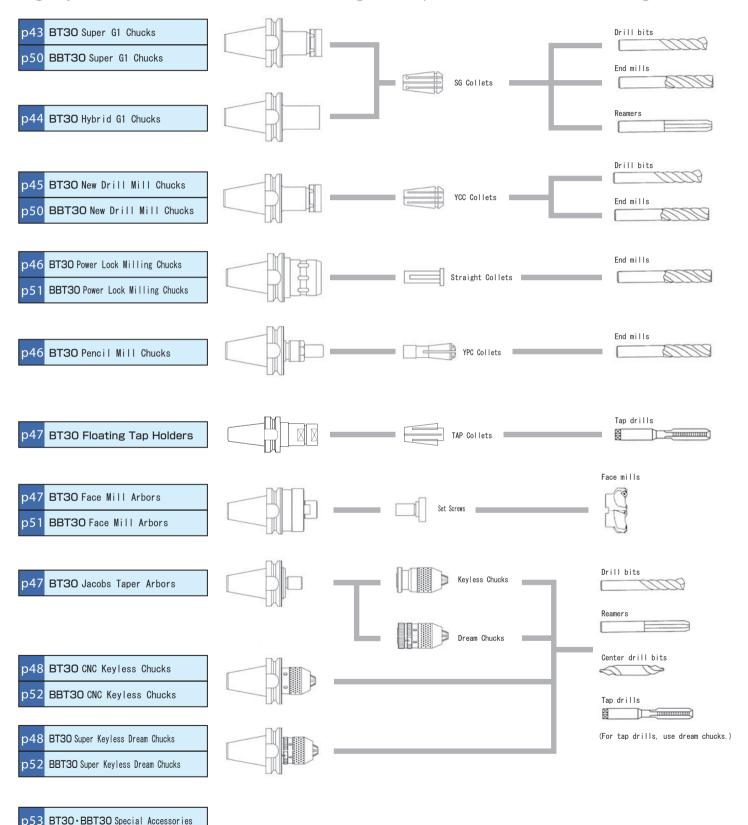
# BT30·BBT30 Tooling System

For high-performance Brother Tapping Centers, YUKIWA Toolings of high precision and high rigidity are recommended to be used, assuring further precise and efficient machining.



# What are the commitments of YUKIWA SEIKO INC.?

Maintaining high machining accuracy is an important first step toward laborsaving and streamlining. In order to realize it, it is vital to ensure accuracy and quality of tool holders in addition to those of machine tools and cutting tools. Our tooling systems use self-developed collets that have incorporated our highest level of technology and long years of experience, and have some special quality not seen in similar products made by other manufacturers. We hope you will take advantage of our systems to improve your machining quality and streamlining.

Commitment

#### We are strong in the area of small-diameter tooling

We have been manufacturing spring collets to pursue techniques for "gripping" tools and workpieces since its foundation. Our tooling products are remarkably effective in the machining fields that require high speed and high precision, and is highly valued by users and machine manufacturers involved in high-speed microfabrication such as die machining and small hole drilling.

We are strong in the area of high-precision machining.

Generally, the accuracy of a tooling collet means the accuracy of a collet only, and other companies do not show the overall accuracy that includes the main body of a holder For our "Hybrid G1 Chucks and Super G1 Chucks." we guarantee as standard the overall runout accuracy of a collet attached to the main body of a holder

### Commitment

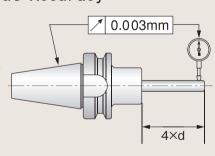
Commitment to our collet chuck systems

The Collet Holders can be adjusted while being attached to the main spindle of a machine, and they can make the runout closer to zero. In addition, the Collet Holders require no special devices such as a heating device to attach or detach a tool. and are safe and easy to use. They also save time significantly for attaching or detaching tools.

#### Overall Runout Accuracy

#### Overall Runout Accuracy The Hybrid G1 Chucks ensure an overall runout accuracy of

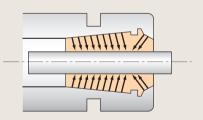
3  $\mu$ m. and the Super G1 runout accuracy of 5  $\mu$ m (runout accuracy of a collet



#### Double Taper Collets

#### Double Taper

The SG Collets and the YCC Collets can exert a high gripping force due to their double-taper shape.

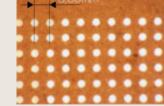


## Example of drilling small diameter holes with a narrow pitch

 $(\phi 0.03 \text{ through holes. wall thickness: } 0.03 \text{ mm. plate thickness: } 0.2 \text{ mm})$ 



XY pitch P = 0.06 mm





Hole position accuracy  $\pm 0.0013$  mm

Tooling machine name	High-precision, high-speed, small-diameter, microfabrication machine MEGA III-500 (Roku-Roku Sangyo, Ltd.)
Holder	Collet Holder and Hybrid G1 Chuck (Yukiwa Seiko Inc.)
Tool	Solid Carbide Shank Drill ADR-0003 (Saito Seisakusho Co., Ltd.)
Workpieces	Sumika Super S1000 20 $ imes$ 20 $ imes$ 0.5 ( $\phi$ 0.03 drilling from the back) [mm]
Machining time	21 minutes 4 seconds/100 holes (12.6 seconds/one hole, including centering)



Measurement data of  $\phi$  0.03 drilling