



	A	B	C	D	E	F	G	H	I	J
107	e1 distance	48	Porthaux11 vrfd short; dist long joint tenon to e1 [from bot of tenon to where tone hole enters bore]							50
108	d1 distance	247	Porthaux11 vrfd short; dist long joint tenon to d1 [from bot of tenon to where tone hole enters bore]							251
109	c1 distance	454	Porthaux11 vrfd short; dist long joint tenon to c1 [from bot of tenon to where tone hole enters bore]							467
110										
111										
112										
113										
114										
115	<b>VII. Bore diameters at Tone Holes</b>									
116	f2	12								12.3
117	e	13	Porthaux11 vrfd 13.0							13.3
118	d	13.5								13.8
119										
120	c	15.5								16.2
121	b	16.1								17
122	a	17	Porthaux11 vrfd 17.0							17.4
123	g	19.6								19.1
124	f1	22.1								23.2
125										
126	e1	24.2	e1 tone hole bore diameter on long joint							25.4
127	d1	27.3	d1 tone hole bore diameter on long joint							28.9
128	c1	31.2	c1 tone hole bore diameter on long joint							30.5
129										
130										
131										
132										
133										
134	<b>VIII. Bell No Bell</b>									
135	bell logic		If bell_logic = 0 => normal conical bore; if bell_logic = 1 => inverted conical bore; if bell_logic = 2 => bell expansion							1
136	bell length (0, 1, 2)		total length of bell. [lines 141 + 144 = line 136]							315
137	bell bot bore (0, 1, 2)		dia bore at the bottom of bell [end with socket]							32.1
138	bell top bore 0, (1, 0, 2)		dia bore at the top of bell [where low Bb exits]							30.6
139	bell center bore (only for logic 2)		dia bore at max center of expansion							
140	bell wall (only for logic 2)		bell wall thickness, just for David							
141	bell bot bore expansion (only for logic 2)		dist of bottom to maxium of expansion [including bell socket length,if bell logic=0 =>100]							
142	Outside diameter of wood at expansion		Just for David							
143	bell tenon (0, 1, 0, 2)		bell socket length							38.2
144	bell expansion length (only for logic 2)		distance of maxium expansion to top of bell [where Bb exits]							
145	bellfq									43
146										
147										
148	<b>IX. PITCH</b>									
149	pitch	430	input the historical pitch of the bassoon, must input value, best guess							430
150	freq_init	380	Initial frequency range variable							380
151	Delta frequency	2	frequency increment parameter							2
152	Number of frequencies	60	number of frequencies to scan for min chi sq							60
153	Frequency adjust	1.05	frequency adjustment parameter							1.05
154	<b>X. Title</b>									
155	title		Bassoon Calculation: Porthaux11-O-BrusMIMIDK0026-Wg1-WOB-DNM							
156										
157			Notes on long joint bore: Porthaux11, normal							0
158			Notes on boot joint bore: Porthaux11, down normal; up good							
159	<b>XI. Bore Diameter Locations</b>		Notes on wing joint bore: Porthaux11, normal							
160		22	Number of diameters							19
161	<b>Bell Bore; No Bell</b>	9.7	Initial bore diameter [do not include in line 160 counting]							9.3
162		420	dist1; measured from the bottom of the wing joint- 10mm				1			415
163		332	dist2; measured from the bottom of the wing joint- 11mm				1			362
164		297	dist3; measured from the bottom of the wing joint- 12mm				1			310
165		230	Porthaux11 OOR; dist4; measured from the bottom of the wing joint- 13mm				1			220
166		140	dist5; measured from the bottom of the wing joint- 14mm				1			155
167		0	dist6; measured from the bottom of the wing joint- 15mm				1			0
168		146	dist7; measured from the top of the bootjoint - small bore side- 16mm; was 10	Bottom wing	13.6		2			80
169		204	dist8; measured from the top of the bootjoint - small bore side- 17mm; was 15	top boot sma	15.5		2			0
170		288	dist9; measured from the top of the bootjoint - small bore side- 18mm	top boot larg	23.3		2			215
171		382	dist10; measured from the top of the bootjoint - large bore side- 19mm; was 3	sbore dia sep	18.7		3			0
172		330	dist11; measured from the top of the bootjoint - large bore side- 20mm; yes 2	lbore dia sep	18.7		3			295
173		237	dist12; measured from the top of the bootjoint - large bore side- 21mm; yes 1	Hook Length	392		3			275
174		164	dist13; measured from the top of the bootjoint - large bore side- 22mm				3			255
175		80	dist14; measured from the top of the bootjoint - large bore side- 23mm				3			190
176		534	dist15; measured from the top of the long joint- 24mm	lj bot bore	23.6		4			95
177		473	dist16; measured from the top of the long joint- 25mm				4			555
178		403	dist17; measured from the top of the long joint- 26mm				4			465
179		335	dist18; measured from the top of the long joint- 27mm				4			390
180		272	dist19; measured from the top of the long joint- 28mm				4			360
181		232	dist20; measured from the top of the long joint- 29mm				4			295
182		185	dist21; measured from the top of the long joint- 30mm				4			155
183		121	dist22; measured from the top of the long joint- 31mm				4			70
184		51	dist23; measured from the top of the long joint- 32mm	lj top bore	32.5		4			0