

# Everything you need to know about the CLARINET

## Clarinet Breakdown



## Clarinet Categories

### **Beginning student clarinets:**

Student clarinets are designed for beginners and are meant to provide an excellent start for the first two to three years of playing. A student clarinet typically has a larger bore—the area inside a clarinet—which allows air to pass easily through the instrument to make a sound. The clarinet’s small size and light weight make them easy for smaller children to transport.

If this is a first clarinet, an instrument made of plastic is a great choice. Plastic clarinets are less expensive and more durable than wooden clarinets. Even after graduating to a wooden instrument, the plastic clarinet is often used in high school and college marching or pep bands.

### **Intermediate clarinets (“step-up” instruments):**

Intermediate instruments are an ideal step-up for middle or high school clarinetists who have outgrown their student model clarinet; for non-music-major college students; or for hobbyists playing in a local concert band or a church. Whatever the situation, stepping up to an intermediate clarinet will have positive benefits that are musical, physical, and psychological.

Intermediate clarinets are made of better quality materials which result in several benefits. Grenadilla wood provides a full and rich tone, a smaller bore-area inside the clarinet-produces a focused and centered sound and undercut tone holes improve pitch. Better keywork allows clarinetists to further develop technique. Psychologically, stepping up to an intermediate clarinet can reinvigorate interest that may have stalled due to a student clarinet's limits. Simply put, it is not much fun as a student to put forth more time and effort and receive lower than desired results on an inferior student instrument.

For students who show a high level of interest or personal enthusiasm for playing the clarinet, and who have given serious consideration to majoring in music at the college level, foregoing an intermediate clarinet and stepping up to a professional level instrument might be best. This allows serious students to become familiar with their clarinet before college auditions, and will prevent parents from having to buy and resell an intermediate instrument that is likely to be an intermediary step to a professional instrument down the road.

### **Professional Clarinets:**

Professional clarinets are designed and crafted for professional musicians, and they're also popular among serious high school and college music students. Professional clarinets are built using the finest quality grenadilla or rosewood available. A professional clarinet's bore is optimized for intonation and sound. The key work is done with premium materials. However, these components alone do not make a quality professional clarinet. The entire process requires the hands and close attention to detail of a skilled musical instrument craftsman.

Like intermediate clarinets, most professional clarinets are made of grenadilla to achieve a uniform sound when played in a large ensemble. Because of its dark, mellow sound and quick response, rosewood is sometimes preferred among solo and chamber clarinetists. Other than grenadilla and rosewood, a variety of other woods are used for the barrel and bell. Cocobolo is the most common, but other exotic woods are also used for their unique sound and quick response.

Professional clarinets offer a few different bore sizes and shapes which result in different sound characteristics. Classical clarinetist prefer a smaller bore resulting in a centered and focused tone. However, a large bore clarinet is the choice of many jazz musicians. The larger bore provides a free-blowing, flexible clarinet with a big sound. The bore's shape also has a lot to do with a clarinetist's preference. The most common shapes are cylindrical and polycylindrical. A cylindrical bore offers a free-blowing and flexible feel, along with a large sound with more volume. The polycylindrical bore offers a little more resistance with a sound that has more sustain. The polycylindrical bore is also easier to tune.

Whether larger bore or small, grenadilla or rosewood, the keywork itself must be responsive and strong. Blue steel springs are used to ensure quick, even action. Nickel-silver keys are used, because they are durable and do not bend easily which may cause binding or leaks. Double fish skin or cork pads are favored for their water resistance and longevity.

# Body Materials

Materials used for the clarinet's body have a huge impact on the instrument's tone and projection.

## **Plastic (Resin):**

Plastic is used exclusively for student-level clarinets. Plastic proves durable and does not change with humidity or temperature.

## **Ebonite (HardRubber):**

Ebonite clarinets are rare but offer a material that is the best of both worlds. Hard rubber is stable and durable like plastic, but the dense rubber offers a dark sound and projection favored by professional musicians.

## **Grenadilla (African Blackwood):**

Grenadilla is the choice of more advanced and professional clarinet players. The sound is focused and possesses a "ring" that cannot be found in synthetic instruments. To insure long life, it's essential to properly break-in and care for a wood clarinet.

## **Greenline:**

To answer the problem of dwindling grenadilla stock, as well as the problem of instability of true wood clarinets, Buffet-Crampon developed a blend of grenadilla dust and epoxy. Greenline clarinets offer the density and tone of a grenadilla clarinet but add the stability of good synthetic materials.

## **Rosewood:**

Rosewood clarinets offer darker, more mellow sound than grenadilla. Rosewood clarinets are quickly finding favor among chamber players and soloists.

# Key Materials

## **Nickel Plated:**

Nickel plate is shiny, extremely durable and does not easily tarnish. It is found on most student and intermediate level clarinets, and is preferred by many professionals.

## **Silver Plated:**

Silver plating is warmer in appearance and softer to the touch. It also adds a minute amount of weight to the clarinet and thus slightly darkens the tone.

## **Hamilton Plated:**

Yamaha offers this blend of silver and gold on its CSG series Bb and A clarinets. This blend presents a warm, slightly golden look to the clarinet, and the added weight provides a darker and more liquid sound.

# Bore Design

## Bore Size:

The size of the clarinet's bore affects the general playing feel of the clarinet. Larger-bore clarinets are preferred by jazz players and are more free-blowing with greater flexibility and projection. Medium-bore clarinets are the most common and offer a balance between flexibility and focus. Smaller-bore clarinets are the most resistant clarinets, provide a compact and focused sound and are usually preferred by chamber musicians.

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## Bore Shape:

In addition to bore size, the bore shape also has a great impact on overall clarinet playability. Cylindrical-bore clarinets are more free-blowing and flexible. Cylindrical-bore clarinets offer a large sound with great volume. Polycylindrical-bore clarinets are slightly more resistant. Their sound has more ring and, though less flexible, polycylindrical clarinets offer superior intonation.

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## Breaking in a wood clarinet:

In order to help prevent wooden clarinets from developing cracks, it is necessary to break-in a new or used clarinet that has not been played for a while. Breaking-in a clarinet helps ease the wood into the amount of heat and moisture introduced while playing for extended periods of time.

### Week 1:

Play the clarinet no longer than 15 minutes per day, and swab the bore carefully afterwards to remove moisture.

### Week 2:

Extend playing time to 30 minutes and follow up by swabbing the bore.

### Week 3:

Playing time can be expanded to 45 minutes. As always, swab the bore afterward.

### Week 4:

Push playing time up to one hour, making sure to swab the bore afterwards. After this regimen, if you have followed it closely, your clarinet should be broken-in. If you live in a dry climate, your clarinet will require more care since moisture is pulled from the wood quickly, causing problems. In this case, using a humidifier in your case will help prevent the wood from drying too rapidly and cracking.