first time alto builder\'s questions

Posted by left - 2012/05/03 12:13

Hello everybody!

My name is Lefteris and I'm a luthier from Greece. I mainly build classical guitars and I didn't know anything about 11 string alto guitar, until a customer of mine asked me to make him one! So as you understand I have some building questions, since the only source of information for me is the web. I don't know anyone who made or own an 11 string alto guitar in my country and I hope that with your help this could be a good start.

The first questions that pop in to my mind when I see an instrument like that (there will be more when the actual building starts!!!) are these:

1. About fingerboard: Do you guys use 1 or 2 pieces of ebony to make it? It's very difficult for me to find a decent piece this wide, and I'm afraid that if I make it with 2 pieces it will open at the joint when the conditions are very dry. As you know ebony can do crazy staff!

2. About top and bracing: I'm planning to brace the guitar with the traditional 7 fan bracing. How much stronger should the structure be (compared with a six string Spanish style guitar) in order to tolerate the extra tension?

I'm going to make the plans for this guitar on the AutoCAD designer program and share it with you all. It's a pity there aren't any plans out there.
Thank you in advance for your time to answer this.:)

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Re:first time alto builder\'s questions

Posted by Sten - 2012/05/05 05:54

Hello Lefteris,

I wish you luck and success with your construction of an 11 string alto guitar!

I think that some other members of this community can answer your questions better than me, but I will give you a link to another thread at this website where I specify in two posts the measures of my two 11 string alto guitars:

http://altoguitar.com/index.php?option=com_fireboard&Itemid=31&func=view&id=1087&catid=3&limit=6&limitstart=24

Best regards,

Sten

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Re:first time alto builder\'s questions

Posted by walter - 2012/05/05 16:29

Hello Lefteris, I used the keyboard Rosewood, I had not one piece so I joined the cut from the book gives a unique piece.

1) If I had the ebony of the width and length I would use it, but if I had doubts about its change over time once doors._REMARQUES go to the back of the keyboard apraticasre grooves along its length to compensate for possible warping or sagging.
This could create some problems, however, the response of the notes by creating areas of decay of sound in the middle of the keyboard!
I have no idea how the professionals in this area need to choose the keyboard itself, it is nevertheless true that in my opinion sounds better than the rosewood and ebony is more stable, but just my opinion!

2) for the internal fan and reinforcements will tiporto what was suggested in other forums about the Harp guitars ....
If we consider the guitar with metal strings on a load of 10-11 strings, 6 normal and 5 drone, KG will be on the 120 than half of a 6 string.
I suggest rounding the ratio of the fan aunmentadolo than a 6 string, 30%, so the same can be done to a Altoguitars than a normal 6-string.
I always hope some luthier Altoguitars can confirm this. The mine has a completely different structure from a Hauser and

Fleta tradizzionale or Spanish. As the internal structure I used a comb to get more raggere very dense knots on the table, the thinner the range of chains and maintain lightness and rigidity.
I prparerei Cad construction plans for all if I could have at least basic information on the keyboard!
For the internal structure of the chains or fan then every maker has his or could relate to a drawing at least in principle.
I wanted to just propose to Heikki Rousu, to collaborate on this, or rather, I-us build in an open drawing in principle, but with at least some indications of spazziature keys, bridge, and pitch ... if he desire, since the matter is really hard to find news updates certain that I would be more available!

I have a question, however, as you relate with the internal volume of the guitar and the extent of the hole?
The Altoguitars have many liters of air in the chest, on average, are larger than a classical guitar as a body?

Greetings Walter

Ciao Lefteris, per la tastiera io ho usato del palissandro, non lo avevo in pezzo unico così la ho giuntata tagliata da libro dia un pezzo unico.

1) Se avessi dell'ebano di quella larghezza e lunghezza lo userei, ma se avessi dei dubbi sulla sua modificazione nel tempo una volta relizzata la tastiera su retro andrei a apraticasre dei solchi sulla sua lunghezza per compensare svergolamenti o possibili cedimenti.
Questo potrebbe però creare alcuni problemi alla risposta dell note creando delle zone di decadimento del suono in mezzo alla tastiera!
Non ho idea di come i professionisti di questo settore vadano a scegliere la tastiera stessa, è comunque vero che a mio avviso il palissandro suoni meglio dell'ebano e sia più stabile, ma solo il mio parere!

2) per il ventaglio interno e rinforzi ti tiporto quanto mi è stato suggerito in altri forum a riguardo di Harp guitars....
Se consideriamo le chitarre con corde di metallo il carico di una 10-11 corde, 6 normali e 5 bordone, sarà sui 120 KG rispetto la metà di una 6 corde.
Mi suggerivano di arrotondare la proporzione del ventaglio aunmentadolo rispetto una 6 corde del 30%, pertanto lo stesso si può fare per una Altoguitars rispetto una normale 6 corde.
Spero sempre qualche liutaio di Altoguitars possa confermare ciò. la mia ha una struttura completamente diversa da una Hauser o Fleta o tradizzionale spagnola. Come struttura interna ho usato un pettine a raggere molto fitto per ottenere più nodi sulla tavola, minor spessore delle catene del ventaglio e mantenere leggerezza e rigidità.
Anch'io prparerei dei piani costruttivi Cad per tutti se potessi avere le informazioni di base almeno sulla tastiera!
Per la struttura delle catene o ventaglio interno poi ogni liutaio ha la sua o potrebbe rapportarsi con un disegno almeno di massima.
Volevo appunto proporre a Heikki Rousu, di collaborare a questo, o meglio io-noi nel realizzare un disegno aperto di massima ma con almeno indicazioni certe su spazziature tasti, ponte, e diapason... se ne avesse desiderio, poiché per la materia è veramente difficile trovare notizzie certe io sarei più che a disposizione!

Ho io una domanda invece, come vi rapportate con il volume interno della chitarra e la misura della buca?
Le Altoguitars hanno quanti litri di aria nella cassa in media, sono più grandi di una chitarra classica come corpo?

Un saluto Walter

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Re:first time alto builder\'s questions

Posted by tommyollie - 2012/05/07 18:25

Hi Lefteris,
I was able to get a couple of good quality wide ebony boards from:
http://www.luthierssupplies.co.uk/
It may be worth importing if they have the stock.
Joining 2 narrower ebony boards seems to be quite common among multi-string builders. if you check out the yahoo ten string forum there might be a few useful posts.
Regarding the bracing, I was advised by one experienced Alto builder not to over brace and that a slight increase in bracing would suffice.
Best of Luck

Bill

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Re:first time alto builder\'s questions
Posted by left - 2012/05/07 20:34

Hello to everyone!

I am sorry for the late responce but as I assume you've heard, we were all into ellection fever these days in Greece.

Thank you very much for your answers, they are very helpful for me.

Walter,about your question on the body of the guitar and the hole. This is my opinion which is based 100% on my personal experience and its not at all scientific.I hope it will help.
A bigger box means that there is enough room for the low frequenses to develope and give a rich and deep bass. But on the other hand, guitars that have a beep body are have a slow responce and are lacking attack.Thats why flamenco guitars are generally shallower than classicals.That gives them speed and agresiveness.About the hole now. With a small hole the instrument have deep, woofer like bass, but it sounds like it's talking with its nose closed. As the hole gets biger the sound opens up and it becomes clearer, but if you over do it, it will sound thin an shallow.Try to do this: Make with your mouth a sigle continious note and try to keep it while you open and closing your lips slowly . You'll see what I mean!:woohoo:

Thanks everyone once more,
Lefteris

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Re:first time alto builder\'s questions
Posted by walter - 2012/05/07 22:49

Hello Lefteris you generally know how I indicavi the speech volume of the guitar body and also the fact acusticoe losses if I open the hole or not ... what I meant is whether or not to apply a rule to optimize its physical resonator! Let me explain, or try:
if the air volume of the instrument it will resonate at a frequency determined primarily on low, if I can calculate his overall resonator should be able to drill a hole that is precisely "tuned" to the lowest frequency that the guitar can generate! What do you think? nonsense?
With holes for my shoulders, I have to say does not make it bad, I doubled the volume of a hole normal dividing by two. I basically doubled its volume of the hole!
Now I would like to replicate the "small", but with proper tuning fork with standard Altoguitars! I'll write a luthier pm at Heikki Rousu, to see if he can give me a hand in this.
Greetings Walter

Ciao Lefteris si in generale sapevo come mi indicavi del discorso del volume del corpo della chitarra ed anche del fatto acusticoe perdite se apro o meno la buca... quello che intendevo è se applicare o meno una regola fisica per ottimizzare il suo risuonatore! Mi spiego meglio o cerco:
se il volume d'aria dello strumento lo farà risuonare ad una determinata frequenza soprattutto sui bassi, se io riesco a calcolare in generale il suo risuonatore dovrei essere in grado di praticare un foro preciso che sia " intonato" sulla frequenza più bassa che la chitarra potrà generare! cosa ne pensate? una sciocchezza?
Per la mia con le buche alle spalle, che devo dire non rende male, ho raddoppiato il volume di una buca normale dividendola per due. In pratica ho raddoppiato il suo volume di foro!
Ora vorrei replicare la "piccola", ma con diapason adeguato alla norma Altoguitars! Penso scriverò un Pm a l liutaio Heikki Rousu, per veder se può darmi una mano in questo.
Un saluto Walter

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Re:first time alto builder\'s questions
Posted by left - 2012/05/08 00:02

Walter sory for the misunderstading.
Well I know that some people do it using tecnology but I never got involved in these things (even though they are tempting!)because this is not the way I work. I'm very old school and I like to be based on experience and intuition.

I am sure that Luca Milani can help you with that. He had studied this issue a lot and I know that he uses sound ports in his new guitars.
I hope I got it this time!
Lefteris

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Re:first time alto builder\'s questions

Posted by walter - 2012/05/08 01:58

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Lefteris, a quiet, too, are the old ways ... I'm curious and often the only ancio threads that I think might be interesting for other luthiers ...
I did not study at a school of luthery, I had a real teacher, I always arranged and confrontandomi with those makers who very generously sent me often in the right directions.
The beauty of violin making is that we all have in mind a stamp and a sound that we're going to find!
The only way I pe is to grow and not stop and look domende dialogue and exchange of ideas and information;)
Greetings Walter

Lefteris, tranquillo, anch'io sono per le vecchie maniere... solamente sono curioso e spesso l'ancio discussioni che penso possano essere interessanti anche per altri liutai...
Non ho studiato ad una scuola di liuteria, ne ho avuto un maestro concreto, mi sono sempre arrangiato e confrontandomi con quei liutai che con molta generosità spesso mi hanno indirizzato nelle giuste direzioni.
Il bello della liuteria è che in testa tutti noi abbiamo un timbro ed una sonorità che andiamo a ricercare!
L'unico modo che ho pe crescere e non fermarmi è fare domende e cercare dialogo e scambio di idee ed informazione ;)
Un saluto Walter

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