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Introduction

The FreeDrumLessons.com website was launched in 2007, and has since established itself, as one of the biggest, if not the biggest, resource on free drum lessons on the World Wide Web. At the end of 2009, a live stream version of this learning platform was created on the ustream website, and so, FreeDrumLessons.com Live was born. These lessons are planned beforehand and are based around questions that Jared Falk and Dave Atkinson, the hosts of the live show, gather from received emails and from posts on the FreeDrumLessons.com forum.

The original purpose of this document was to write an overview of the tenth live lesson entitled - "What to Look For When Buying a Drum Set" - with special guest, drummer, drum builder and owner of Casey Drums, Jason Kliewer. The more I thought of writing about the lesson, the more I felt that something more than an overview needed to be done.

With all the information shared in the lesson, this was great opportunity to create a small and organized guide, not only of what to consider when buying a drum set, but also, concerning general knowledge about the various components of a drum. Having this in mind, the information provided was broken in five distinct chapters – lesson overview, general drum information, drum shells, shell hardware and drum companies. In the first chapter, the lesson is reviewed, enabling a better view of some of the most important events on the broadcast. In Chapter II - General Drum Set Information - we take a glance at what to consider when buying your first drum set, either new or used; choosing a drum kit for a style of music; number of pieces to choose when buying a kit and the effect of drum heads in the sound of your drums. If you are looking for information regarding drum shells, like type of material of the shell (wood, metal, acrylic), types of shells, bearing edges, shell depth and diameter...and how all of these options affect the general sound you get from a drum, then you should check the third chapter. In the fourth chapter, we delve into shell hardware, lugs, bass drum spurs, tom mounts and hoops and their effect on sound. The last section of this guide, gives a further understanding of how a drum company may work, from the lines of drums that are sold, to the customer support and endorsements. This chapter is built around Casey Drums, since the examples given in the lesson were from Jason Kliewer's experience in managing the company.

The information in this document was taken from the tenth lesson - "What to Look For When Buying a Drum Set" - of the FreeDrumLesson.com Live broadcast at the ustream.com website. All the extra information found on this guide, was taken from the internet and from an e-mail response sent to me by Jason Kliewer. After the lesson ended, I took the liberty of e-mailing him some more questions that I had, not only from subjects that were not talked about in the lesson, but also regarding incomplete or unclear answers given in the broadcast. Hence, both the video of the broadcast and this document can be used separately. But if you are looking for a particular subject, it will be easier to check it on the document, because of the table of contents and because of the way the information was organized.

Have fun.

Acknowledgments

I would like to thank Jason Kliewer for being so kind and quick on answering my questions, regarding some of the observations made in the lesson and of taking the time to clarify other questions that I wasn't able to ask Jared and Dave during the live lesson.

I would also like to thank three great bodacious friends of mine, Luis Maçarico, Bruno "Base" Pires and Jacky for helping me reviewing this guide.

And last but not least, I would like to thank Christina Kliewer for the great photo she provided for the cover of this overview.

Chapter 1

Lesson Overview

Lesson Overview

Lesson Information

Time: 4pm PST (7pm EST)

Date: February 16th, 2010

Topic: What To Look For When Buying A Drum-Set

Where: http://www.freedrumlessons.com/live

Duration: 1:00:01

Hosts: Jared Falk & Dave Atkinson

Special Guest: Jason Kliewer from Casey Drums

Video of the Lesson: http://www.freedrumlessons.com/drum-lessons/how-to-buy-a-drum-set.php

Summary

The show kicked off with Jason Kliewer playing along to a song by Dashboard Confessional, called, *Belle of the Boulevard*. We got a chance to get to know Jason a little bit, and how he got started on drums having Jared Falk as his teacher.

Jason was a special guest for this lesson and with the assistance of Jared and Dave, gave us more than a question and answer session about drums. The topics discussed ranged from - what drum kit to buy when you are just starting out, new drum kit vs used drum kit, shell hardware, types of woods, sizes of shells, drum companies, what is best for live playing and studio playing, drum sets for styles of music, types of drums hoops...etc. Throughout the lesson, Jason also gave us some information regarding Casey Drums. Not only did we got to know some of the inside outs of the company, but also were shown in some detail, two of the three lines of drums that the company manufactures.

Dave Atkinson with the help of Jared Falk, entertained us with very cool and funny moments throughout the lesson, which involved wine and Dave, the TUNA takeover, Ice Hockey and Dave's Microphone.

Before the giveaways and the announcement of the new contest for this week's lesson, both the hosts and special guest played drum solos. The lesson ended with Jared Falk playing one more drum solo.

This was a very fun lesson to watch. Not only did we get tons of information regarding drums, but we also got very funny and entertaining moments with and without drum sets. My favorite lesson so far.



General Drum Set Information

General Drum Set Information

Choosing Your First Drum Kit (New vs Used)

Before you find your sound on the drums, it is good to just buy something to get you going.

If you decide to buy something new, then don't buy a cheap imported drum set, which usually costs around 300\$ and comes with cymbals that kind of warp the first time you hit them. Go for something decent, around, let's say, the 800\$ to 1000\$ mark. You can get pretty decent drum kits around these prices, so you don't need to go out and spend 4000\$ on a custom kit as you are starting.

A used drum kit is definitely a great way to go. When you buy a used kit, the depreciation of its original value has already happened. Whoever bought it, already lost a great percentage of the price they paid for it. The price of used drum sets will always decrease to a certain point, and will stay around that price range. Unless you have a really old collector's kit that might hold its value or even increase it slightly, regarding its original price, the price of a used drum kit will always decrease. Therefore, if you wanted to upgrade to a better kit in the future, you could sell the used kit you bought in the first place for pretty much the same amount of money that you spent on it.

What to Look for While Testing a Drum Set (Used or New)

When looking for a drum kit, and to guarantee you're getting a quality instrument, either used or new, there are some things you can look for. First, you can look for the quality of the drum hardware, specially the lugs, as far as how they turn. So, when you go to test a drum set at a music store, or at the house of a seller of a used drum kit, take your drum key with you and check the lugs. Turn them, and see if they are kind of crunchy or if they are smooth. The lugs will take a huge part regarding the upkeep of the kit, so look for smoothness while turning the tension rods on the lugs. The quality of the rims is also very important. If they are really thin, the coating isn't in good condition and it shows signs of pitting, then the rims will deteriorate a lot faster.

Another thing to look for, are the bearing edges of the drums. If you have the opportunity, you can ask the person who you are buying the kit from, to take out the heads of the drums. You could start by the snare, since it takes a lot of beating. After taking the head off, the hoop should follow it, enabling you to run your finger along the top of the drum, along the bearing edge. If it is straight and flat, and your finger doesn't move because of bumps, then you are in a good spot.

In regards to sound, if you are a beginner, you won't necessarily need to hear a drum set in person. If you do your price shopping and stick with a general price range, let's say, between 500 and 800 dollars, you won't need to hear them before buying them, since drum sets in this price range are fairly comparable, regardless of the drum company that manufactures it. However, if you know how a good drum set sounds, then you will want to listen to it before buying it.

Choosing a Drum Set for Styles of Music

Some drummers have different drum kits for different styles of music. Generally, if you are a one drum kit kind of guy, maple is the best choice, since it is the most versatile. Birch is also a very good option.

If you are looking for a snare that is versatile, a maple snare in a 5.5 inch depth is a great choice. It has a great tuning range and the tone blends well into different musical situations, whereas metal snares can have a tendency to be too loud or piercing if you are not a finesse player or a great tuner. Maple snares can be tuned to sound great for many styles.

For metal and heavy rock players, Jason talked about Tama drums. Since they have the biggest share in that market, and have endorsees heavy rock drummers, it his easier for them, to have feedback from heavy rock drummers. This way they can produce models that cater more to these types of players. Jason feels that it is mostly looks and not a question of sound.

You should think more of what sounds good with your band, and of what you like, and not consider as much style of music in particular. It is real hard to say what is the best quality drum set for metal or any other type of music. It is not just the drum kit, there are many factors that come into play other than just the drum set, like the choice of heads and of cymbals. Play some kits and do some research.

Number of Pieces

Most drum teachers have a standard five piece drum kit that they use for their lessons. We see lots of drummers playing a four piece kit, but a five piece is more common. Even the Railroad Media Inc. instructional DVDs, are written for a five piece kit. What is taught on the DVDs can be adapted to a four piece, but it is really best to stick with the five piece at first, until you get comfortable with what you have, before doing any types of changes.

Cracks in the Drums

If a drum has an airline crack on the inside, which is something very rare, it could be the result of you dropping it really hard on the floor or of taking the drum from a high temperature area to a low temperature area. For instance, going from 30 degrees, when you are inside the club, to -5 degrees in the outside. In two minutes the drum will just snap. The most likely scenario will have the lacquer cracking first before the shell.

The best advice that can be given here, is for you to be careful with your drum kit. It doesn't matter the type of material a drum is made of, if you drop it or treat it wrongly it won't matter. I once heard from a fellow drummer - "Take care of your drums, and the drums will take care of you".

Drum Heads

A well made drum will sound good even with cheaper heads. In Jason's opinion, the drum heads are only responsible for 50 to 60 percent of the sound of the drum.



Drum Shells

Types of Shell Material

Better sound is a very subjective issue, and will depend on your ears and how trained they are. Some of the more used types of shell materials for drum kits are maple, oak, beech and birch, which are types of wood, acrylic and some types of metal.

Maple is more of a projection wood. It is going to project your drums louder and you will be getting a lot of volume out of a maple kit, so it is a very good choice for live drumming. Maple has nice controllable qualities for studio recording.



A piece of Maple Wood (Bland color and not a lot of grain figure)

Oak is louder than maple, it is boomier, loud and with more sustain, so it is harder to control in a studio setting.



A piece of Oak Wood (Aggressive V grain patterns)

Birch is fabulous for recording because of its warmer tone, it is easier to equalize and tune. These drums are like self EQuing drums. Birch wood is a very good drum for live performance.



A piece of Birch Wood (bland color just like maple)

With **beech** wood the sound qualities are a happy medium between maple and birch. They project like maple but are deep and controllable like birch. They are very good for studio recording and live performance.



A piece of Beech Wood

Acrylic drums are very noticeable on stage, not just because of the looks but of the sound also, which is brighter, louder and has more of a metallic tone on the lines of a metal snare. Since acrylic is a non porous material, the sound waves produced on the inside when the drum is hit, bounce like crazy, there is no absorption into the acrylic, so you will be getting pure sound from it.



ddrum Acrylic Drum set

While watching the lesson a question hit me. There are wood drum sets and wood snares, acrylic snares and acrylic drum sets and snare drums made of metal, so what about **metal** drum kits? I asked Jason and he told me that there are metal kits but just a select few. Ludwig at one point made a limited edition stainless steel kit. Jason feels they sound different.

Although all these materials have different characteristics, at the end of the day, once you go live with a professional sound system, you are going to rely on the sound guy to project and equalize your drums, so it is not going to matter too much. The most important thing is that you like the tone and overall sound of your drums, and the sound man will do the rest of the work.

Types of Shells

There are drum shells that are made of only one ply of wood. This wood is very thick and is steam bent, which is a more expensive manufacturing process. However, these types of drums are louder than normal drums, because of the level of thickness. They will also have a more open and round tone, so it will be more focused and project a little bit less than normal drums. The tuning range is crazy on these drums, a steam bent 12x8 inch tom, will dwarf a normal tom with the same sizes. You can easily get high, mid and low tones from these one ply drums.

Shell Depth and Diameter

The smaller the diameter, the higher the tone and the pitch. If you are playing a rock kit, generally speaking, it has a 12 and a 13 inch rack toms and a 16 inch floor tom, which are also big in depth. If you are playing something like that, you won't be getting flexibility of tone. You will get amazing mid and low tone, but your highs just get choked right out. With a fusion kit, you have 10 and 12 inch rack toms and a 14 inch floor tom. This is a more flexible drum kit. With these shell diameters, you can get a higher pitch from the drum, but you have to be careful regarding the depth. Usually, in the fusion kits, you get a 10 inch in diameter by 8 inch of depth (10x8) rack tom. If you get a drum that is shallower than that, you will get a higher pitch, but will lose resonance capability and flexibility in tonal range. Also, the shallower the drum, the quicker the sound will be and the more attack it will have.

A good example of these differences in tom sizes can be seen between Travis Barker and Joey Jordison. Joey has deeper toms and Travis shallower ones, this way he can get a "punk sound" from them, which is characterized by quick bursts of sound.

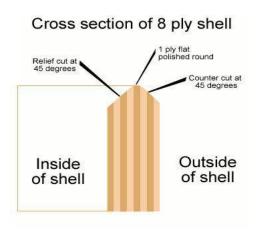
Number of Plies

Number of plies is very important in drums. Originally, thinner drums were less stable, so they would have a tendency to flex with temperature changes or even lose its near perfectly round shape. The thickness of the ply, affects the projection. The thicker the shell is, the more it will project, the more it will stay in tune and the decay is quicker. Nonetheless, it is possible to get more decay from a shell with these features, thanks to the level of projection we can get from a thicker shell.

The thinner the shell, the quieter it will be. There are some people that believe that thinner shells have a greater tuning range.

For beginner drummers, Jason recommends thicker drums. Eight or seven ply for the toms, eight or ten ply for snare drums and ten ply for the bass drum.

Bearing Edges



Most drums are made with a series of 45 degree angled bearing edges. Some companies have made a few models with 30 degree angles, but it is not a very popular thing. Shallower angles are used to replicate a lot of vintage drums edges, where the sound is a lot more deadened and flat. The sharper 45 degree edge gives a crisp sharp sound.

Reinforcement Hoops

Jared's DW Exotic kit has reinforcement hoops on the inside of the drum. These hoops will increase the tone and fundamental pitch of the drum, so you will have a higher tone in the drum. But its main purpose, and why they are put into drums, is to stabilize the shell. Nowadays, shell technology is a lot better, and you don't need these hoops on most shells, even thinner shells don't need them. So, choosing a drum kit with or without reinforcement hoops is a question of personnel preference and it isn't really of any concern.



Reinforcement hoops on the top and bottom edges of the drum

Shell Finishes

Out of the three finishes, wrap, lacquer or satin, the wrap will change the sound the most, but most naked ears will never be able to tell. It's so minute, that it is almost impossible to tell. If you are looking for the best, then go with a satin stain finish like the one on the Casey Drums Stain Series, the kit Jared was playing throughout the live broadcast. Jason told me that the way they do the finish on those drums is incredible for the shell. It lets the drum vibrate and resonate freely and gives it a sweet sound.



Shell Hardware

If you want to know the effect of the shell hardware on the sound of the drum, then this is the chapter for you. We will also discuss some of the differences between some of the options you have for personalizing the look and sound of the drum.

Lugs

Lugs and hardware often times should be mounted on the nodal point of the shell. The nodal point is the portion of the shell were hardware should be mounted, because this way, the shell is allowed to vibrate freely, without degrading the shell's dynamic range and sustain. This way the drum doesn't get choke. There is a certain tolerance within the edge of the shell, were a lug should be mounted. And the same goes for all the hardware. Often times you get to see floor tom mounts near the bottom of the drum, which is a very good option. Some other manufacturers put the mounts right in the middle of the drum which greatly affects the sound of the drum.

On the snare there is no problem on having lugs in the middle of the drum, because it helps to keep the tension on both drum heads, since this way the rods are pulling off of each other.

When buying a drum set, you don't need to necessarily worry about these issues, unless you see drums with lugs that are really far into the drum. You can also check brochures and things like those, to see what companies have to offer, and check possible problems like hardware placement.



Well Mounted Lugs and Floor Tom Mounts

Hoops

Die cast hoops are thicker and don't move as much. The hoop is so thick that if the snare drum head is cranked really tight, the hoop won't flex. A standard triple flanged hoop will not be rigid enough, so, if you crank the tension real high your rim will not evenly hold down the head in between the tension rods. The die cast is just so much thicker and stronger, that it will do a better job of holding down the head evenly when in extreme head tensions. With that said, triple flanged hoops don't choke the sound of the drum, while die cast has a tendency to choke the shells, because of its rigidity and its inability to vibrate with the drum.

Triple flanged hoops are the most common type of hoops found in drums, they are the norm. This is not something that you should worry about while searching for a drum kit.

While talking with Jason via e-mail, he said that he has had some tendinitis problems because of playing in snares drums that had die cast hoops. This happened because of its rigidity and its inability to vibrate with the drum. The hard rim does not absorb any of the shock from the stick and so, it traveled back up into his wrist and elbow creating a lot of pain. As soon as he switched all his snares to triple flange or wood hoops, the problem never came back.



Tama Metal Hoops - The two on the left are triple flanged hoops

Wood hoops have less of a sharp attack; you are going to have a round kind of warm body to it. It will give you an open tone, not boomy and less metallic. Metallic hoops are louder, have more attack and can project a sharp sound. Also wooden hoops are more expensive.



Snare Drum with Wood Hoops

Tom Mounts







Tama Drum with Mount Drilled on the Shell

On lower-end and semi-pro kits, the mounts may be drilled onto the shell, whereas mid-range and high-end drums will have floating mounts (like the ones on DW kits). It lets the drum vibrate freely.

The ideal drum has the least amount of hardware on it. Casey drums have tiny lugs which play a huge part in the sound and resonating qualities. The reason there are mounts onto the shell on the semi-pro kits and lower-end kits is strictly a price reason.

Bass Drum/ Kick Drum Spurs

The sound of a bass drum can be affected by the quantity of hardware that it is in contact with the shell. Hence, the spurs definitely affect the sound of the kick drum. The flexibility of the spurs is also important. If you have really sturdy spurs on the drum you will get a lot of tone from the head. However, Jason finds that the less the hardware in the drum and the more flexible the spurs, the more freely the drum is able to bounce and move, and so the better sound it will have.

What we have just talked about is one of the reasons why Casey Drums have small lugs, with a single bolt, so this way they have very small contact with the shell.



Bass Drum With Spurs

Various types of Spurs







Drum Companies

The best reason to play

Drum Companies

Some of the viewers of the lesson, and even Jared and Dave, made some questions regarding the way a drum company works, so, we got information on the various drum lines that Casey Drums offers, how to get endorsed and the way its customer support is handled. Therefore, naturally, this chapter is based around Casey Drums. Even though Jason just wanted to talk about drums in the lesson, and take the focus off of his drum company, in this chapter we will have to do just that, focus on his company, but as a way to learn more about the way a drum company works. We will also take this opportunity to give some more information regarding Casey Drums and Jason Kliewer.

Drum Set Lines

Casey Drums has three lines of drums, custom, stain and show.

Custom Line – about everything in the kit is high end. You can choose shell thickness, shell depths, and all the sizes, as well as upgrade options as far as hoops go. The kit in the live lesson was upgraded with different bass drum spurs. It had a wood hoop, which is an upgrade, as well as the painted wood bass drum hoop. The different mount options on the toms are also optional and the ten inch snare drum is a bit of an upgrade. The kit shown in the lesson is a unique model that is used to show around.



Casey Drums Custom Line

Measures of the drums in the Live Lesson

Rack Toms: 10x8 inch and 12x8.5 inch Floor Tom: 16x16 inch Snare Drum: 14x6.5 inch Bass Drum: 22x8 inch

Stain Line – it is the mid-range line of Casey Drums. It is available only in stain finishes. The drum in the live lesson had exactly the same shells and lugs as the Custom Line, it had standard floating tom mounts (much like the DW kits), eight ply toms, ten ply kick drum and ten ply snare. The black

powder coated rims and black tension rods were upgrades for the person who bought the kit.



Casey Drums Stain Line

Measures of the drums in the Live Lesson

Rack Toms: 10x8 inch and 12x8.5 inch Floor Tom: 16x16 inch Snare Drum: 14x6 inch Bass Drum: 22x8 inch

Show Line – the low-range of Casey Drums. However, this low-range is more of a semi-professional drums, so it is a very high end range also.



Casey Drums Show Line

Customer Support

Since Casey Drums is a small company, besides building the drums, Jason takes care of customer

support. He will personally meet local people and answers all the e-mails. He strives to answer e-mails right away, and to create a conversation with the possible customer, not necessarily to just sell drums, but to answer any questions they might have with anything drum related. He tries to really make a personal connection with the people that contact him.

Endorsement

To apply for an endorsement, you have to contact Jason and send him a promo kit. This kit should contain copies of the following:

- o all of your recordings in albums;
- o DVDs or any other multimedia that you have made or participated in;
- o a list of current tour dates;
- o a list of accomplishments, like for instance winning a guitar center drum of, just as an example;

So, if you want to apply for endorsement, you have to have an audience, you have to have people that want to see you and you need to be playing regularly.

Jason Kliewer

Jason started playing drums when he was only 12 years old. He was the first student of Jared Falk. He has been playing drums for 10 years. We best know him for his work with the Canadian band Hasting. With only 19 years old he recorded the play-along section of the <u>Railroad Media's Rock Drumming System</u>.

Besides talented behind the drum kit, since early high school, Jason has been perfecting his skills as a drum builder. With only 22 years this young drummer has already a very impressive track record regarding the world of drumming.

Famous Quote: "...you can crank the snot out of a drum, and it won't flex."

Casey Drums

<u>Casey Drums</u> began as a hobby business in 2004 in BC, Canada. The original company name was Kliewer Custom Drums. It was too hard to say, however, so we took the initials K. C. and in 2008 our name officially changed to Casey Drums (taken from www.caseydrums.com).



Other Drum Companies

There are many really good drum brands. Probably 95% of them are very good companies. All of them make model lines for beginners.