

MOUTHPIECES

There are five mouthpiece components that affect the sound of the instrument and the performance of the player.

1. The Rim

- a. Rim diameter
 - i. Wide rim diameters give a cushion to the lips, providing greater endurance.
 - ii. Narrow rim diameters give greater flexibility (ex. slurring notes) and better tone. People with large lips sometimes like a narrower rim (increases the cup diameter).
- b. Rim contour
 - i. Flat rims impair flexibility. Most rims are slightly curved.
- c. Rim edge
 - i. Rounder edge used for narrower rim (rounder attack)
 - ii. Sharper edge used for wider rim (sharper attack)

2. The Cup

- a. Cup depth
 - i. Deep cups emphasize the fundamental and lower overtones, giving a fuller, darker sound. The low register speaks more easily.
 - ii. Shallow cups have a lighter, brighter sound because the upper overtones sing out. Used by jazz players when they need to play in the high register for an extended period of time. Not advised for students still in their developmental stage.
- b. Cup shape
 - i. Conical mouthpieces produce a mellower tone. French horn mouthpieces are the most conical. Cornet and euphonium mouthpieces tend to be more conical than those of trumpets and trombones.
 - ii. Bowl-shaped mouthpieces produce a brighter sound. Most mouthpieces combine both shapes to varying degrees.

3. The Throat

- a. Diameter size
 - i. Wide throat - darker sound, less resistance, more breath required
 - ii. Narrow throat - brighter sound, more resistance, less breath required

4. The Backbore

- a. Bore size
 - i. Large bores require more air and embouchure strength (greater endurance)

- ii. Smaller bores require less air and embouchure strength (less endurance)

5. **The Shank**

- a. The shank must fit into the instrument receiver properly so that the taper of the backbore fits seamlessly into the leadpipe. A shank of improper length can affect the tonal centres of some pitches.

MOUTHPIECE COMPARISONS

Trumpet

Beginner	Intermediate	Advanced
Bach 7 or 7C	Bach 6, 5 or 5C	Bach 3C, 2, 1, X1, 1C
Giardinelli 7C	Schilke 14 or 17	Giardinelli HG1 or MB1
Schilke 9 or 11	Denis Wick 3	Schilke 18, 20, 20D2d
Denis Wick 4	Yamaha 13D4	Denis Wick 2 or 1
Yamaha 11C4 (7C)		Yamaha 17C4

French Horn

Beginner	Intermediate	Advanced
Conn 1	Giardinelli S15 or C12	Giardinelli C12, C8, C4, S15
Giardinelli C12	Holton MDC	Holton MDC, DC
Holton MDC	Schilke 27 or 30	Schilke 27 or 30
Schilke 27 or 30	Denis Wick 7N	Denis Wick 7N, 5N, 4N
Denis Wick 7N	Yamaha 30E, 30C like Giardinelli S15	Yamaha 32D4
Yamaha 27	Yamaha 31 like Holton MDC	

Trombone

Beginner	Intermediate	Advanced
Bach 12C, 12, 11	Bach 9, 7C, 7, 6 1/2AL	Bach 6 1/2AL, 5, 4, 3
Schilke 46	Giardinelli 4D	Giardinelli 3D or Sym.T
Denis Wick 12CS or 9BS	Schilke 47 or 50	Schilke 51B or 51
Yamaha 45C2(12C)	Denis Wick 6BS or 6BL	Denis Wick 5BS, 5BL, 4BS, 4BL, 4AL
	Yamaha 47 like Bach 6 1/2AL	Yamaha 51 like Bach 5
	Yamaha 48 like D. Wick 6BL	Yamaha 53 like Bach 3

Euphonium

Beginner	Intermediate	Advanced
Bach 7	Bach 6 1/2A, 6 1/2AL	Bach 5G, 3G
Schilke 46D	Schilke 46D	Schilke 51D
Denis Wick 6BY, 6BM, 6BL	Denis Wick 6BY, 6BM, 6BL	Denis Wick 4AY, 4AM, 4AL, 4 1/2A, Y, M
Yamaha 47	Yamaha 48	Yamaha 51, 53

Tuba

Beginner	Intermediate	Advanced
Bach 25, 24AW	Bach 22	Bach 18, 12, 7
Giardinelli 25	Giardinelli 24W	Giardinelli WD24
Mirafone H2	Mirafone 22	Mirafone C4
Schilke 62	Schilke 66	Schilke 66 or 67
Denis Wick 5	Denis Wick 4 or 3	Denis Wick 2
Yamaha 65 like Bach 25	Yamaha 67	Perantucci PT-50
Yamaha 66D4 like Bach 24AW		