

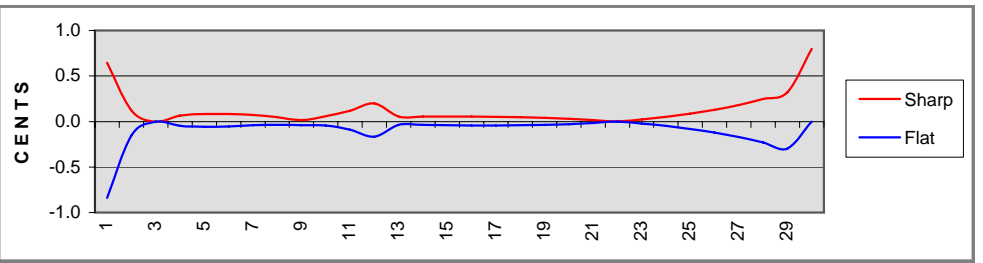
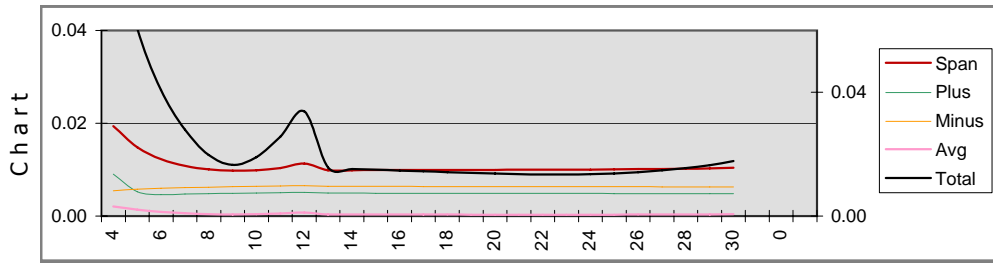
Tension-Compensated Fret Interval Calculator

Strings	String Set	Custom Red Diamond (038 026 016 011)						String Set
	String No.	6	5	4	3	2	1	String No.
	Pitch	select	select	G3 - Guitar 3	D4	A4	E5	Pitch
	Frequency (Hz)	0.00	0.00	196.00	293.66	440.00	659.26	Frequency (Hz)
	String Tension (lbs)	0.00	0.00	20.68	23.68	22.27	23.53	String Tension (lbs)
	Basic Diameter	-	-	0.0380	0.0260	0.0160	0.0110	Basic Diameter
Core Area (in ²)	-	-	OK	OK	OK	OK	Core Area (in ²)	
Core Modulus E (psi)	-	-	OK	OK	OK	OK	Core Modulus E (psi)	
Mass/Unit L (lbs./in)	-	-	OK	OK	OK	OK	Mass/Unit L (lbs./in)	

Fingerboard	Basic Scale Length	13.987	Basic Fret Width	0.0740	Fret Interference	0.000	Avg. Finger Width	0.400	Fingering Allowances
	1st Fret Clearance		OverRide >	0.015	OverRide >	0.013	OverRide >	0.012	1st Fret Clearance
	12th Fret Clearance		OverRide >	0.065	OverRide >	0.062	OverRide >	0.058	12th Fret Clearance
	1st Fret Clearance Pressed @ Fret	3		0.004	0.004	0.003	0.002	Fretted Clearance	

Various	Dimensional Allowances	Nearest Edge Relief (Chamfer/Radius)			Various Allowances			Dimensional Allowances
		0.000	0.000	0.000				
		NUT	SADDLE	Body Compression Δ	spare	spare		

Calculate	RESET	ENTER	Align @ Fret Intervals	CLEAR	Fret Interval Deviation Error							
	Complete!	3	Less Than	22	Build Chart	PLUS	0.005	Str 4 @ Fret 1	0.0004	AVG ±	12	Fret SPAN
		ZERO-out	EVEN-out	START	MINUS	0.006	Str 1 @ Fret 1	0.013	TOTAL ±	0.010	SPAN ±	



Tension-Compensated Fret Intervals

Fret Intervals	Traditional Fret Intervals		Tension-Compensated Fret Intervals		String-to-String Fret Interval Variance		Error Profile (Cents)		Compensated Nut						
	NUT	0.000	NUT	0.000	PLUS	MINUS	SHARP	FLAT	6	5	4	3	2	1	
Summary															
Scale Length - 13.987	1	0.785	1	0.757	0.005	0.006	0.6	0.8	<div style="display: flex; justify-content: space-around; font-weight: bold; margin-bottom: 10px;">Compensated Nut</div> <div style="text-align: center; margin-top: 20px;"> <p><u>String Set</u></p> <p>Custom Red Diamond (038 026 016 011)</p> </div>						
Fret Width - 0.074	2	1.526	2	1.501	0.001	0.001	0.1	0.2							
Fret Interf. - 0.000	3	2.225	3	2.199	0.000	0.000	0.0	0.0							
Finger Width - 0.400	4	2.886	4	2.857	0.000	0.000	0.1	0.0							
ZERO @ Fret - 3	5	3.509	5	3.478	0.001	0.000	0.1	0.1							
EVEN @ Fret - 22	6	4.097	6	4.064	0.000	0.000	0.1	0.1							
DEV Plus - 0.005	7	4.652	7	4.617	0.000	0.000	0.1	0.0							
DEV Minus - 0.006	8	5.176	8	5.139	0.000	0.000	0.0	0.0							
DEV Average - 0.000	9	5.670	9	5.632	0.000	0.000	0.0	0.0							
DEV Total - 0.013	10	6.137	10	6.096	0.000	0.000	0.1	0.0							
Nut Relief - 0.000	11	6.578	11	6.535	0.001	0.000	0.1	0.1							
Saddle Relief - 0.000	12	6.994	12	6.949	0.001	0.001	0.2	0.2							
Body Compr. - 0.000	13	7.386	13	7.341	0.000	0.000	0.1	0.0							
	14	7.756	14	7.711	0.000	0.000	0.1	0.0							
	15	8.106	15	8.059	0.000	0.000	0.1	0.0							
	16	8.436	16	8.388	0.000	0.000	0.1	0.0							
	17	8.748	17	8.699	0.000	0.000	0.1	0.0							
	18	9.042	18	8.992	0.000	0.000	0.0	0.0							
	19	9.319	19	9.268	0.000	0.000	0.0	0.0							
	20	9.581	20	9.530	0.000	0.000	0.0	0.0							
	21	9.829	21	9.776	0.000	0.000	0.0	0.0							
	22	10.062	22	10.009	0.000	0.000	0.0	0.0							
	23	10.282	23	10.228	0.000	0.000	0.0	0.0							
	24	10.490	24	10.436	0.000	0.000	0.1	0.0							
	25	10.687	25	10.631	0.000	0.000	0.1	0.1							
	26	10.872	26	10.816	0.000	0.000	0.1	0.1							
	27	11.047	27	10.990	0.000	0.000	0.2	0.2							
	28	11.212	28	11.155	0.000	0.000	0.2	0.2							
	29	11.367	29	11.310	0.001	0.000	0.3	0.3							
	30	11.514	30	11.456	0.001	0.000	0.8	0.0							
	SADDLE	13.987	SADDLE	13.946	PLUS	MINUS	SHARP	FLAT			0.062	0.030	0.036	0.000	
	Traditional Fret Intervals		Tension-Compensated Fret Intervals		String-to-String Fret Interval Variance		Error Profile (Cents)		Compensated Bridge/Saddle						

Tension-Compensated Fret Interval Calculator

Strings

String Set	Custom Red Diamond (038 026 016 011)						String Set
String No.	6	5	4	3	2	1	String No.
Pitch	select	select	G3 - Guitar 3	D4	A4	E5	Pitch
Frequency (Hz)	0.00	0.00	196.00	293.66	440.00	659.26	Frequency (Hz)
String Tension (lbs)	0.00	0.00	20.71	23.68	22.26	23.48	String Tension (lbs)
Basic Diameter	-	-	0.0380	0.0260	0.0160	0.0110	Basic Diameter
Core Area (in ²)	-	-	OK	OK	OK	OK	Core Area (in ²)
Core Modulus E (psi)	-	-	OK	OK	OK	OK	Core Modulus E (psi)
Mass/Unit L (lbs./in)	-	-	OK	OK	OK	OK	Mass/Unit L (lbs./in)

Fingerboard

Basic Scale Length	13.987	Basic Fret Width	0.0740	Fret Interference	0.000	Avg. Finger Width	0.400	Fingering Allowances
1st Fret Clearance		OverRide >	0.015	OverRide >	0.013	OverRide >	0.012	1st Fret Clearance
12th Fret Clearance		OverRide >	0.065	OverRide >	0.062	OverRide >	0.058	12th Fret Clearance
1st Fret Clearance Pressed @ Fret	3		0.004		0.004		0.003	Fretted Clearance

Various

Dimensional Allowances	Nearest Edge Relief (Chamfer/Radius)		Various Allowances			Dimensional Allowances
	0.000	0.000	0.000	spare	spare	
	NUT	SADDLE	Body Compression Δ			

Calculate

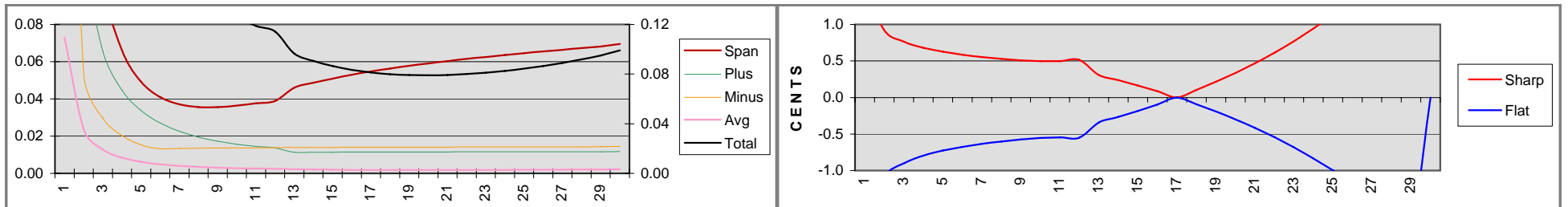
Align @ Fret Intervals

Less Than Build Chart

Fret Interval Deviation Error

PLUS Str 1 @ Fret 1 AVG ± Fret SPAN
 MINUS Str 4 @ Fret 1 TOTAL ± SPAN ±

Chart



Tension-Compensated Fret Interval Calculator

Strings

String Set	Custom Red Diamond (038 026 016 011)						String Set
String No.	6	5	4	3	2	1	String No.
Pitch	select	select	G3 - Guitar 3	D4	A4	E5	Pitch
Frequency (Hz)	0.00	0.00	196.00	293.66	440.00	659.26	Frequency (Hz)
String Tension (lbs)	0.00	0.00	20.65	23.68	22.28	23.55	String Tension (lbs)
Basic Diameter	-	-	0.0380	0.0260	0.0160	0.0110	Basic Diameter
Core Area (in ²)	-	-	OK	OK	OK	OK	Core Area (in ²)
Core Modulus E (psi)	-	-	OK	OK	OK	OK	Core Modulus E (psi)
Mass/Unit L (lbs./in)	-	-	OK	OK	OK	OK	Mass/Unit L (lbs./in)

Fingerboard

Basic Scale Length	13.987	Basic Fret Width	0.0740	Fret Interference	0.000	Avg. Finger Width	0.400	Fingering Allowances
1st Fret Clearance		OverRide >	0.015	OverRide >	0.013	OverRide >	0.012	1st Fret Clearance
12th Fret Clearance		OverRide >	0.065	OverRide >	0.062	OverRide >	0.058	12th Fret Clearance
1st Fret Clearance Pressed @ Fret	3		0.004		0.004		0.003	Fretted Clearance
							0.002	

Various

Dimensional Allowances	Nearest Edge Relief (Chamfer/Radius)		Various Allowances			Dimensional Allowances
	0.000	0.000	0.000	spare	spare	
	NUT	SADDLE	Body Compression Δ			

Calculate

Align @ Fret Intervals

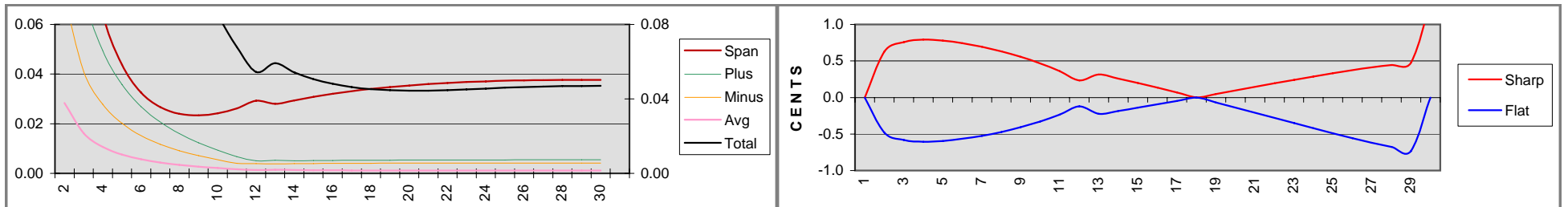
Less Than Build Chart

Fret Interval Deviation Error

PLUS Str 4 @ Fret 3 AVG ± Fret SPAN
 MINUS Str 1 @ Fret 3 TOTAL ± SPAN ±

Complete!

Chart



Tension-Compensated Fret Interval Calculator

Strings	String Set	Custom Red Diamond (038 026 016 011)						String Set
	String No.	6	5	4	3	2	1	String No.
	Pitch	select	select	G3 - Guitar 3	D4	A4	E5	Pitch
	Frequency (Hz)	0.00	0.00	196.00	293.66	440.00	659.26	Frequency (Hz)
	String Tension (lbs)	0.00	0.00	20.67	23.68	22.27	23.53	String Tension (lbs)
	Basic Diameter	-	-	0.0380	0.0260	0.0160	0.0110	Basic Diameter
Core Area (in ²)	-	-	OK	OK	OK	OK	Core Area (in ²)	
Core Modulus E (psi)	-	-	OK	OK	OK	OK	Core Modulus E (psi)	
Mass/Unit L (lbs./in)	-	-	OK	OK	OK	OK	Mass/Unit L (lbs./in)	

Fingerboard	Basic Scale Length	13.987	Basic Fret Width	0.0740	Fret Interference	0.000	Avg. Finger Width	0.400	Fingering Allowances
	1st Fret Clearance		OverRide >	0.015	OverRide >	0.013	OverRide >	0.012	1st Fret Clearance
	12th Fret Clearance		OverRide >	0.065	OverRide >	0.062	OverRide >	0.058	12th Fret Clearance
	1st Fret Clearance Pressed @ Fret	3		0.004	0.004	0.003	0.002	Fretted Clearance	

Various	Dimensional Allowances	Nearest Edge Relief (Chamfer/Radius)			Various Allowances			Dimensional Allowances
		0.000	0.000	0.000				
		NUT	SADDLE	Body Compression Δ	spare	spare		

Calculate	<input type="button" value="RESET"/> <input type="button" value="ENTER"/>	Align @ Fret Intervals	<input type="button" value="CLEAR"/>	Fret Interval Deviation Error			
	Complete!	<input type="button" value="2"/> Less Than <input type="button" value="17"/>	Build Chart	PLUS <input type="text" value="0.004"/>	Str 4 @ Fret 1 <input type="text" value="0.0005"/>	AVG ± <input type="text" value="12"/>	Fret SPAN
		ZERO-out	EVEN-out	<input type="button" value="START"/>	MINUS <input type="text" value="0.005"/>	Str 1 @ Fret 1 <input type="text" value="0.015"/>	TOTAL ± <input type="text" value="0.012"/>

