## An Appraisal of Student Clarinet and Saxophone Reeds







I have been using premium reeds with students for so long that I've forgotten what student reeds were like. I give them a premium reed and demonstrate how much money one would throw in the garbage if it were broken accidentally. Very few reeds are broken or mistreated by these students! Even my beginner students start on a professional mouthpiece and a premium reed and a step-up or intermediate instrument. It is just going to make them sound better immediately and make the learning process easier.

However, Vandoren released the new Juno student reeds last year, claiming that it was a better student reed made of professional caliber cane and cheaper than the other student reeds available. I thought this needed some tests and measurements.

A local dealer gave me three each of Vandoren Juno, Rico, and Rico Royal Reeds for both alto saxophone and Bb soprano clarinet. All reeds were strength 3. I did not season them or adjust them. I do teach my students how to do that immediately when they start on cane reeds, but most students do not know how, or even that it is necessary. I also kept the reeds in the original plastic covers, as many students do. I played the reeds 5 minutes per day each for a week.

There were obvious differences. I'm not going to separate clarinet and saxophone reed performance, sound or measurements from each other. The same issues were apparent in testing and measurements in both cases.

I'm sure I must have used Rico Reeds as a beginner, but I certainly do not remember. I do remember the very first time I used a professional caliber reed, though! The Rico Reeds had a dull, veiled quality. They did not speak or articulate clearly and sounded fuzzy on low notes and thin on high notes. The altissimo register was extremely difficult to play and sounded poor. The fastest articulation of staccato notes I could produce was sixteenth notes at MM 126. After a week, the reeds were already fading and sounding worse.

The Rico Royal reeds were much better. They were dull, but not as veiled. They would never sound great, but they would project in a moderate hall. They were quite "thuddy"

in the low chalumeau, like the Rico Reed, but not as thin in the upper clarion. The altissimo register responded fairly well and sounded just okay. This is how I remember my students sounding before I started using only premium reeds with them. Maximum speed of articulation was staccato sixteenth notes at MM 132. These reeds felt like they would last another week.

The Juno reeds were clearer, warmer and more brilliant than either of the Rico Reeds. The clarion register of the clarinet and the upper register of the saxophone just sang. The altissimo register was responsive and sounded good. The very lowest notes were just a little "thuddy." Maximum speed of articulation was staccato sixteenth notes at MM 144. I couldn't get the reeds to bounce off the rails faster than that. A truly premium reed can get up to over MM 172, but most players can't tongue sixteenths a lot faster than MM144 anyway! The Juno reeds stayed very fresh and responsive, and seemed like they would last another 3 weeks. I saved them all to give to students! The others? Kindling for my fireplace.

In summary on playing tests, the Juno reeds made both Rico products seem like "Reed Shaped Objects." Junos play more freely, articulate more quickly and clearly, sound better, and last longer. They are also the least expensive of the student reeds...just very slightly cheaper than Ricos and about 10% cheaper than Rico Royals. I feel Rico's premium reeds are every bit as good as Vandoren's (although all these things are personal), but the gloves are off on the student reed market and Rico has it's work cut out for them! In my opinion, Juno reeds are the only choice for students if they are not going to use a premium reed. They work well without adjustment, they sound good, they are easy to play, and they last. In fact, I could use them professionally if I had to!

They are almost certainly the best choice for students who either have not learnt how to adjust cane reeds or do not use a premium synthetic reed that does not need adjustments.

## Do Measurements Bear Out the Playing Experience?

There are only two different parameters that can affect this large a difference in playing...cane quality and cutting accuracy. I measured both of these.

The difference in cane quality was obvious when playing the reeds, less dense and pulpier as I went from Juno to Rico Royal to Rico. I measured this by weighing 10 of each of the reeds on a scale that measures down to .001 ounces. This was unfair to the Rico Royal reeds, as they are French cut, with some of the "bark" scraped off and are automatically lighter than both other products, so I will compare Rico and Juno as they are both American cut and have almost identical measurements and dimensions.

	Average Weight	Range of Weights
Rico Clarinet	.027 ounces	.024031 ounces
Juno Clarinet	.031 ounces	.030032 ounces
Rico Alto	.040 ounces	.038042 ounces
Juno Alto	.041 ounces	.040043 ounces

The Juno reeds are made from denser and more consistent cane.



Reed Measurements were done using the PerfectaReed measure that will measure up to 61 points on a reeds' surface in thousands of an inch. I chose to measure 7 points on the tip of each reed, 6 points down the centre of each reed, and 6 points 2/3rds of the way towards the left and right rails of the reeds from their centre line. (For those familiar with the PerfectaReed measure: on clarinet reeds the centre measurements were E 1-6. The saxophone reed centre measurements were F 1-6. The points of measurement 2/3rds of the way towards the left and right rails were B 1-6 for all reeds.) I took 25 measuring points on each reed, a total of 450 measurements.

To make the data easy to understand, I averaged the total variances of thickness from side to side of each reed at six points equidistant from the left and right side rails (about  $1/3^{rd}$  of the way towards the centre from the edge.) This is where most reeds need the most adjusting for good performance...side to side variance of resistance is the single most common reed problem. I also compared the total variance of thickness between the same reed brand and type at the centre line for 6 points for each set of six reeds.

Reed	Avg thickness variance from left to right sides. Measured at 6 points on each side.	Avg thickness variance down the centre line of the reeds. Measured at 6 points.
Rico	.010"	.011"
Rico Royal	.019"	.009"
Juno	.003"	.006"

The cane density measurement and the variances of side-to-side measurements and centre line thickness variances do bear out the playing test results. The Juno reed is best.



Chuck Currie is a clarinetist and saxophonist who performs with the Vancouver Island Symphony, the Pacific Symphonic Wind Ensemble, The Band of the 15th Field Regiment, Royal Canadian Artillery, Pacific Blackwood, the Vancouver Saxophone Ensemble and is the proprietor of Sax Noir Studio. Chuck is a Backun Canada and a Conn Selmer artist performing on Backun MoBa Clarinets, Selmer Privilege Bass Clarinets, Yanagisawa Silver Sonic Saxophones and Morales-Backun bells and barrels and mouthpieces on all clarinets; he uses Legère reeds on saxophones. Chuck performs on Trevor James RAW Alto and Tenor saxophones.