

|  | A | B | c | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 101 | VI. Long Joint |  |  | Pezé1 There is a table along long joint |  |  |  |  |
| 102 | Ig_length | 584 | 584 | total length of long joint |  |  |  |  |
| 103 | Ig_tenon_bot | 48.8 | 48.8 | length bottom tenon on long joint [tenon going into boot joint] |  |  |  |  |
| 104 | lj_bot_bore | 24.8 | 24.8 | long joint bottom tenon bore diameter [tenon going into boot joint] |  |  |  |  |
| 105 | lj_top_bore | 32.7 | 32.7 | long joint top tenon bore diameter [tenon going into bell] |  |  |  |  |
| 106 | Ig_tenon_top | 36.9 | 36.9 | length top tenon on long joint [tenon going into bell] |  |  |  |  |
| 107 | e1 distance | 59 | 59 | dist long joint tenon to e1 [from bot of tenon to where tone hole enters bore] |  |  |  |  |
| 108 | d1 distance | 256 | 256 | dist long joint tenon to d1 [from bot of tenon to where tone hole enters bore] |  |  |  |  |
| 109 | c1 distance | 470 | 470 | dist long joint tenon to c1 [from bot of tenon to where tone hole enters bore] |  |  |  |  |
| 110 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 112 |  |  |  |  |  |  |  |  |
| 113 |  |  |  |  |  |  |  |  |
| 114 |  |  |  |  |  |  |  |  |
| 115 | VII. Bore diameters at Tone Holes |  |  |  |  |  |  |  |
| 116 | f2 | 12.3 | 12.4 |  |  |  |  |  |
| 117 |  | 13 | 13 |  |  |  |  |  |
| 118 | d | 13.8 | 13.8 |  |  |  |  |  |
| 119 |  |  |  |  |  |  |  |  |
| 120 | c | 16.1 | 16.1 |  |  |  |  |  |
| 121 | b | 17.3 | 17.3 |  |  |  |  |  |
| 122 | a | 17.6 | 17.6 |  |  |  |  |  |
| 123 | 9 | 20.6 | 20.6 |  |  |  |  |  |
| 124 | $f 1$ | 22.1 | 22.1 |  |  |  |  |  |
| 125 |  |  |  |  |  |  |  |  |
| 126 | e1 | 25.3 | 25.3 | e1 tone hole bore diameter on long joint |  |  |  |  |
| 127 | d1 | 28.4 | 28.4 | d1 tone hole bore diameter on long joint |  |  |  |  |
| 128 | c1 | 31.5 | 31.5 | c1 tone hole bore diameter on long joint |  |  |  |  |
| 129 |  |  |  |  |  |  |  |  |
| 130 |  |  |  |  |  |  |  |  |
| 131 |  |  |  |  |  |  |  |  |
| 132 |  |  |  |  |  |  |  |  |
| 133 |  |  |  |  |  |  |  |  |
| 134 | VIII. Bell |  |  | Pezé1 There is not a tone hole in the bell |  |  |  |  |
| 135 | bell logic | 1 | 1 | If bell_logic $=0=>$ normal conical; if bell_logic $=1=>$ inverted concial; if bell_logic $=2=>$ bell | Il expansion |  |  |  |
| 136 | bell_length ( $0,1,2$ ) | 327 | 327 | total length of bell [lines $141+144=$ line 136] |  |  |  |  |
| 137 | bell_bot_bore ( $0,1,2$ ) | 31.9 | 31.9 | dia bore at the bottom of bell [end with socket] |  |  |  |  |
| 138 | bell_top_bore 0, ( $1,0,2$ ) | 28.7 | 28.7 | dia bore at the top of bell [where low Bb exits] |  |  |  |  |
| 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 ( $0,1,0,2$ ) | 37.5 | 37.5 | bell socket length |  |  |  |  |
| 144 | bell_expansion_length (only for logic 2) |  |  | distance of maxium expansion to top of bell [where Bb exits] |  |  |  |  |
| 145 | belflg | 34 | 34 | Usually about 10 mm more than line 138 |  |  |  |  |
| 146 |  |  |  |  |  |  |  |  |
| 147 |  |  |  |  |  |  |  |  |
| 148 | IX. PITCH |  |  |  |  |  |  |  |
| 149 | pitch | 430 | 430 | input the historical pitch of the bassoon, must input value, best guess |  |  |  |  |
| 150 | freq_init | 380 | 380 | Initial frequency range variable |  |  |  |  |
| 151 | Delta frequency | 2 | 2 | frequency increment parameter |  |  |  |  |
| 152 | Number of frequencies | 60 | 60 | number of frequencies to scan for min chi sq |  |  |  |  |
| 153 | Frequency adjust | 1.05 | 1.05 | frequency adjustment parameter |  |  |  |  |
| 154 | X. Title |  |  |  |  |  |  |  |
| 155 | title |  |  | Bassoon Calculation: Pezé1-O-Kampmann-Wg1-WOB-DNM |  |  |  |  |
| 156 |  |  |  |  |  |  |  |  |
| 157 |  |  |  | Notes on long joint; Pezé1 not very out of round |  |  |  |  |
| 158 |  |  |  | Notes on boot joint bore: Pezé1 normal |  |  |  |  |
| 159 | XI. Bore Diameter Locations |  |  | Notes on wing joint bore: Pezé1 normal |  |  |  |  |
| 160 |  | 22 | 21 | Number of diameters |  |  |  |  |
| 161 |  | 10.5 | 10.3 | Initial bore diameter [do not include in line 160 counting] |  |  |  |  |
| 162 |  | 0 | 0 | dist1; measured from the bottom of the wing joint-10 mm |  |  |  | 1 |
| 163 |  | 342 | 352 | dist2; measured from the bottom of the wing joint-11mm |  |  |  | 1 |
| 164 |  | 302 | 312 | dist3; measured from the bottom of the wing joint- 12 mm |  |  |  | 1 |
| 165 |  | 208 | 228 | dist4; measured from the bottom of the wing joint-13mm |  |  |  | 1 |
| 166 |  | 162 | 0 | Pezé1 OOR $150 \times 175$; dist5; measured from the bottom of the wing joint-14mm |  |  |  |  |
| 167 |  | 62 | 62 | dist6; measured from the top of the bootjoint - small bore side- 15 mm | Bottom wing | 14.6 |  | 2 |
| 168 |  | 85 | 85 | dist7; measured from the top of the bootjoint - small bore side- 16 mm | top boot smi | 14.6 |  | 2 |
| 169 |  | 135 | 135 | dist8; measured from the top of the bootjoint - small bore side- 17 mm | top boot larc | 24.7 |  | 2 |
| 170 |  | 265 | 265 | dist9; measured from the top of the bootjoint - small bore side- 18 mm |  |  |  | 2 |
| 171 |  | 361 | 361 | dist10; measured from the top of the bootjoint - large bore side- 19 mm | sbore dia sel | 19.1 |  | 3 |
| 172 |  | 367 | 367 | dist11; measured from the top of the bootjoint - large bore side- 20 mm | Ibore dia ser | 19.5 |  | 3 |
| 173 |  | 277 | 277 | Pezé1 OOR $260 \times 295$; dist12; measured from the top of the bootjoint - large bore side- 21 mn | Hook Length | 394 |  | 3 |
| 174 |  | 140 | 140 | Pezé1 OOR $120 \times 160$; dist13; measured from the top of the bootjoint - large bore side- 22 mm |  |  |  | 3 |
| 175 |  | 78 | 78 | dist14; measured from the top of the bootjoint - large bore side- 23 mm |  |  |  |  |
| 176 |  | 62 | 62 | dist15; measured from the top of the bootjoint - large bore side- 24 mm | lj_bot_bore | 24.8 |  | 3 |
| 177 |  | 535 | 535 | dist16; measured from the top of the long joint- 25 mm |  |  |  | 4 |
| 178 |  | 494 | 494 | dist17; measured from the top of the long joint- 26 mm |  |  |  | 4 |
| 179 |  | 403 | 403 | dist18; measured from the top of the long joint- 27 mm |  |  |  | 4 |
| 180 |  | 340 | 340 | dist19; measured from the top of the long joint- 28 mm |  |  |  |  |
| 181 |  | 295 | 295 | dist20; measured from the top of the long joint- 29 mm |  |  |  |  |
| 182 |  | 210 | 210 | dist21; measured from the top of the long joint- 30 mm |  |  |  | 4 |
| 183 |  | 130 | 130 | dist22; measured from the top of the long joint- 31 mm |  |  |  |  |
| 184 |  | 88 | 88 | dist23; measured from the top of the long ioint- 32 mm | li top bore | 32.7 |  |  |

