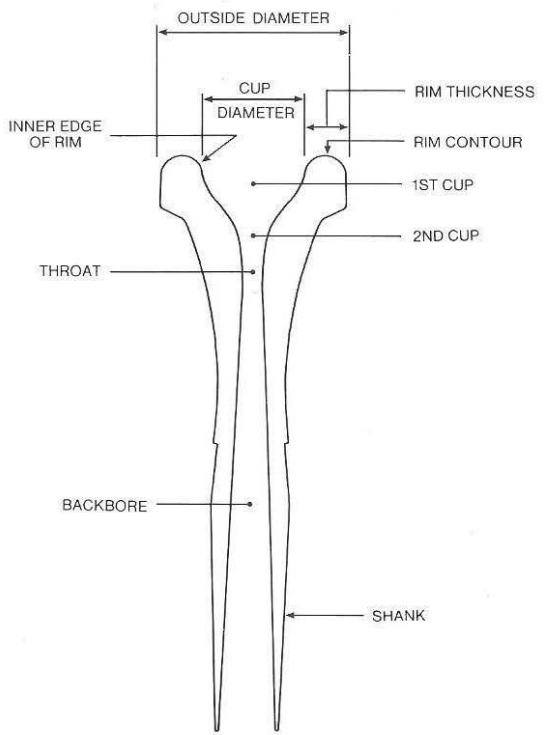
ANATOMY OF A MOUTHPIECE

In order to select a mouthpiece you must know something about its inner and outer functions.

When choosing your mouthpiece you should always try to obtain the best sound quality and accurate intonation.



RIM CONTOURS

A medium wide rim provides the best combination of flexibility and endurance. A narrow rim gives more flexibility but reduces endurance. Thus, a narrow, round rim will give great freedom to move between high an deep notes. A wide rim will, of course, give better endurance and feel more comfortable, but the lips are locked in a fixed position which considerably reduces flexibility.

The Elsberg mouthpieces for trumpet, cornet and fluegelhorn come equipped with a standard rim which is medium wide and designated C. This rim has the shape most players prefer. It is medium round – flat enough to distribute a light pressure and round enough to give excellent flexibility. And it is extremely comfortable.

Rim A is also medium wide but has a less round surface which gives more endurance and comfort, though it has a tendency to hold the lips in a fixed position and therefore reduce flexibility.

Rim B is excellent for piccolo trumpet. It is a bit wider than rim A and also has a less round surface to give more endurance and absorb the stronger pressure necessary to play this instrument.

Rim D is medium round and somewhat wider than rim C. Rims B and D are mainly produced for those who can't help pressing and for those with heavy, soft lips.

All four rims have a reasonably sharp inner edge which is placed so that it won't cut with normal pressure of the lips. The sharpness of the inner rim influences both flexibility and precise attack and is therefore extremely important to the construction of the mouthpiece.

All other mouthpieces for clarin trumpet, hunting horn, french horn, mellophone, alto horn, baroque alto, tenor, and bass trombone, alto, tenor and bass trombone and tuba come equipped with a rimshape, which will give the best results and are developed for the specific character of the instruments.

CUP DIAMETERS

It is advisable to choose a mouthpiece with a large diameter and a deep cup. A large diameter gives a powerful volume and a sonorous, compact, and smooth sound in all registers. It gives better lip control, greater flexibility, and reduces the risk of cracking notes. A large cup diameter is by far the most comfortable and makes it easier to play with a relaxed embouchure.

With a small cup diameter only a smaller part of the lips can vibrate and the musician will not get a rich and full sound quality. This leads to more lip pressure in an attempt to get more volume through the instrument than the cup diameter can actually provide. At the same time the risk of cracking notes is considerably increased and the sound will be sharp, nasal, and thin. A small cup diameter stops the sound and impedes development of the embouchure.

A large cup diameter lowers the pitch, and a deep cup will do the same. Conversely, a small cup diameter or a shallow cup will give a higher pitch.

CUP DEPTHS

A deep cup gives a dark and rich sound. The deep notes will be more resonant while the overtones will be lessened. A deep cup gives the lips more room to vibrate freely. Musicians with heavy, soft lips are advised to choose mouthpieces with deep cups and large diameters because they will compensate for the extra room the lips occopy in the cup.

For musicians who play mostly in the middle and high ranges it is better to select a more shallow cup which will, of course, give a lighter and more sparkling sound. A bigger opening to the throat will compensate for the shallow cup and make the sound fuller and richer.

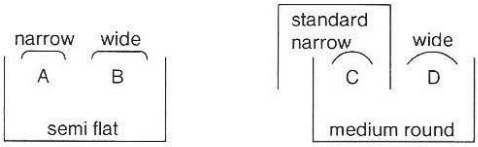
THE THROAT

The Elsberg standard mouthpieces are equipped with a medium size throat in order to give a smooth range, good intonation, and excellent endurance for all-round work. In order to facilitate the medium and deep ranges most often used with large mouthpieces, these are equipped with a bigger throat.

BACKBORES

The standard mouthpieces all have a backbore giving the best sound and range and making them suitable for all-round use. According to need, however, a mouthpiece – for picc.trpt., trumpet, cornet and fluegelhorn – may be equipped with one out of four different backbores. A close backbore gives a light, slim, and more easily controlled sound while making the pitch of the instrument higher. A big, open backbore gives a darker and more mellow sound at the cost of endurance, and it lowers the pitch of the instrument.

LABELLING SYSTEMS
RIM CONTOURS

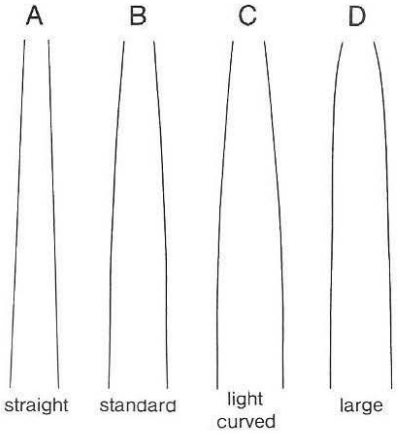


RIM CONTOUR is expressed in the first figure of the model number by the letters A, B, C and D.

CUP DIAMETER is expressed in the second figure of the model number by the numbers 00, 0, 1, 2, 3 etc.

CUP DEPTHS (C cup)
Extra deep – deep – medium – shallow – extra shallow
XD D M S XS
is expressed in the third figure of the model number by the letters XD, D, M, S and XS.

BACKBORES is expressed in the last figure of the model number by the letters A, B, C and D.



INSCRIPTION ON MOUTHPIECE
example:

(1)	(2)	(3)	(4)
C	OO	XD	A
rim	diam.	depth	backbore