



## **CHOOSING A REED/MOUTHPIECE COMBINATION THAT WORKS**

By Chris Hill

As a part of my job as principal clarinetist with the South Dakota Symphony, I travel to many schools throughout this region. Two of the questions I'm most frequently asked are:

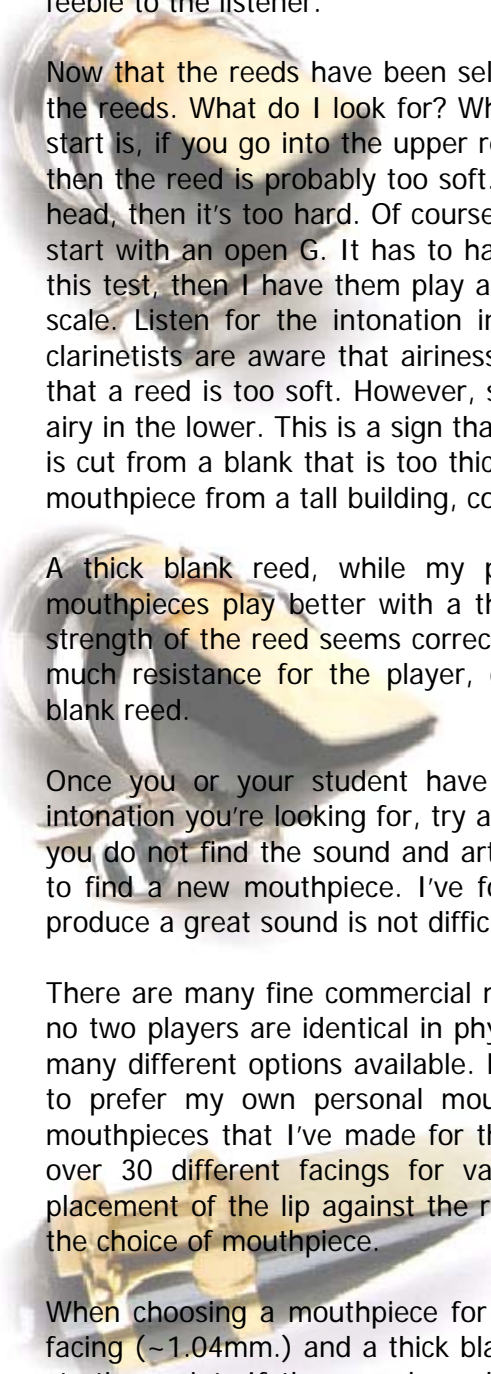
- ✓ What type of reeds should I (or my students) play?
- ✓ What mouthpiece do you recommend?

In my experience, the reed/mouthpiece combination is the most important part of the instrument. To demonstrate this, when I teach a master class, I will usually play a student's clarinet with my mouthpiece and reed, then compare that with the student's mouthpiece on my clarinet. Invariably, if the mouthpiece is of the beginner-intermediate variety, the sound is far better with my professional mouthpiece on the student clarinet. The reed/mouthpiece combination affects the tone quality, intonation, and articulation. When one popular mouthpiece maker changed their specs several years ago, band directors complained that their current students couldn't articulate as well as their previous ones. Couple this with poor reed choice, and it will make good articulation and intonation either difficult or impossible. Were all familiar with the strident tones that clarinetists can produce. So the question remains: how does one go about picking a correct reed/mouthpiece combination for oneself or for a student?

Since there are many fine-quality reeds and mouthpieces, I will not recommend a particular brand. It is important to keep in mind that no set-up is correct for everyone. One private teacher states that when a band director insists that every student in his band must play a particular set-up, his response is: Do you make them all wear the same size shoes?

If a player has a professional-quality mouthpiece, I would suggest starting by trying to fit a reed to that mouthpiece. The reed strength is primarily influenced by the mouthpiece. As an example, at one point I had two mouthpieces: one for concert performance and one as a spare to be used in situations where the mouthpiece might be damaged, such as marching band (this was back before I could afford to have a spare that matched my #1 mouthpiece, and before I knew how to alter the mouthpiece to suit me). My #1 mouthpiece was specifically designed for a hard reed, and I used a #5 reed on it. My #2 mouthpiece was designed for a soft reed, so I used a #2 on it. Believe it or not, the mouthpiece with the softer reed was much more difficult for me to play! This was mainly due to the facing of the mouthpiece (the tip opening, and how it curves toward the table of the mouthpiece) and the inside, or chamber, of the mouthpiece.

Keeping this in mind, how would one select a reed strength and type to match the mouthpiece? We will assume at this point that the musician has a good embouchure. When testing reeds, test enough of a particular type to know how well they really work for you or your student. I usually try a full box of ten, but four reeds would be a good minimum. Then



test the equipment in a large room, as sometimes a setup that sounds good in a small room doesn't work well on stage. Too many people pick their equipment to sound good in an 8X8 practice room when they aren't going to be performing there! Stand back a distance from your student or have someone come in to listen, since many times the player can't hear what the listener might pick up. A good reed/mouthpiece setup will often sound a little buzzy to the player, and a sound that is pure and dark to the player will frequently sound fuzzy and feeble to the listener.

Now that the reeds have been selected, and you're in a large room, it is time to actually try the reeds. What do I look for? What I tell students in master classes is that a good place to start is, if you go into the upper register and it sounds like a cat that got its tail stepped on, then the reed is probably too soft. If you feel like your eyeballs are going to pop out of your head, then it's too hard. Of course, we have to refine these criteria a bit. I have my students start with an open G. It has to have a clear, yet full, sound on this note. If the reed passes this test, then I have them play a slurred C major scale, followed by a three octave F major scale. Listen for the intonation in the upper register, and for airiness in the lower. Most clarinetists are aware that airiness is a sign that the reed is too hard, and flatness is a sign that a reed is too soft. However, sometimes a reed will sound flat in the upper register, and airy in the lower. This is a sign that the reed is either cut too thin on the rails or that the reed is cut from a blank that is too thick for that particular mouthpiece. Rather than dropping the mouthpiece from a tall building, consider trying a different style of reed.

A thick blank reed, while my personal choice, is not the choice for everyone. Some mouthpieces play better with a thinner reed, particularly if the facing is more open. If the strength of the reed seems correct (i.e. the sound in both registers is good), yet there is too much resistance for the player, consider fitting this particular mouthpiece with a thinner blank reed.

Once you or your student have found a reed that is comfortable, with the sound and intonation you're looking for, try articulating scales and arpeggios, both slowly and quickly. If you do not find the sound and articulation you are looking for from the reed, then it is time to find a new mouthpiece. I've found that getting a mouthpiece that makes it possible to produce a great sound is not difficult; finding one that can do that plus articulate well is...

There are many fine commercial mouthpieces, and many fine custom makers, as well. Since no two players are identical in physical dimension and in how they want to sound, there are many different options available. Even though I make mouthpieces, I don't expect everyone to prefer my own personal mouthpiece, even among people who play on Chadash-Hill mouthpieces that I've made for them. I make six standard facings, and have custom-made over 30 different facings for various customers. Variety is a good thing! Embouchure, placement of the lip against the reed, and the angle of the clarinet from the body all affect the choice of mouthpiece.

When choosing a mouthpiece for a student, I start with mouthpieces with a medium close facing (~1.04mm.) and a thick blank reed. With the embouchure that I teach, this is a good starting point. If the sound needs more focus, I will start by having him/her try a closer facing, first with the same reed, then with a harder one. If the sound is thin and/or it feels like the reed is collapsing against the mouthpiece, I assume the facing is too close, and well

go back to the medium close mouthpieces. Well then try thinner blank reeds. If the sound on the medium close mouthpiece is too thin or small to begin with, yet the strength of the reed seems correct, then try a medium open facing. If the sound is fuller, but unfocused or tubby, then well try a thinner blank reed. If it sounds wild, well try a reed with a shorter vamp.

Please keep in mind that the facing is not the entire game when talking about mouthpieces. Without getting too technical, the chamber has a large effect on how a mouthpiece sounds and feels, so two different types of mouthpieces with the same facing will not necessarily play the same. In the above example, I am using the same basic type of mouthpieces, but with different facings.

We all are looking for something different in a sound; however there are some generalities about reed/mouthpiece types and their effect on the sound that should be noted. Generally, a closer facing will provide more focus and an open facing more vibrancy. Close facings are easier to articulate on, and require less jaw pressure, but an open facing makes it easier to produce a broader sound. Thicker blank reeds tend to have more depth in the sound, while thinner blanks sound clearer. Always remember that the tone is only a part of what a player does. Choosing a set up that allows you to make music, not just a collection of pretty notes, is just as important to the performers or the students confidence in performance!

My setup is a Chadash-Hill 104 mouthpiece, with a Rico Grand Concert Evolution #4 reed, a standard Bonade ligature, and a Chadash clarinet. This works for me, but as we learned, this may not be the best for you or your students. Test and try as many combinations as you can to help you and your students find their tone. It is sure to pay off in the performance!

