

Horizontal Bandsaw Floating Jaws, Version 1.0

By R. G. Sparber

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My 4 by 6 Horizontal/Vertical bandsaw is great for holding and cutting large stock. But when faced with cutting tiny bits of material, it needs some help. Those big jaws do not extend out to the blade so this thin stock tends to vibrate and bend due to the cutting force.

One solution is to hand-hold the stock and use the vertical mode. This can put my fingers dangerously close to that blade. A safer and more precise method is to use the horizontal mode and find a way to clamp the bit into those larger vise jaws.



Here is one way:

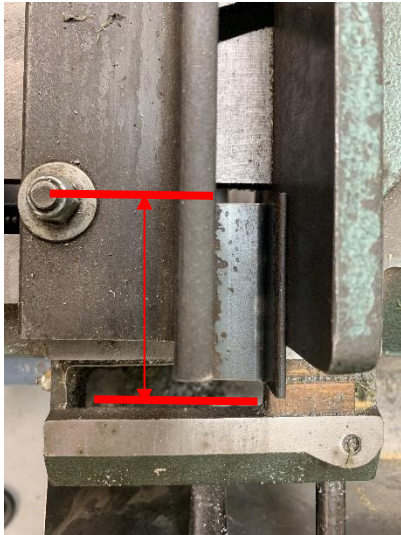
This attachment drops into the saw's vise to clamp small bits. The clamping surfaces extend all the way out to the blade to provide good support.

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The attachment is made from 3 components.

The back floating jaw is angle stock. I'm using extruded aluminum $\frac{1}{8} \times 2 \times 2$ angle with one side cut down to 1- $\frac{1}{4}$ inches.



The length is set by the blade to movable jaw pivot bolt distance on the saw.

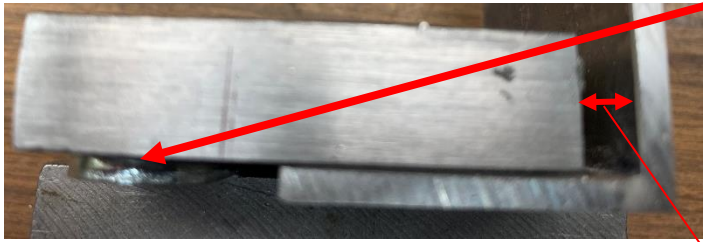


The front jaw is a block of metal the same length as the angle and 2 inches wide. It is $\frac{1}{2}$ inch thick.

I also used a scrap of metal the same thickness as the angle stock and about 2- $\frac{1}{4}$ inches long by $\frac{1}{2}$ inch wide.

The small bar is attached to the bottom side of the front floating jaw. There won't be much stress so I used Go2 Glue spread in a thin layer. Note that the small bar is offset to the left plus does not overhang the top of the block.

Since my bar is shorter than the block is wide, I offset the bar so it would contact the ways of the vise. The area on the block without this bar will be hanging beyond the way in mid air.

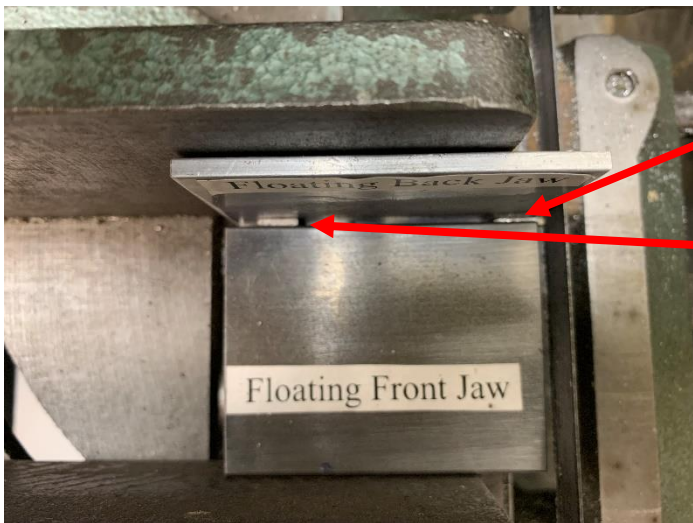


Note that the small bar sets the front floating jaw level as it contacts the back floating jaw.

The arrangement of floating jaws lets me clamp any stock from 0 thickness up to about 1 inch.



This long thin piece of stock is supported by the floating jaws right up to the blade.



If the stock is too short to span the face of the back floating jaw,

a piece of packing will be necessary to prevent the front floating jaw from rotating.

I welcome your comments and questions.

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Rick Sparber

Rgsparber.ha@gmail.com

Rick.Sparber.org