

Rottenburgh2-O-Brugge-Wg1-WOB-DNM

	A	B	C	D	E	F	G	H
1	I. Bocal		Original bocal???: NO bocal					
2	dia reed end		inside diameter of reed end of bocal					
3	bocal string length (0, 1)		length of bocal inserted into receiver					
4	metal bocal length top (0, 1)		meas. along top of bocal					
5	metal bocal length bot (0, 1)		meas. along bottom of bocal					
6	dia wj end		inside diameter of bocal					
7								
8	bocal logic	2	if bocal logic = 0 => bocal is choke; if bocal logic=1=>choke in wing joint calc; if bocal logic = 2 => no bocal					
9								
10			Put here choke vs receiver details???					
11								
12								
13	II. Wing Joint Lengths		bocal receiver: no					
14	choke bore dia.	10.2	logic 1; bore diameter of choke; logic 0; diameter bocal bottom or beginning of bore at bottom or receiver					
15	receiver length (1, 0) (formally choke length)	60	logic 1; length of choke from top of wing joint; logic 0; length of receiver (same as string length)					
16	wing joint length	516	total wing joint length, including tenon and socket					
17	tenon length	41.4	tenon length; one can see the rough cut job, tenon not even around the circumference, c 41 to 42 mm					
18								
19	wj f2	240	dist top of wing to where tone hole enters bore [not at the center of the tone hole]					
20	wj e	305	yes long					
21	wj d	350	yes long					
22								
23	Bore dia. Bottom of wing joint	17	Need to Average, usually oval; a bit 16.7 x 17.3					
24	Bore dia. top of boot joint small side	18.3	yes, larger than wing tenon, an average					
25	Bore dia. top of boot joint large side	23.8						
26								
27	III. Boot Lengths		No Two whole design; normal rounded cork ; used logic 1, but could remove plug					
28	bj logic	1	logic=> if bj logic = 0 => plug removed; if bj logic = 1 => plug cannot be removed					
29	bj c	89	dist from top of boot to where topmost tone hole enter bore [not at center of tone hole]					
30	bj b	157						
31	bj a	196						
32								
33	bjtotal [Needed for both boot logics]	427	total length of boot, include socket, along the small bore side, meas. With boot cap removed					
34	bjltotal [Needed for both boot logics]	427	total length of boot, include socket, along large bore side					
35	plug small [Need for logic 0 only]	0	plug thickness, large bore side					
36	plug large [Need for logic 0 only]	0	plug thickness, small bore side					
37								
38	boots [Needed for both boot logics]	393	hook length along s bore => bjs-septum length = boot - septum <= calc the septum					
39	bootl [Needed for both boot logics]	393	hook length along l bore => bjl-septum length = boot - septum <= calc the septum					
40								
41	boots bottom [Needed for both boot logics]	26.5	use hook, dist of bore [dist on stick plus 7mm, diff between hook and bot of stick]					
42	bootl bottom [Needed for both boot logics]	26.6	use hook, dist of bore [same as boots bot except tenon depth will be different]; 19.5 + 7					
43								
44	extreme bore [Needed for logic 1 only]	48.1	Outside dia of plug [measured] = small bore dia + large bore dia + the septum width					
45								
46	septum length exp [Need for logic 0 only]	33	dist. from very bottom of boot to septum [point between the large and small bore]					
47	septum length calc - do not imput value	34	dist. From very bottom of boot to septum [bjl - bootl]			do not imput value		
48	septum length - do not imput value	34	if bj logic = 0 => septum = septum exp; if bj logic = 1 => septum = septum exp; if bj logic = 1 => septum = septum exp			do not imput value		
49			used logic 1, but could remove plug					
50	sbore dia sep* [Needed for both boot logics]	18.9	septum small bore dia [assume = lbore dia sep]					
51	lbore dia sep* [Needed for both boot logics]	18.9	septum large bore dia [assume = sbore dia sep] [measure if cork can be removed; for Logic 0]					
52	sep width exp [Need for logic 0 only]	9.5	septum width; direct measurement if remove plug; used logic 1, but could remove plug					
53	sep width calc - do not imput value	10.3	septum width; calc. => extreme bore - sbore - lbore			do not imput value		
54	sep width - do not imput value	10.3	if bj logic = 0 => sep width = sep width exp; if bj logic = 1 => sep width = sep width exp			do not imput value		
55								
56	bj g	349	dist from top of boot (socket) to where G hole enters bore [not at cent of tone hole]					
57	bj f1	129	dist from top of boot (socket) to where F1 hole enters bore [not at cent of tone hole]					
58								
59			Notes on turn-around: cork is made of ??? could add friction, ??mm of curve					
60								
61								
62								
63	IV. Tone Hole Diameters							
64	f2	4.8						
65	e	5.7						
66	d	5.2						
67								
68	c	6.7						
69	b	6.5						
70	a	5.8						
71	g	8.5						
72	f1	8.9						
73			Tone holes on long joint totally round					
74	e1	12.1	e1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]					
75	d1	11.7	d1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]					
76	c1	10	c1 tone hole dia, on long joint [need to average NS and EW dias, NS usually greater]			9.7.0 x 10.3		
77								
78								
79								
80								
81								
82	V. Tone Hole Depths							
83	f2	24						
84	e	25.4	wing not very wide, see photos and extra meas., but has a different form or slope					
85	d	24.3						
86								
87	c	26.9						
88	b	25.6						
89	a	27.5						
90	g	17	meas along bot tone hole wall [north wall, toward reed,tone hole usually at angle]					
91	f1	21	meas along east side tone hole wall [north wall, toward reed,t hole usually at angle]					
92								
93	e1	7.2	e1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist]					

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94	d1	8.4	d1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist]					
95	c1	8	c1 tone hole depth; meas east/west with deapth gauge [at center, or shortest dist]					
96								
97								
98								
99								
100								
101	VI. Long Joint		There is a table along long joint;there is not a normal table along long joint, a flatten area along long joint					
102	lg_length	575	total length of long joint					
103	lg_tenon_bot	40	length bottom tenon on long joint [tenon going into boot joint] Mostly 40mm, it is uneven, poor cutting work					
104	lj_bot_bore	23.7	long joint bottom tenon bore diameter [tenon going into boot joint]					
105	lj_top_bore	31.7	long joint top tenon bore diameter [tenon going into bell]					
106	lg_tenon_top	42.2	length top tenon on long joint [tenon going into bell] mostly 42.2 mm but again uneven					
107	e1_distance	46	dist long joint tenon to e1 [from bot of tenon to where tone hole enters bore]					
108	d1_distance	237	dist long joint tenon to d1 [from bot of tenon to where tone hole enters bore]					
109	c1_distance	440	dist long joint tenon to c1 [from bot of tenon to where tone hole enters bore]					
110			Three tone holes on long joint dist. Short because joint cut back					
111								
112								
113								
114								
115	VII. Bore diameters at Tone Holes							
116	f2	13.2						
117	e	13.6						
118	d	14.1						
119								
120	c	18.2						
121	b	18.2						
122	a	18.3						
123	g	20						
124	f1	23.4	yes larger than e1 tone hole					
125								
126	e1	23.1	e1 tone hole bore diameter on long joint					
127	d1	25.3	d1 tone hole bore diameter on long joint					
128	c1	30.4	c1 tone hole bore diameter on long joint					
129								
130								
131								
132								
133								
134	VIII. Bell		There IS a tone hole in the bell: 7.1mm, 85 mm from bottom, include bell socket					
135	bell_logic	2	If bell_logic = 0 => normal conical bore; if bell_logic = 1 => inverted conical bore; if bell_logic = 2 => bell expansion					
136	bell_length (0, 1, 2)	300	total length of bell [lines 141 + 144 = line 136]					
137	bell_bot_bore (0, 1, 2)	30.4	dia bore at the bottom of bell [end with socket]					
138	bell_top_bore 0, (1, 0, 2)	25.7	dia bore at the top of bell [where low Bb exits]					
139	bell_center_bore (only for logic 2)	37	dia bore at max center of expansion					
140	bell_wall (only for logic 2)	10.5	bell wall thickness, Just for David					
141	bell_bot_bore_expansion (only for logic 2)	207	dist of bottom to maxium of expansion [including bell socket length,if bell_logic=0 =>100]					
142	Outside diameter of wood at expansion	54.2	Just for David					
143	bell_tenon (0, 1, 0, 2)	42.2	bell socket length					
144	bell_expansion_length (only for logic 2)	67	distance of maxium expansion to top of bell [where Bb exits]					
145								
146								
147								
148	IX. PITCH							
149	pitch	415	input the historical pitch of the bassoon, must input value, best guess					
150	freq_init	380	Initial frequency range variable					
151	Delta frequency	2	frequency increment parameter					
152	Number of frequencies	60	number of frequencies to scan for min chi sq					
153	Frequency adjust	1.05	frequency adjustment parameter					
154	X. Title							
155	title		Bassoon Calculation: Rottenburgh2-O-Brugge-Wg1-WOB-DNM					
156								
157			Notes on long joint bore: not very out of round in places, in good shape					
158			Notes on boot joint bore: small side very cyn.					
159	XI. Bore Diameter Locations		Notes on wing joint bore: ????					
160		19	Number of diameters					
161		10.2	Initial bore diameter [do not include in line 160 counting]					
162		0	dist1; measured from the bottom of the wing joint- 10mm					1
163		430	dist2; measured from the bottom of the wing joint- 11mm; OOR					1
164		312	dist3; measured from the bottom of the wing joint- 12mm					1
165		274	dist4; measured from the bottom of the wing joint- 13mm					1
166		175	dist5; measured from the bottom of the wing joint- 14mm					1
167		130	dist6; measured from the bottom of the wing joint- 15mm;	Bottom win	17			1
168		52	dist7; measured from the bottom of the wing joint- 16mm	top boot str	18.3			1
169		0	dist8; measured from the top of the bootjoint - small bore side- 17mm	top boot lar	23.8			2
170		0	dist9; measured from the top of the bootjoint - small bore side- 18mm					2
171		275	dist10; measured from the top of the bootjoint -small bore side- 19mm	sbore dia se	18.9			2
172		365	dist11; measured from the top of the bootjoint - large bore side- 20mm;	lbore dia se	18.9			3
173		263	dist12; measured from the top of the bootjoint - large bore side- 21mm	Hook Lengh	393			3
174		248	dist13; measured from the top of the bootjoint - large bore side- 22mm					3
175		210	dist14; measured from the top of the bootjoint - large bore side- 23mm					3
176		442	dist15; measured from the top of the long joint- 24mm	lj_bot_bore	23.7			4
177		363	dist16; measured from the top of the long joint- 25mm					4
178		310	dist17; measured from the top of the long joint- 26mm					4
179		255	dist18; measured from the top of the long joint- 27mm					4
180		195	dist19; measured from the top of the long joint- 28mm; OOR 180 x 210					4
181		162	dist20; measured from the top of the long joint- 29mm					4
182		140	dist21; measured from the top of the long joint- 30mm					4
183		15	dist22; measured from the top of the long joint- 31mm					4
184		0	dist23; measured from the top of the long joint- 32mm	lj_top_bore	31.7			4