

KJI REED MAKING SYSTEM

HISTORY & USE

This all started a long long time ago in a Galaxy far far away ... actually in Hartford, CT, at the Music Educators conference 20 + years ago. That's where their amazing story began. Since that time Krassimir Ivanov and Justin Miller have become great friends as well as business partners. However, a couple of years ago they decided to become more than that ... collaborators and inventors! They combined Krassimir's incredible knowledge of reed making with Justin's business and marketing skills.

They observed on Facebook and other social media many pictures of reed desks from bassoonists everywhere. They noticed how proud they were of their incredible assortment of tools, machines, cane and other reed making items. They also observed 2 other things their desks were very cluttered and there was no pattern of tools being used to make the reeds. Everyone was using different stuff to work on the "generic" cane ...ie 120 mm length and 1.27 mm gouge and other G/P and GSP formats based upon that formula.

As a result, they concluded that this type of reed making with so many variables and so many different results was ineffective. It does not produce high quality reeds easily and consistently.

Thus, their solution for this problem was to design the tools and the cane to work together!

No one had ever thought to do this before ...

- Design and engineer a Gouged Shaped and Profiled piece of cane. When you make your blank and cut the tip ... **IT PLAYS!** ... and plays with full vibrations.
- Design and engineer tools to work with this *specially engineered* cane to produce a consistent reed blank .

The KJI REED MAKING SYSTEM was created!



The heart of the system is the cane. They started with 3 new proprietary shapes knowing that there are many different bassoons and players. The KJI System would need a variety of performance characteristics to give everyone a good choice for their particular instrument and bocal. The story about the shapers is on the website.

<https://millermarketingco.com/product/kji-miller-proprietary-bassoon-shapers/>

Once the shapers were developed, the design of the GSP cane took form. Specifications like Collar / Shoulder location ... Tip location... Overall length of the cane ... Wire placement ... and Profile of the blades were determined for the GSP Cane corresponding with the 3 new shaper designs. Details on the cane and wire placement can be found on the website.

<https://millermarketingco.com/product/kji-specially-engineered-117-bassoon-gsp/>

With the shape and cane taken care of, they turned their attention to the tools.



There are 3 forming mandrels and a drying rack in the KJI Reed Making System - KJI RMS for short. All the tools are numbered to indicate which is used first and in which order they are to be used.

Mandrel #1 is a very slender tool that starts the forming process. The tip is small enough to fit inside the blank without damaging the cane. Other important features are the length, which goes only to the collar / shoulder area without opening up that area and a "Stop" on it to prevent it going too far, making the forming process very consistent.

Moving to **Mandrel #2**, you will notice that it is a little shorter than Mandrel #1 but it is a little thicker with a steep taper on the end. Again, there is a "Stop" for consistency of forming.

Finally, **Mandrel #3** is even shorter but has 3 lines on it. This is the final step in forming. With the KJI GSP Cane you form to the first line only! The other 2 lines are there if you use other cane that is wider in the tube.

Once you are done forming, you place the reed onto the 10-PIN KJI RMS drying board on an exact copy of Mandrel #3 for drying.

Next are the Reamers. When using a High Quality Rieger - 5 Fluted super sharp type of reamer (and all others that are not as good as the Rieger) you will notice that there are pieces of cane left in the tube that need to be filed away. The reason is that when cutting across the grain of the cane, some cane is cut and some cane is torn. When filing the torn pieces away, there are "Potholes" left in the tube which affects fit on the bocal and air flow thru the reed.

The KJI RMS reamers are newly designed to eliminate that problem and fix two other problems as well .



Reamer #1 is a traditional taper reamer. It's made with a coarse Diamond Like Coating to establish the basic taper of the inside of the tube. By using this material, the tube is perfectly round, leaves no pieces of cane in the tube to be filed and leaves a smooth unpolished surface that "grabs" the bocal better. There is more surface area and a slight cushion effect that is left after using this reamer.

However, this is not the only reason to use this reamer. Its designed to fit the diameter of the end of your reed, matching the diameter of **YOUR** bocal at 7-8 mm from the tip of your bocal. By doing this, the reed will fit perfectly on the bocal. It is very important for fit and seal to match your bocal because every bocal is handmade and therefore is unique and needs to be individually matched to your reed.

Reamer #2 is smaller and smoother. It is designed to go up inside the reed tube and smooth the area around the tip of the bocal, matching the diameter of the tip of your bocal.

By adjusting the reed to fit your bocal exactly, you get a good seal which promotes better resonance and less resistance. This is not possible with traditional reamers!

The next invention is our **Revolutionary Diamond Files**, made from highly polished round diamonds. The surface of each diamond is smooth, however the round edge is exceptionally crisp and sharp. This allows the file to work very well without a lot of pressure and leaves a smooth result. Typical Diamond files are random sized diamonds glued onto metal. These types of files leave a rough surface and are not easily controlled. The KJI RMS Diamond files are attached to a Bamboo Handle. This bamboo handle is very light weight and water tolerant, which gives you great feel and control while filing your reeds! Also, the diamonds are arranged in an organized pattern that leaves space between them for the dust to easily be cleaned out.



KJIDF6140 is pictured on the left

KJIDF6200 is on the right.

The 140 Grit is more coarse than the 200 Grit.



Rounding out the KJI RMS are 2 plaques. The metal plaque is for use with files or sandpaper. The limited edition Rieger Blue Transparent plastic plaque is for use with knives.

Last but not least is our unique Tool Holder



Made of Solid Cherry with a natural stain, the KJI RMS tool holder will organize your desk and keep your tools from rolling around, thus increasing your efficiency!

Another amazing feature of the tools ... **the handle** ... made from **solid hard maple** ... clear coated with a durable finish. It is longer and larger in diameter than traditional reed making tools. More comfort and less fatigue!!!



Best of all ... our system is designed and built in the USA!

All of the system components are available separately on www.millermarketingco.com.

Recommended Accessories For The KJI Reed Making System

	EMI SILICONE SEALANT <ul style="list-style-type: none"> • High Strength Silicone Sealant • "Food Grade" / Non-Shrinking • \$6 	<div data-bbox="902 363 1425 884"> <p>KJI 117 GSP ENGINEERED BASSOON CANE</p>  <p>New Item</p> </div>	
	GEORG RIEGER PLIERS <ul style="list-style-type: none"> • 5 1/2 Inch Length • Oval Hole Allows for Proper Forming of The Tube • \$45 	<div data-bbox="902 905 1425 1404"> <p>KJI REEDS</p>  <p>SAMPLER PAK</p> </div>	
	MILLER PRO SOFT BRASS WIRE <ul style="list-style-type: none"> • 22 Gauge • 1 lb • \$30 	<div data-bbox="902 1425 1425 1661">  <p>2XREED SWISS ARMY KNIFE</p> <ul style="list-style-type: none"> • \$24 </div>	
	RIEGER COTTON THREAD <ul style="list-style-type: none"> • Specially Treated Cotton Thread • Strong/ Non-Stretch • \$18 	<div data-bbox="902 1682 1425 1913">  <p>KYOCERA CERAMIC KNIFE</p> <ul style="list-style-type: none"> • \$19.95 </div>	
	DUCO CEMENT <ul style="list-style-type: none"> • Multipurpose Glue • Dries Clear And Fast • \$3 	<div data-bbox="902 1682 1425 1913">  <p>"DUTCH"</p> <ul style="list-style-type: none"> • Hardness Tester • Helper • Priceless! </div>	