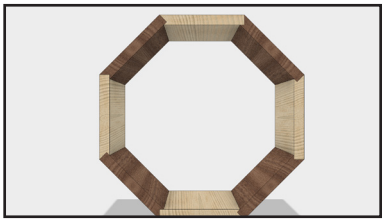
YONICO
PROFESSIONAL ROUTER BITS

Step-by-Step Instructions
Yonico Item #15138

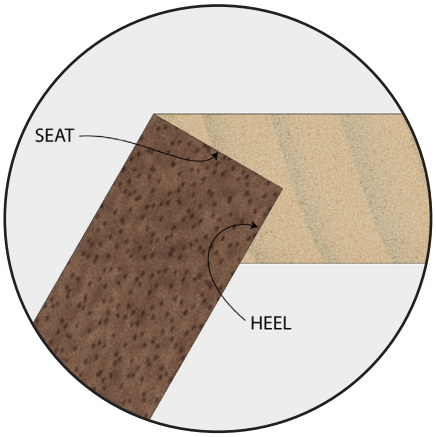
The 15138 Bird's Mouth Glue Joint Bit will cut clean joints for 8-sided objects.

Step 1: Determine stock thickness and diameter of finished object.

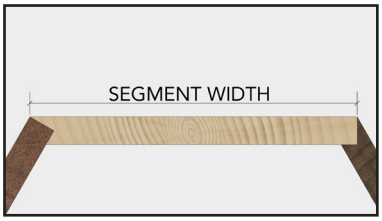


Choose the diameter and stock thickness for your finished object.

A bird's mouth joint has two parts: the seat and heel. You can use any material thickness that is less than the length of the router bit's seat-cutting edge.



Step 2: Find the segment width.

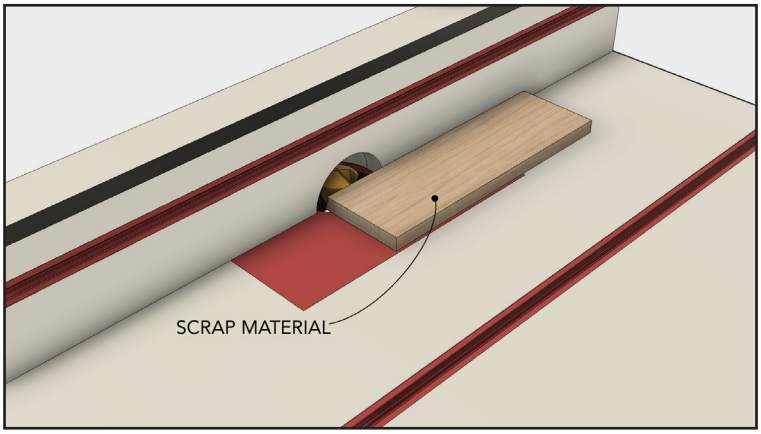


Segment width should be equal to the object's diameter divided by 2.4. For a 12" diameter, make all segments 5" wide.

Step 3. Set bit height and fence depth.

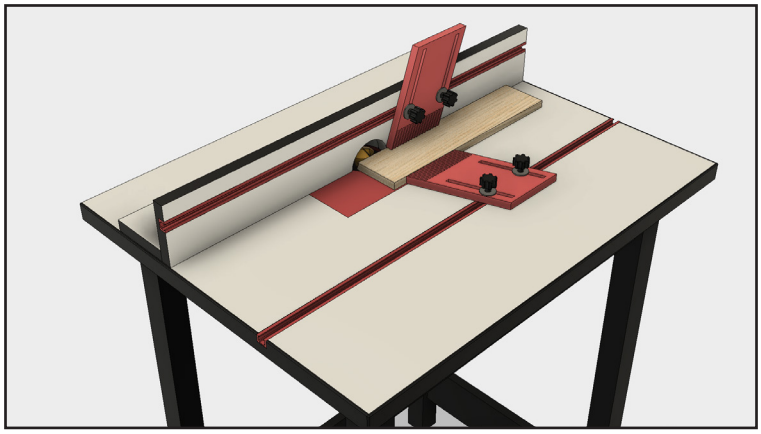
The bit height should be equal to the stock thickness multiplied by .293. This would give you .147" for .5" stock. To set the fence depth, multiply the stock thickness by .707. With .5" stock, the fence depth should be .354".

Step 4: Make a test cut in scrap material.



Before routing the segments, run a piece of scrap material through the router. Test the joint's fit.

Step 5: Route one edge of each segment.



Now you can run your segments face up through the router table. Use feather boards to keep the stock pressed flat against the table and fence. Feed the parts slowly and use a push stick to keep your hands at a safe distance from the bit.

Important Formulas

To calculate segment width:

Outside diameter / 2.4

Bit height:

Stock thickness x 0.293

Fence depth...

Stock thickness x 0.707

Face up/face down guidelines:

Route all segments with outside face up

Bit & Fence Setup Detail