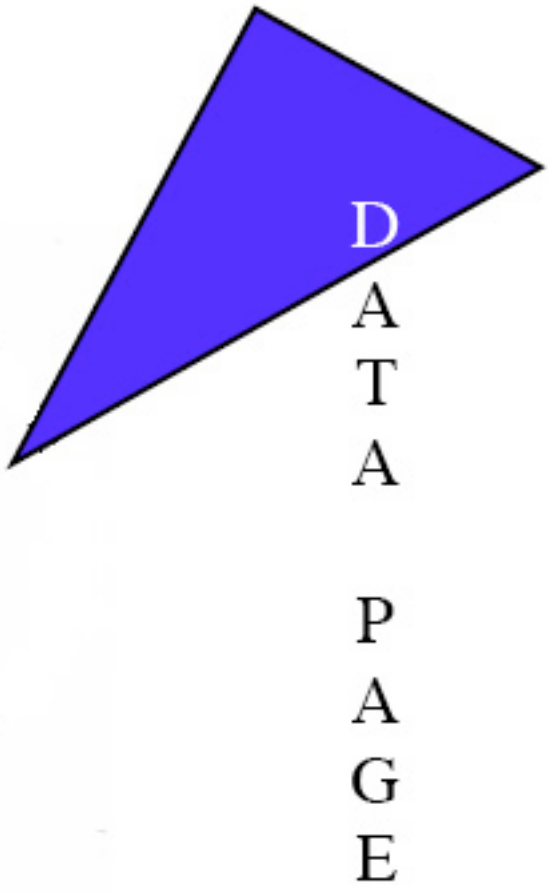
How to Shop



Today there are a wide variety of flutes available to the student, pre-professional, and professional flutist. Although many faults can only be seen by an experienced repairperson, **the following outline lists several tests that you can use when comparing even a large number of flutes.** It can be helpful to take notes on each flute you look at using this outline as a format. This will help you avoid any unnecessary confusion and keep one flute from "running into" the next one.

Finish

Look at the surfaces of the instrument. If it has been poorly plated or if there are obvious signs of carelessness, there could also be hidden, more serious problems. Excessive or deep patina (faint surface scratches) on a silver instrument shows careless handling by the manufacturer, dealer, or repairperson. Student instruments which are nickel-plated are not recommended because of the excessive wear tendencies of nickel plating. It is fundamental that **the finish of an instrument is a statement about is quality.**

Pads

The pads are often the most overlooked aspect of a flute, but they are usually the greatest cause of trouble on poorly or quickly built instruments. Pads are most often constructed of felt and cardboard base wrapped in layers of skin. Double-layered yellow skins are best because they resist bacteria. The felt used to make a pad should be as hard as possible. To test this, press down a key until it just barely touches the tone hole. Then, press the key down as far as it can go. This will tell you how much the felt of the pad will compress. Small differences can bring about large changes down the road! Soft felt pads are less desirable for three reasons:

1. Soft felt pads compress and form deep impressions where the tone holes strike. Once there is a deep impression, the pad is impossible to reseat and must be replaced. Harder felt pads compress less and therefore are longer wearing.
2. Soft felt pads are slow to respond because you must wait for the pad to ooze over the tone hole to seal. Hard felt pads seal immediately on contact making the flute speak much quicker.

3. Soft felt pads receive little adjustment during installation. This indicates that the manufacturer is not interested in spending much individual time with each instrument.

Direct from the factory, most flutes do not seal perfectly and will need a reseating and adjusting. To test how well the pads are sealing, gently press each key again until the pad just barely touches the tone hole. Look for any gaps where the pad does not meet the top of the tone hole in both the pad you are touching and any other that closes simultaneously. A more specific test can be done by playing the flute. Play down a chromatic scale closing each key very slowly. If a note "sneaks" out, then there may be a leak. Each note should "pop" out without any silence or extraneous noise between notes.

Mechanism

A competent repairperson is trained to find defects of design and construction problems of a mechanism. The following tests are excellent for evaluating a mechanism with no prior experience or knowledge.

The two most important aspects of any mechanism are to be tight fitting and not bulky. Compare the diameters of pad cups between instruments. Oversized pad cups save manufacturer's padding time but slow the mechanism response. The bulky mechanism results in more work for the player.

Intonation/Scale

Most flutes today are **pitched** A=442Hz, and the flute is designed to play in tune with the headjoint pulled out approximately 5mm. This allows the player to "push in" the headjoint to raise the overall pitch of the instrument if needed.

Your current flute may have an old or outdated scale, so when trying a new instrument, you must consciously remember to not make any adjustments that your old one requires. It helps to not play your old flute on the day you are trying new ones.

To test the scale of the flute, you must play it! Play low C and overblow until C^2 (the C in the staff) an octave above sounds. This is the pitch that is mathematically correct. Now correctly finger C^2 and see how close it is. You can do this up the chromatic scale. More advanced players should explore the overtone series three partials above the fundamental. The flute which requires the least amount of adjusting to produce an in tune pitch has the best scale.

Handwork/Handmade

Flutes with more handwork are most desirable because they are made to more exacting standards. A handmade instrument is produced complete by hand. The opposites of handmade instruments are assembly line instruments. Professional instruments should be **completely** handmade.

Student instruments that are hand assembled by one person and have a handcut headjoint and tone holes are most desirable (in the "student" category). Machines can only cut headjoints at very limited angles. Handcutting the embouchure hole not only refines these angles and shapes to allow for a fuller sound with greater flexibility, but each headjoint is played and cut again to realize its individual potential. Any rough edges which disturb the air stream are also removed. The same rules apply to undercutting the embouchure hole as to tone holes.3
Mechanisms which are assembled on an assembly line are often fit poorly. This causes horizontal movement between keys and unstable adjustments. Mechanisms and pads on a student instrument are best if hand fit and hand assembled by one person to ensure the best possible fit and reliability. This dramatically improves the instrument!

"Step-up" and "pre-professional" instrument come in two varieties. The first is the "souped up" student flute. Manufacturers can put instruments into this category by adding options to a basic student flute. They will often have the same bulky mechanism, assembly line production, and machine cut headjoints. Other manufacturers will take completely handmade professional flutes and "down scale" the design to produce a "pre-professional" instrument. These flutes often have large amounts of handwork or are partially handmade. They also have many other professional features. Generally, the price of these "pre-professional" instruments is competitive to the "souped-up" models. In other words, you can spend the same amount of money and get a much more advanced instrument. **In the long run, you end up spending less money on the professionally designed instrument.** It is most important to locate the instruments with the most handwork.

These guidelines will help in the purchase of a long lasting instrument that is well worth the investment. Playing characteristics vary from flute to flute and from person to person. Trying several brands of flutes will help you find the right instrument for you. One brand of instrument does not work for every person. Make sure to find an instrument that helps your weaknesses. An instrument, which accentuates your strengths, will also accentuate your weaknesses! **Your main goal is to find the instrument that fits you.**

Questions? We're happy to help, Just give us a call.