

RAM PRODUCTS, INC. ITEM #1331
5 Piece Diamond Set In HP-FP Bur Block
Review by Bill Tarlton, 3/13/2021



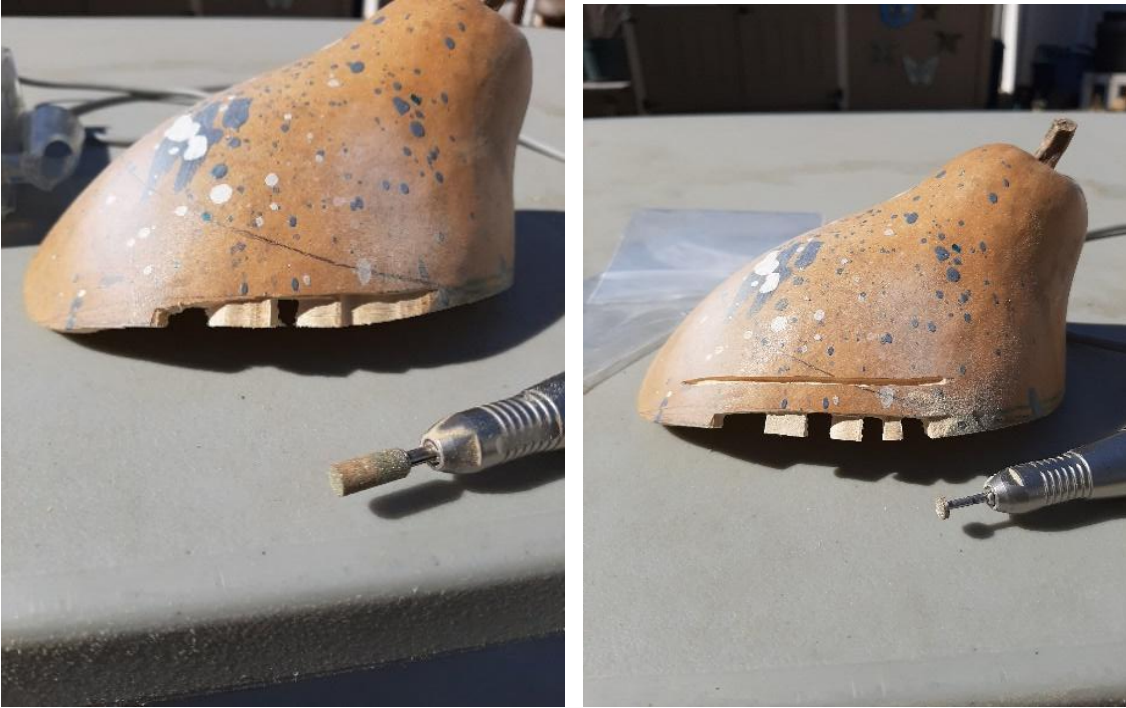
I had the opportunity to test this bur set and agreed to write a product review. Hopefully, my review will help you make an informed decision when you are considering diamond burs. In order to take out the suspense, these diamond burs are outstanding at achieving what they are designed for.

In order to simplify my review, I included a picture of the specific bur and the results on the sample gourd shard. My carver speed was set to 35k RPM for all operations. That's not to say that you can't use these at lower speeds as well.

The set included five 3/32" shafted **course** textured diamond burs with the following shapes: cylinder, football, wheel, inverted cone, and torpedo. You will need a 1/8th" to a 3/32" step down adapter if your carver handpiece takes 1/8" shafted burs. As pictured, the burs are housed in a 16-hole case which accommodate 16 each 3/32" burs on one side or 16 each dental burs on the other side. It will not house both sizes at the same time.

The picture below left shows the cylinder bur. Note that all I did was carve away the hard gourd shell to various depths. I wanted to determine how easily this particular bur

would remove the skin. It took about three light passes and the skin was gone. I went a bit further to test this bur on pulp. Depending on the amount of pressure the results were consistently smooth. The actual cutting was very efficient. Initially, due to the hardness of the shell and heat build-up some residual darkness presented on gourd. As I lightened the pressure the darkness disappeared. If you look closely at the picture you will also see residue build-up on the bur. I contribute that to the coarse diamond texture; however, it did not impact the effectiveness of the bur. Just to note, all five burs had the same tendency to build-up residue during use.



I continued to work in the same area with the **wheel** bur. Note that in the picture above right I cut a 3/32" channel and also hogged away the pulp. I used two techniques to accomplish this. The first was to set the bur on its side and make straight cuts. The second was to push straight down (vertically) in what can be described as a sanding operation. It was very quick and effective.

Moving on to the **football** bur, below left you can see what I did by simply comparing that picture below to the one above. On the horizontal line I removed skin and pulp on both sides of the 3/32" channel. Above that I turned the bur downward and created a variety of holes. Just above that, I laid the bur on its side and created those football shapes.



With the exception of the shape, there's not a major difference in the football bur and the **torpedo** bur's abilities. I did some smoothing in the lower horizontal channel and created a variety sized holes using a drilling technique. It performed well in removing the skin. In the picture above left you can see the result in the areas around all the holes. In cases where you don't want to go deep while at the same time keeping a smooth surface (read minimum sanding later), these particular diamond burs would be a good alternative to a carbide bur.

My personal favorite bur was the inverted cone due to its versatility – undercutting, straight line cutting and sanding abilities. It may be a bit difficult to see due to the lighting and angle of the camera, but look at the horizontal section just below the lower row of holes. I undercut both the lower and upper section and also sanded the ripples out. If you look at the two sections above the top row of holes you see where I removed the skin and undercut there as well. There are more examples of this inverted cone use later in the review.



In order to test the burs as a set, I wanted to know how complementary they were to each other. I'll describe these next tests as a series of operations and also show the photos in a series at the end. Keep in mind that I only used the diamond burs included in this set.

- First, I used the **wheel** bur to make five initial cuts through the skin.
- I wanted to remove as much material as possible in the next operation so I used the **cylinder** bur to do just that.
- Next, I undercut the lines with the **inverted** cone and lightly sanded with the top of the cone to achieve a graduating scalloped look.
- Just to show another capability of the **inverted** cone, I set it on end and made four holes by pushing straight down. Initially the holes were totally blackened by the heat. As I lightened the pressure, the darkness abated.
- While I would not use the **football** as a filigree bur, I did carve all the way through the shard with that bur. Notice the smooth finish.
- In order to demonstrate the sanding ability of the **cylinder**, check out the smooth bottom edge. Also, I did some additional sanding on the scalloped portion. Finally, as you scroll down to the next page, I made a dimensional cut using the **cylinder**.





With all that said and photographed, I need to address the clogging solutions. As I mentioned previously, the clogging may have had a minor impact but it was insignificant to the point that I did not notice degradation in performance. I wanted to see what it would take to clean them up. First, I ran each bur, at full speed, across a buffing wheel (pictured below) but I later learned **this is not recommended so do not do this (see the final sentence below)**. Then I placed them in acetone and let sit for about 15 minutes. I wiped them off with a rag. While they don't have the original luster, they were fully cleaned, unclogged and ready for the next challenge. RAM subsequently informed me that using the brown scotch brite type wheel would not be recommended because it might remove the diamond grit. Acetone, by itself, should do the job.



AFTER USE

BRAND NEW