SAXGOURMET SAXOPHONES

FEATURES, BENEFITS, AND FREQUENTLY ASKED QUESTIONS

R RESTRICTED TO
LIMITED PRODUCTION, BUILT BY HAND,
USING ONLY THE FINEST MATERIALS

STEVE GOODSON, SAXOPHONE GURU AND VISIONARY
"SAXOPHONE DESIGNER TO THE STARS"

WHAT DO YOU THINK OF THE CURRENT STATE OF SAXOPHONE DESIGN?

Well, if I had to give a one word description, that word would be "disappointed". We are truly living in the "Golden Age" of the saxophone, with more horns being made and sold today than at any time in history. Unfortunately, virtually all of the saxophones sold today are merely copies of old designs. There is almost no innovation or original thought being displayed by the major manufacturers.

IS THE REASON FOR THIS THAT OLD DESIGNS WERE "BETTER" OR THAT THEY ARE, AT LEAST, ADEQUATE?

There's this persistent myth that the "great horns of the past" were superior to what you can buy today. What a load of crap! First, if you really like something about a particular old horn, remember that there is absolutely nothing about them that cannot be perfectly duplicated, and often improved upon. Nothing. Na Na. Zero. They're in no way "unique". They do have a couple of characteristics common to pretty much all of the "vintage" horns, though: terrible ergonomics and questionable intonation. Not to mention years and years of built-in metal fatigue plus the wear and tear you would expect on something that old.

SO IF "VINTAGE" HORNS ARE SO BAD, WHY DO MANUFACTURERS KEEP COPYING THEM?

First, understand that the advertising claims of "vintage horn sound" are just that: advertising claims. Some companies, particularly Selmer and Yamaha, have made some real improvements in intonation. But if you will look at their horns offered today and compare them side by side with what they were selling 30 years ago, you will easily see that there is virtually no difference. Sure, there are a lot of vague claims about "improvements" but where's the changes you can actually see? The simple fact of the matter is that you can't see the changes and improvements because they really aren't there. Have a look for yourself and you'll see what I mean. And the rest of the companies? It looks to me like they're essentially offering you Selmer and Yamaha copies. If they were really and truly different, you would be able to easily see the difference. Right? Have a look and you will see what I am talking about. So why do they keep making them? Because you keep buying them. There's nothing more to it than that, and the tooling required to manufacture saxophones is expensive.

OK, IF MOST SAXOPHONES TODAY ARE "LACKING", WHAT CAN BE DONE TO IMPROVE THEM? WHAT AREAS NEED ATTENTION AND IMPROVEMENT?

There are quite a few things about saxophones that we believe that we have improved and corrected. We've done quite a bit of experimenting in the areas of intonation, tone color, flexibility of response, mechanism improvements, ergonomics, and finishes and construction materials. Let's examine these topics one by one. I'll provide an overview of what we have done with our Saxgourmet saxophones to improve them. I'll only discuss features that are unique to our horns, so you can easily compare them to other brands.

INTONATION HAS IMPROVED A LOT IN RECENT YEARS, BUT IS STILL LESS THAN PERFECT AND REQUIRES THE PLAYER TO "ADJUST" IN ORDER TO PLAY IN TUNE. WHAT CAN BE DONE?

Actually, quite a lot. First, let's define the main problem areas: the extreme ranges of the horn (bell key notes, palm keys, and the upper part of the second register), and getting the octaves to match. I'll spare you the lengthy scientific explanation of the cause of these problems, but will tell you that we're stuck with the laws of physics in use in this universe as they apply to conical bores.

It's relatively easy to figure out how to make the lower notes (the fundamentals) of the saxophone play in tune. All you have to do is apply the math (it's published and not that hard to find), get your tube taper right and pull your tone holes in the right places and make sure they're the correct diameter. You do have to allow a bit for the curvature of the neck and bow (think like a plumber: straight pipes vs. curved pipes), but basically the behavior of the energy wave as it travels through the horn is fairly predictable, so getting the lower octave tempered with itself is not much of a chore.

The trouble comes about when we press the octave key. First, a quick refresher in music physics: an octave is defined as the doubling of the number of cycles per second of the energy wave. Now think back to those overtone exercises you practice: the first overtone is supposed to be an octave, but it's a little bit sharp. The second overtone is an octave and a fifth, and it's (relatively) even sharper. The third overtone is sharper still, and it only gets worse. So if we rely upon overtones alone, there is no way the octaves are going to match, right? We can adjust this out and temper our scale a bit by moving the position of the tone holes, but this will result in several notes being a bit out of tune rather than a few notes being a lot out of tune. Better, but not as good as it could be. Unfortunately, this is the approach most saxophone makers take. But not Saxgourmet.....

It's quite possible to alter the frequency of the wave by manipulating the taper of the neck. Most manufacturers make the mistake of using a cone with straight even sides for the neck.....and then they wonder why their octaves don't match. Take a look at our necks: the angle of the taper changes significantly toward the base. There's a reason. Think of your saxophone as a series of four cones (neck, body, bow, and bell), each with a different taper. The neck is the most important of the four cones because it is the one which shapes the sound and sets intonation. Actually doing the math (and understanding what the math means) is absolutely crucial to neck design!

HOW IS IT POSSIBLE TO CHANGE THE NATURE OF A SAXOPHONE'S BASIC TONE? I THOUGHT YOU HAD TO CHANGE MOUTHPIECES TO DO THAT.

Sure, the mouthpiece has a considerable influence on the ultimate sound of the saxophone, but it's crucial that the horn itself not limit your options. The saxophone itself must offer the broadest possible set of tonal options, and this is where a lot of manufacturers fall down. The "tonal box" they force you into is just too small. Here's what we do about giving you more options with our Saxgourmet saxophones:

First, many of our horns come with two different necks, a "bright" one and a "dark" one. Remember that we said that it's the neck that is the most important component in shaping the sound, so by using two very different materials on necks that are otherwise identical, we give you a significant difference as a starting place. In addition, we build our saxophones to have a broader tonal spectrum. We accomplish this through metallurgy, a topic believe we know more about than anybody else in the industry.

Most saxophones are made from brass, and virtually all saxophone manufacturers today use the same "recipe" for their brass: 70% copper and 30% zinc. Just so you know, they do not now and never have used recycled"cartridge brass" (it contains lead and is far too soft) or brass from church bells (too soft, and contains tin). Basically, the more zinc the brass alloy used contains, the brighter its resonance frequency. We believe that using this much zinc puts a "floor" on the mid and low range frequencies, making the tone too bright and thin. We resolved this issue by substantially increasing the amount of copper while dramatically reducing (and some times eliminating entirely) the zinc content. This results in a natural tone which is far richer and more complex. The additional mid range and lower tones that the copper yields gives our horns an almost "human" quality to the voice that is unrivaled by any other saxophone. Should player desire a brighter tone, a second "bright" neck made from gold brass is provided.

MOST SAXOPHONES ARE DIFFICULT TO PLAY IN THE EXTREME LOWER REGISTER, THIN SOUNDING IN THE UPPER REGISTER, AND HAVE A VERY INCONSISTENT DYNAMIC RANGE. ARE THERE SOLUTIONS TO THESE PROBLEMS?

Getting the lowest notes to sound with good quality and a big dynamic range (including pianissimo!) requires that the energy wave be able to travel the length of the horn freely and without obstruction. It's important to understand specifically where the wave contacts the body (the "pressure nodes"), so a bit of math is required. You also have to think a bit like a plumber, and understand the dynamics of straight line flow vs. curved flow. None of this is an impossible task, but you do have to do the math and you do have to pay attention. Unfortunately, many manufacturers of saxophones would not know a pressure node if it bit them on a vital portion of their anatomy, nor do they seem to care about easing the flow of the wave. We do care, and it's one of the reasons our horns play so well.

HOW IS IT POSSIBLE TO IMPROVE THE RESPONSE OF A SAXOPHONE?

It is important to understand what we are trying to accomplish ere: we're not trying to improve the "airflow"! We are working to improve the transfer of acoustic energy. If you want to see if your horn is "hard to blow", do this: take the mouthpiece off your horn, finger low Bb, put your mouth around the neck cork and blow. That's how much blowing resistance your horn has!

What we're trying to accomplish here is to reduce the factors which reduce the energy of the wave as it goes through the horn. It's a "given" that the horn is tight and leak free, so we have to go after items that either absorb the energy wave or impede its flow. The main "absorber" of energy is the exposed leather of the pads, which acts like a sponge. The obvious solution to this problem is to maximize the size of the resonators so that there is a minimum of exposed leather. It is also essential that the resonator be constructed from then same alloy as the body of the saxophone to avoid "coloring" the sound.

Another area where there is very often a significant loss of energy efficiency is the bow and the curved portion of the neck. Since the energy wave has to "go around a corner", the saxophone designer must think like a plumber, and not only allow for the change in direction and distance, but also for any turbulence in the airstream which may cause additional resistance to the energy wave.

Unfortunately, far too many saxophone makers treat the entire horn like a straight pipe. We don't.

IF YOU CHANGE THE MECHANISM AND KEYWORK, WON'T THE PLAYER HAVE TO LEARN NEW FINGERINGS?

This area makes me crazy. It has always struck me that most of the problems should have been obvious to even the most casual observer, yet the saxophone makers have generally gone right ahead and continued making the same old same old that they've been selling for the last sixty years or so!

There are some rather significant improvements that we have made to our saxophones to address some of the persistent problems that other manufacturers have chosen to ignore. Mechanism and keywork changes are something you can actually see, touch and feel. Don't be fooled by companies that claim improvements that you can't actually see. In all probability, they're not really there at all. Let's take a look at some of the different unique features we've made on different models of our Saxgourmet saxophones. Not all features are available on all models. After you have checked these improvements, go call the people who made your current saxophone and ask them why they weren't included.

NEVER STICK G# MECHANISM

Ever since the articulated G# key was introduced on saxophones, players have been cursed with a G# pad that sticks. We've made this problem a thing of the past by adding a "teeter bar" system which absolutely prevents the G# pad from sticking without altering in any way the "feel" of the mechanism.

OUR EXCLUSIVE NEVER STICK G# MECHANISM

ALTISSIMO OCTAVE MECHANISM

The altissimo range has become a standard part of modern saxophone literature, and this unique key not only makes those difficult notes much easier to produce,

but also greatly improves their intonation and timbre, as well as quickening the response. This feature is exclusive to our Category Five series saxophones.

THE ALTISSIMO OCTAVE KEY
OF OUR CATEGORY FIVE TENOR

UPPER STACK SPEAKER KEY

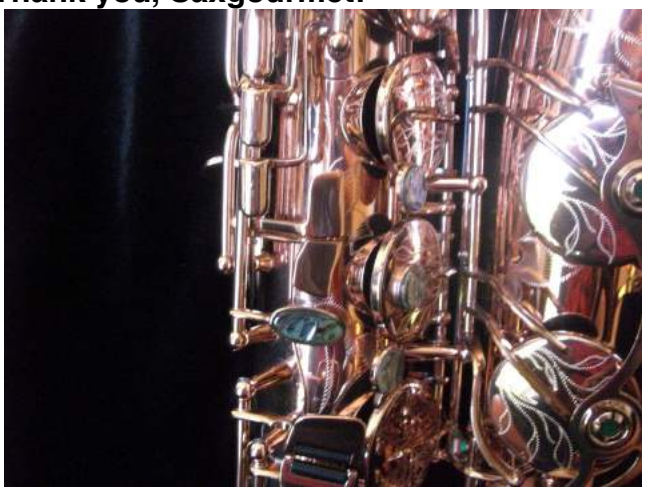
The upper notes of the second register of the saxophone tend to be very out of tune and thin sounding due to inadequate venting. The addition of our exclusive Upper Stack Speaker Key, which requires no additional springs, resolves this problem easily.

UPPER STACK SPEAKER KEY

DEDICATED G3 KEY

G3 is the most often used and most difficult to reliably produce of the altissimo notes. It is often of questionable pitch and weak voice. Knowing all of this, we developed a high G key, that makes G3 *just another note* on your saxophone,

requiring no special skills. A high G is produced as easily as any other note, with perfect pitch. Say "Thank you, Saxgourmet!"



HIGH G KEY TOUCH

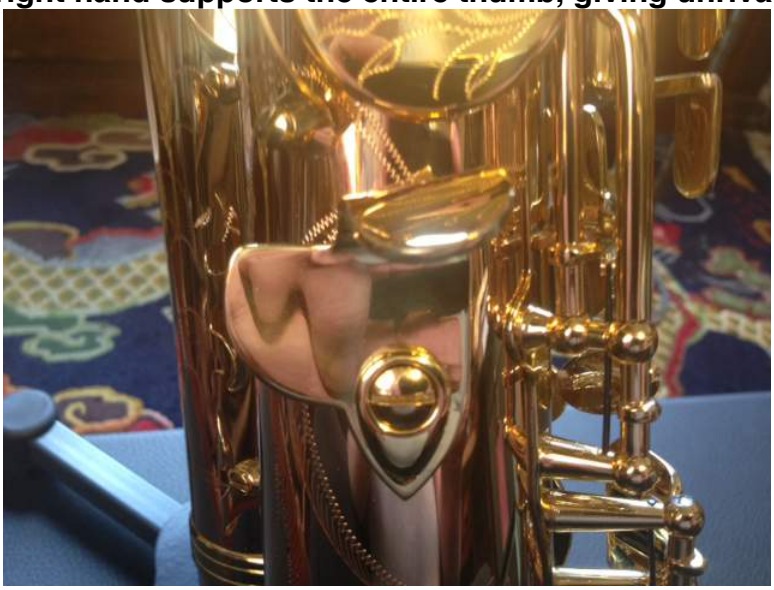
TWO DIFFERENT NECKS FOR TWO DIFFERENT SOUNDS

Most of our horns come standard with two different necks made from two different materials, one producing a "dark" tone, and the other producing a "bright" tone. The necks tune exactly the same. The only difference is the change in the tone.

#1 DARK NECK, #2 BRIGHT NECK

ERGONOMIC THUMB REST

It should not hurt to play your saxophone! Our ergonomically designed thumb rest for the right hand supports the entire thumb, giving unrivaled comfort.



SAXGOURMET ERGONOMIC THUMB REST

KANGAROO LEATHER PADS

All of our saxophones come equipped with custom made black kangaroo leather pads manufactured to our specification by MusicMedic.com. The pads are extra firm (Rockwell hardness = 55), use woven 100% wool felt, and rigid chipboard backs for long term stability. Kangaroo leather is the softest and strongest leather on the planet. It eliminates key noise and *DOES NOT STICK!* Only Saxgourmet saxophones have these special pads as standard equipment. The pads are installed using genuine natural shellac.

SAXGOURMET EXTRA FIRM KANGAROO LEATHER PADSN WITH SOLID COPPER AIR TIGHT MAESTRO RESONATORS

SOLID COPPER AIR TIGHT RESONATORS

All Saxgourmet saxophones use solid copper air tight Maestro resonators manufactured by MusicMedic.com and securely installed with a through rivet. The perimeter of the resonator produces an air tight seal against the pad, preventing any blow through leakage. The resonators are significantly oversized in order to minimize the amount of exposed pad leather, which absorbs energy and deadens the sound.

DOUBLE ARMS ON THE LOW C, LOW B, AND LOW Bb

As long as there have been saxophones, the large lower keys have leaked because the key cups moved in a horizontal plane. If the cups are attached to the rod in two places instead of just one, the cups cannot move. I'm sorry, but this one is a "no brainer", and I just don't understand saxophone manufacturers who don't do it.

EXTRA ARMS FOR LOW C, LOW B, AND LOW Bb

F# "HELPER" MECHANISM

When you close the F, E, or D keys on the lower stack, a compound mechanism also closes the F# key. Unfortunately, this mechanism often gets out nof adjustment, allowing the F# key to leak. It's not a matter of "if" it's going to happen, but "when" it's going to happen. Our saxophones, all of them, have an extra arm which provides a "fail safe" backup allowing the lower notes to always speak freely and saving a trip to the repair shop. Yes, it's even screw

adjustable.You can easily tighten up the lower stack while the piano player takes his solo!

SCREW ADJUSTABLE F# HELPER

THREADING THE NECK INTERIOR

All saxophonists have experienced instability in the lowest notes, resulting in "motorboating" sounds. This phenomenon is due to the energy wave becoming unstable as it passes through the horn. If you calculate the location of the pressure nodes which correspond to the troublesome notes, you can take action to stabilize the wave as it passes. We accomplish this by creating a "boundary layer" of air which allows the wave to pass more freely. The same principle is used by the dimples in golf balls. It works like a charm, and Saxgourmet is the only horn manufacturer doing it!

SAXGOURMET THREADED NECK

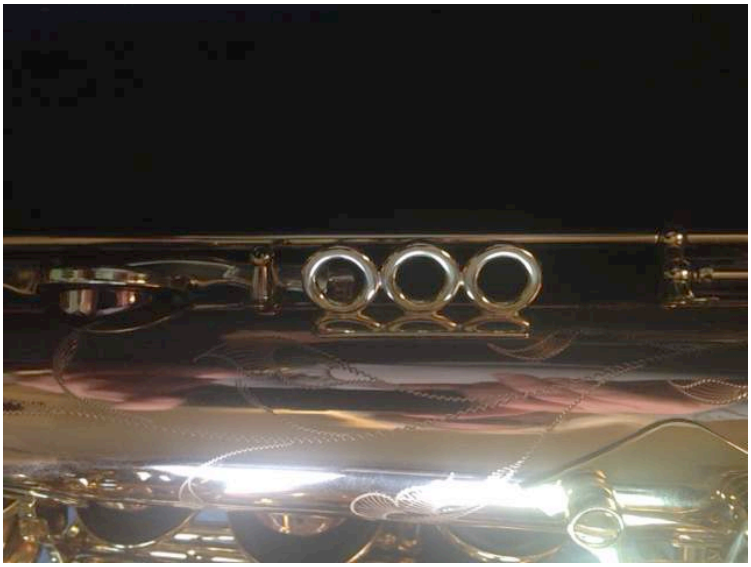
MULTIPLE OCTAVE VENTS

There are twelve semitones in an octave, and in the perfect world, our saxophones would have a separate octave vent for each of them. Unfortunately, the required mechanism for twelve vents would be far too complex and unreliable, so almost all saxophones have only two vents, one for the notes D2 - G#2, and another for the notes A2 and above. By necessity, these notes are in a "compromise" position, so they don't allow for perfect intonation. By increasing the number of vents, thus reducing the number of notes controlled by each individual vent, intonation and response in the second register are substantially improved. This feature is exclusive to our Category Five series of saxophones. The Category Five has a total of four octave vents rather than the usual two.

DOUBLE BODY OCTAVE VENTS ON A SAXGOURMET CATEGORY FIVE

THREE RING STRAP HOOK

Players all have different physiques, and as a result need to have the horn hang from the strap at different places for maximum comfort. It shouldn't hurt to play your saxophone, so all of our horns have three ring strap hooks in order to give the player some options. We don't believe in "one size fits all"!



THREE RING STRAP HOOK

SCREW ADJUSTABLE MAIN STACK KEYS

All of our Saxgourmet saxophones have fully screw adjustable stack keys so that the owner can do minor maintenance and adjustments and avoid expensive trips to the repair shop.

WHY ARE SAXGOURMET SAXOPHONES NOT SOLD BY DEALERS?

Honestly, there are two very good reasons: first, it saves the buyer money by dealing directly with the manufacturer because the markup that dealers and distributors would apply is unnecessary. Secondly, it's truthfully because we don't have to! We've been selling direct from our website since 1995, and understand all of the nuances of "dealing direct".

WHAT IF I WANT TO TRY A SAXGOURMET SAXOPHONE BEFORE I BUY? WILL YOU SEND ONE OUT TO ME ON TRIAL?

It's not a problem! We have a "home trial" program which allows potential buyers to try our horns in their own home. See our website for full details and terms, and don't hesitate to ask questions about anything you don't understand.

CAN I ORDER MY SAXGOURMET SAXOPHONE WITH A SPECIAL FINISH OR CUSTOM ENGRAVING?

Unfortunately, no. We don't offer gold, silver, black nickel, or unlacquered finishes. If you wish to have custom engraving, there are several engravers we have worked with who will be happy to do any custom design you desire after your purchase.

ARE REPAIR PARTS AVAILABLE FOR SAXGOURMET SAXOPHONES?

Yes they are! We make repair and replacement parts available for all current production models, and continue to inventory parts for seven years after the last example of a discontinued model is manufactured.

MORE QUESTIONS?

PLEASE CALL ME

I'M HAPPY TO ANSWER.....THIS IS THE ONLY PLACE YOU CAN ACTUALLY SPEAK TO THE DESIGNER

I'm usually available to the telephone between 10am and 3pm, CST Mon - Thurs

(504) 324 - 3850