- Internal Cooling

TSUGAMI B01, B02, B07

High Speed!



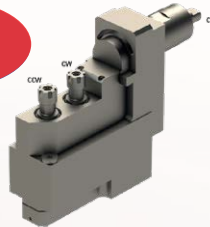
Axial Drilling & Milling

**B07-RSE-207-2X**

- 2 ER11 Spindles
- 16,000 Max RPM
- 1:2 Gear Ratio
- Gang Tool T01

TSUGAMI B01, B02, B07

High Speed!

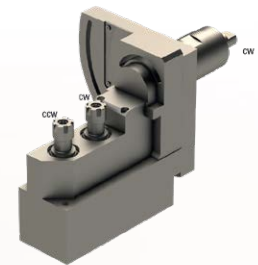


Axial Drilling & Milling

**B07-RSE-207-IK-2X**

- 2 ER11 Spindles
- 16,000 Max RPM
- 1:2 Gear Ratio
- Gang Tool T01
- Internal Cooling

TSUGAMI B01, B02, B07

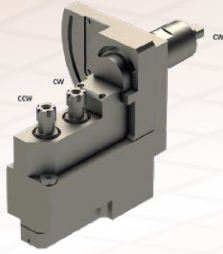


Angled Drilling & Milling

**B07-GSA-207**

- 2 ER11 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01
- Adjustable 90°

TSUGAMI B01, B02, B07



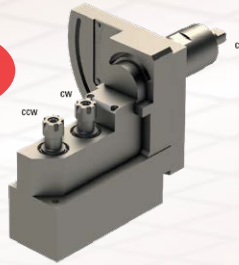
Angled Drilling & Milling

**B07-GSA-207-1K**

- 2 ER11 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01
- Adjustable 90°
- Internal Cooling

TSUGAMI B01, B02, B07

High Speed!



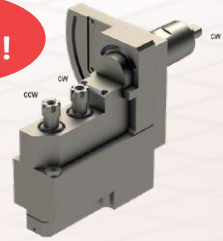
Angled Drilling & Milling

**B07-GSA-207-2X**

- 2 ER11 Spindles
- 16,000 Max RPM
- 1:2 Gear Ratio
- Gang Tool T01
- Adjustable 90°

TSUGAMI B01, B02, B07

High Speed!



Angled Drilling & Milling

**B07-GSA-207-1K-2X**

- 2 ER11 Spindles
- 16,000 Max RPM
- 1:2 Gear Ratio
- Gang Tool T01
- Adjustable 90°
- Internal Cooling

TSUGAMI B01, B02, B07

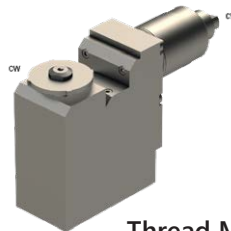


Slitting Saw

**B07-GSS-110**

- ER16 Spindle
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01
- Max Saw OD 70mm

TSUGAMI B01, B02, B07

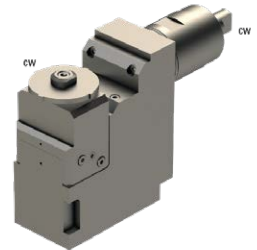


Thread Milling

**B07-GSF-418**

- 8mm Arbor
- 8,000 Max RPM
- 1:1 Gear Ratio
- Thread Mill OD 72mm
- Thread Mill Width 3-5mm

TSUGAMI B01, B02, B07



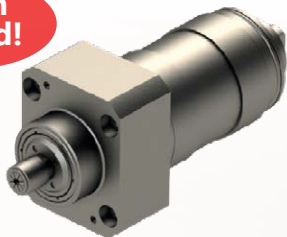
Thread Milling

**B07-GSF-518**

- 8mm Arbor
- 8,000 Max RPM
- 1:1 Gear Ratio
- Thread Mill OD 72mm
- Thread Mill Width 3-5mm
- Adjustable 1.5°
- Machine Type: B01, B02, B07

TSUGAMI B01, B02, B07

High Speed!



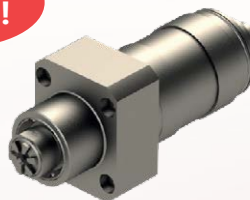
Radial Drilling & Milling

**B026-GSC-105-4X**

- ER08 Spindle
- 22,800 Max RPM
- 1:3.8 Gear Ratio
- Gang Tool T11-T15

TSUGAMI B026-II, B032-II

High Speed!



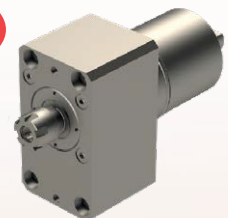
Radial Drilling & Milling

**B026-GSC-107-4X**

- ER11 Spindle
- 22,800 Max RPM
- 1:3.8 Gear Ratio
- Gang Tool T11-T15

TSUGAMI B026-II, B032-II

High Speed!

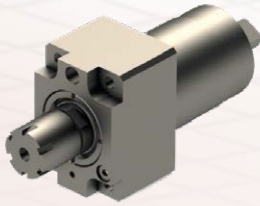


Radial Drilling & Milling

**B026-GSC-107-3X**

- ER11 Spindle
- 15,000 Max RPM
- 1:3 Gear Ratio
- Gang Tool T11-T15

TSUGAMI B026-II, B032-II



Radial Drilling & Milling

**B026-BSC-110-HP**

- ER11 Spindle
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11-T15
- Internal Cooling

TSUGAMI B026-II, B032-II

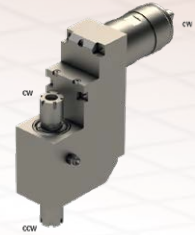


Axial Drilling & Milling

**B026-RSE-110**

- 2 ER16 Spindles
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended

TSUGAMI B026, B032, B038

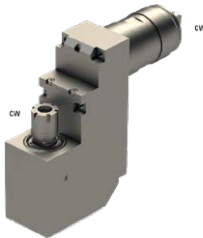


Axial Drilling & Milling

**B026-RSE-110-IK**

- 2 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended
- Internal Cooling

TSUGAMI B026, B032, B038

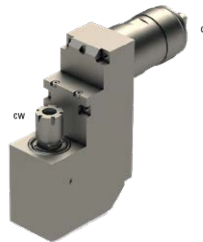


Axial Drilling & Milling

**B026-RSE-110M**

- ER16 Spindle
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11

TSUGAMI B026, B032, B038

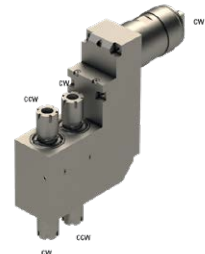


Axial Drilling & Milling

**B026-RSE-110M-IK**

- ER16 Spindle
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Internal Cooling

TSUGAMI B026, B032, B038



Axial Drilling & Milling

**B026-RSE-210**

- 4 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended

TSUGAMI B026, B032, B038

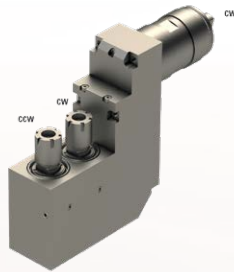


Axial Drilling & Milling

**B026-RSE-210-IK**

- 4 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended
- Internal Cooling

TSUGAMI B026, B032, B038

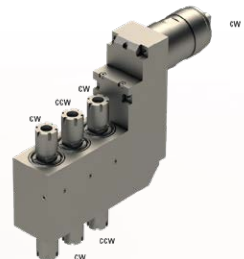


Axial Drilling & Milling

**B026-RSE-210M**

- 2 ER16 Spindles
- 8000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11

TSUGAMI B026, B032, B038

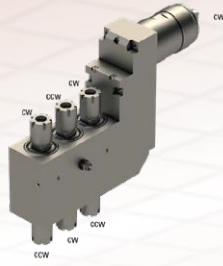


Axial Drilling & Milling

**B026-RSE-310**

- 6 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended

TSUGAMI B026, B032, B038

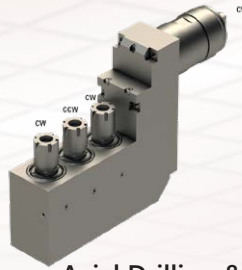


Axial Drilling & Milling

**B026-RSE-310-IK**

- 6 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Double-Ended
- Internal Cooling

TSUGAMI B026, B032, B038

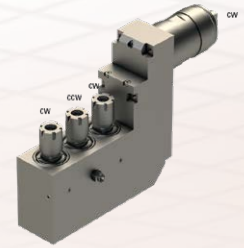


Axial Drilling & Milling

**B026-RSE-310M**

- 3 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11

TSUGAMI B026, B032, B038



Axial Drilling & Milling

**B026-RSE-310M-IK**

- 3 ER16 Spindles
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11
- Internal Cooling

TSUGAMI B026, B032, B038

High Speed!



Radial Drilling & Milling

**S20-RSC-107-3X**

- ER11 Spindle
- 24,000 Max RPM
- 1:3 Gear Ratio
- Gang Tool T31-T34
- Takes 2 Positions T35-T38

TSUGAMI S205, S206

High Speed!

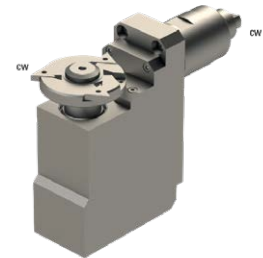


Axial Drilling & Milling

**S20-RSE-107-3X**

- ER11 Spindle
- 24000 Max RPM
- 1:3 Gear Ratio
- Back Tool Post T31-T34
- Takes 2 Positions T35-T38

TSUGAMI S205, S206

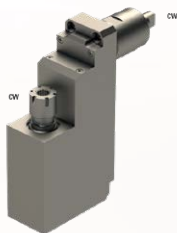


Polygon Milling

**S20-GSP-613**

- 13mm Arbor
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11, T13
- Max Tool OD 72mm
- Max Tool Thickness 8.3mm

TSUGAMI S205, S206

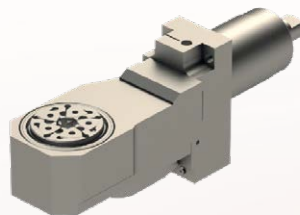


Slitting Saw

**S20-RSS-110**

- ER16 Spindle
- 8,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T11, T13
- Max Saw OD 70mm

TSUGAMI S205, S206



Thread Whirling

**TSUGAMI1-GSW-220**

- Utilis Whirling Ring
- 8,000 Max RPM
- 1:1 Gear Ratio
- Flight Circle Ø6mm
- Adjustable ±20°

TSUGAMI S205, S206

High Speed!



Radial Drilling & Milling

**HS20-GSC-107-3X-II**

- ER11 Spindle
- 15,000 Max RPM
- 1:3 Gear Ratio
- Gang Tool T01, T02, T11-15

TSUGAMI S205, S206, HS20, HS32

**High Speed!**

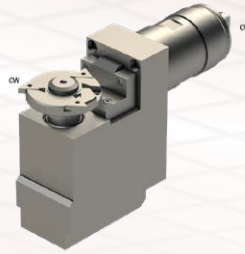


**Axial Drilling & Milling**

**HS20-GSE-107-3X-II**

- ER11 Spindle
- 15,000 Max RPM
- 1:3 Gear Ratio
- Back Tool Post T31-T34
- Takes 2 Positions T35-T38

TSUGAMI S205, S206, HS20, HS32

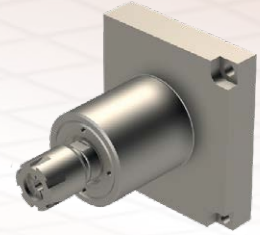


**Polygon Milling**

**HS20-GSP-613**

- 13mm Arbor
- 5,000 Max RPM
- 1:1 Gear Ratio
- Gang Tool T01,02,11-15
- Max Tool OD 72mm
- Max Tool Thickness 8.3mm

TSUGAMI SS20, SS32, HS20, HS32

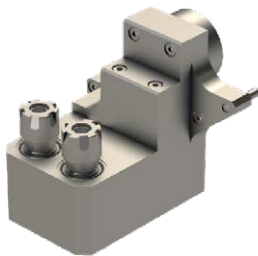


**Radial Drilling & Milling**

**P03-GSC-015**

- ER08 Spindle
- 8000 Max RPM
- 1:1 Gear Ratio

TSUGAMI P034H

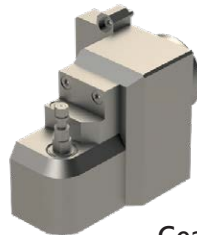


**Axial Drilling & Milling**

**P03-GSE-207-II**

- 2 ER11 Spindles
- 8000 Max RPM
- 1:1 Gear Ratio

TSUGAMI P034H

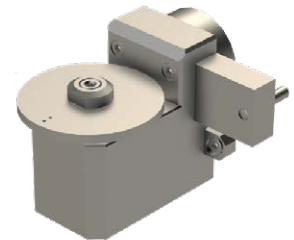


**Gear Hobbing**

**P03-GSH-135-L**

- 3.5mm Arbor
- 8000 Max RPM
- 1:1 Gear Ratio
- Adjustable  $\pm 2.5^\circ$

TSUGAMI P034

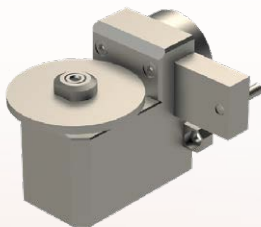


**Polygon Milling**

**P03-GSP-118**

- 8mm Arbor
- 8000 Max RPM
- 1:1 Gear Ratio
- Adjustable  $\pm 2.5^\circ$
- Max Tool OD 45mm

TSUGAMI P034H



**Polygon Milling**

**P03-GSP-218**

- 8mm Arbor
- 8000 Max RPM
- 1:1 Gear Ratio
- Adjustable  $\pm 2.5^\circ$
- Max Tool OD 45mm

TSUGAMI P034H



**Polygon Milling**

**P03-GSP-318**

- 8mm Arbor
- 8000 Max RPM
- 1:1 Gear Ratio
- Adjustable In X  $\pm 2.5^\circ$
- Adjustable In Y  $\pm 1.5^\circ$
- Max Tool OD 45mm

TSUGAMI P034H

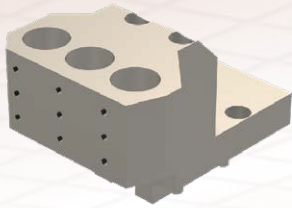


**Thread Whirling**

**P03-GSW-220**

- Utilis Whirling Ring
- 8000 Max RPM
- 1:1 Gear Ratio
- Adjustable 0-20°
- Flight Circle 6mm

TSUGAMI P034

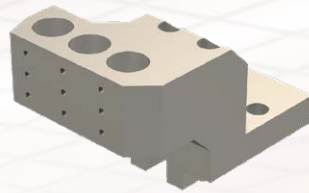


Static Tool Holder

### P03-GDF-416

- 3 Positions (Ø16mm)

TSUGAMI P034H



Static Tool Holder

### P03-GDF-516

- 3 Positions (Ø16mm)

TSUGAMI P034H

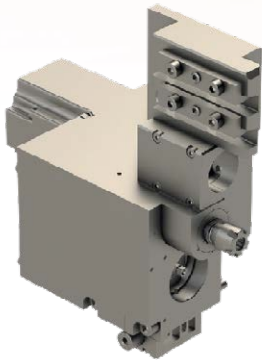


Static Tool Holder

### P03-GTF-018

- 7 Positions (8x8mm)

TSUGAMI P034H



### P03-GSC-117-S

- Replaces Main Block
- 4 Tool Positions
  1. 8mm x 8mm Square Shank
  2. 8mm x 8mm Square Shank
  3. Holder For High Speed Spindle Ø25mm
  4. ER11 High Speed Spindle 16000RPM
  5. Modular Quick Change For Round Holders

TSUGAMI P034H

## Live Tooling Repairs & Restoration

- Live Swiss Machine Attachments Restored to Factory Specification
- We Will Restore PCM and All Major OEM Brands
- Save Money By Shipping to GenSwiss Instead of Overseas



## High Speed Thread Whirling Rings & Inserts

- Rapidly Create Long & Precise Thread Forms
- Superior Surface Finish & Thread Quality
- Custom and Standard Thread Forms Available
- Inserts Repeat Within .0004in

by **UTILIS**<sup>®</sup>  
Tooling for High Technology

