

bob
brass
mouthpieces
loves

Tradition, in Harmony with Technology



Bob Reeves

- **Degree in Arts and Engineering**
Bakersfield Community College
- **Experimental Machinist**
China Lake, Michaelson Laboratory (6 years)
- **Eldon Benge Company**
Toolmaker, bell and leadpipe maker, assembler
- **Purviance Mouthpieces**
10 years, all aspects of mouthpiece design and crafting
- **Bob Reeves Brass Mouthpieces**
Founded July, 1964 (worked out of his garage)
Started first shop in April, 1968
Opened current facility in October, 1998
- **Experimental Chef**
Molto Mario has nothing on Bob

We combine:

- **Old World Craftsmanship**
Meticulous hand balancing
- **High Tech Machinery**
Computer Numeric Controlled Lathes
Coordinate Measuring Machines
Digital Readouts
Salpingometer
- **Custom Tooling**
We make our own tooling
- **Attention to Detail**
No job is rushed



"I've seen it all"
Bob Reeves

*Just because a mouthpiece is made
on a computer numeric controlled lathe,
does not mean it was engineered.*

What Bob Reeves Brass Can Do For You

We have worked with thousands of players over the years to help them attain the sound they want.

We can make your life as a trumpet player easier.

We can help you get your sound.

We work daily with:

- Professionals
- Commercial Players
- Classical Players
- Crossover Players
- Rock Players
- Students
- Weekend Warriors



Some players pass out from the stress
of trying to find a mouthpiece

Your solution may be:

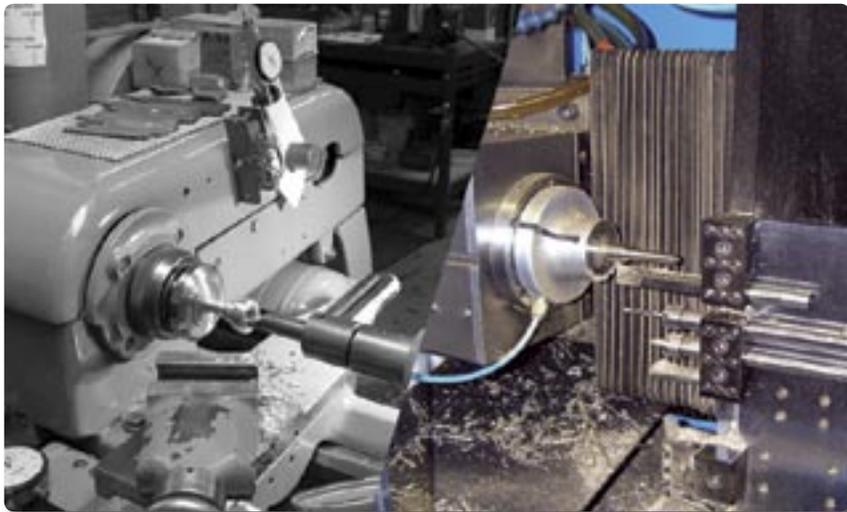
- A mouthpiece
- An adjustment to your horn
- Combining more than one mouthpiece
- An adjustment to your mouthpiece
- An accessory

Our philosophy is to solve your problem,
not just sell you a mouthpiece...

and have fun along the way!

Bob Reeves Mouthpieces

- All of our mouthpieces from the shallowest to the deepest have many **harmonics, or colors in the sound**
- Our stock line alone has **thousands of different combinations**
- **We are always available** for consultation by phone, email, or in person to help you find what you are looking for
- **Please make an advance appointment for shop visits**



The original lathe
Bob started with

A modern Computer Numeric
Controlled Lathe (CNC)

*The major difference between
Bob Reeves Mouthpieces
and all other mouthpieces
is in their richness of sound.*

It's Easy to Choose a Bob Reeves Mouthpiece



*Not sure of what to order?
Don't put a paper bag on your head.*

1. **Pick a rim**
(see pages 6-7)
2. **Decide on a cup**
(see page 8)
3. **Select a backbore**
(see page 9)
4. **Choose solid shank or cut for sleeves**
(see pages 10-12)

Contact us at
800-837-0980
661-775-8820 (international)
info@bobreeves.com



Rim Options

Mouthpiece rims come in an infinite variety of diameters, contours, and widths.

When working with players, we prefer to take a common sense approach; **if the rim feels good on your lips, use it.**

We have three options available to you when choosing a rim:

1. Use a Bob Reeves or Purviance rim
2. We cut the rim off of a mouthpiece you own and turn it into a screw rim
3. We copy a rim from an existing mouthpiece you own (when threading is not an option)



Chops like mine demand a comfortable rim.

The rim (and mouthpiece) have been mathematically defined as far back as 1945 (J. Ruettiger, US Patent # 2,376,453-May 22, 1945).

We use our own mathematical description based on ellipses, which accurately defines the mouthpiece using only 9 variables.

Rim Comparison Chart*

Bob Reeves Rim Number	Diameter	Bach	Schilke	Laskey	Monette	Stork	Warburton
40	40/64"	10 1/2 C Mt. Vernon	6	30	B-8	n/a	7, 8
41	41/64"	7C Mt. Vernon	11, 13	60	n/a	Vacchiano 5	n/a
42	42/64"	3C & 6C Elkhart	14	60	B-6	Vacchiano 3	5, 6
43	43/64"	2 3/4 C Elkhart	16	70	B-5L	Vacchiano 2	4
43N	43/64"	6C Mt. Vernon	n/a	n/a	n/a	n/a	n/a
43W	43/64"	2 3/4 C with cushion	n/a	n/a	n/a	n/a	n/a
43.5	43.5/64"	5C Elkhart	15, 16	75	B-2	n/a	3

*Rim comparison to various mouthpieces as noted. Your results may vary.

*Finding a good rim is like finding a good woman (or man).
When you find one that works, hang onto it!*

Cup Options

These cups are available on all trumpet, cornet, and piccolo mouthpieces.

- Shallow cups facilitate the upper register
- Shallow cups have a brighter sound
- Deep cups facilitate the low register
- Deep cups have a darker sound

Cup	Description
ES	Extra shallow bowl
SV	Very shallow conical V
S	Shallow bowl
M	Medium bowl
D	Medium deep, conical bowl
C	Medium deep bowl (like Bach 3C)
B	Deep cylindrical bowl (like Bach 7B)
V	Deep conical bowl

Bob Reeves Brass balances all aspects of the mouthpiece to provide the best sound, pitch, and slotting available.

Backbore Options

The backbore is not only a size, but a shape.

- Smaller backbores make the upper register easier
- Larger backbores make the upper register more difficult

Backbore	Description
692sL	Works great on shallow and extremely shallow cups
692s	Good for upper register and very open horns
2	Our standard backbore More centered than Bach Excellent tone color and intonation
69	Good for big band playing Records well; bright, focused sound
692	Slightly darker and broader tone than 69
3	Flexible, big sound for strong player
s	Symphonic backbore (similar to Schmidt)
x	Our physically largest backbore Often works well on rotary trumpets

With **too much** back-pressure, the **upper register** is easier to play but the lower register is difficult to play.

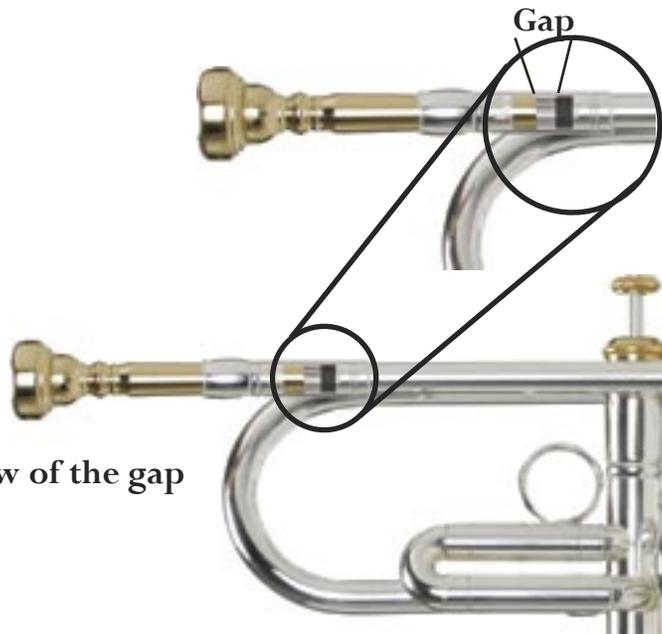
With **too little** back-pressure, the **lower register** is easier to play but the upper register is difficult to play.



The Gap

The “gap,” or annulus, is the space between the end of the mouthpiece and the start of the leadpipe.

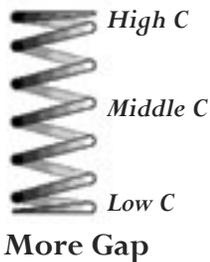
*The gap is a tuning device.
Varying the gap adjusts the distance, or relative position between the modes (notes).*



Cutaway view of the gap

Think of a coil spring where each coil is a different mode, or note.

In many instances, increasing the gap is like stretching the spring; the distance between the modes increases.

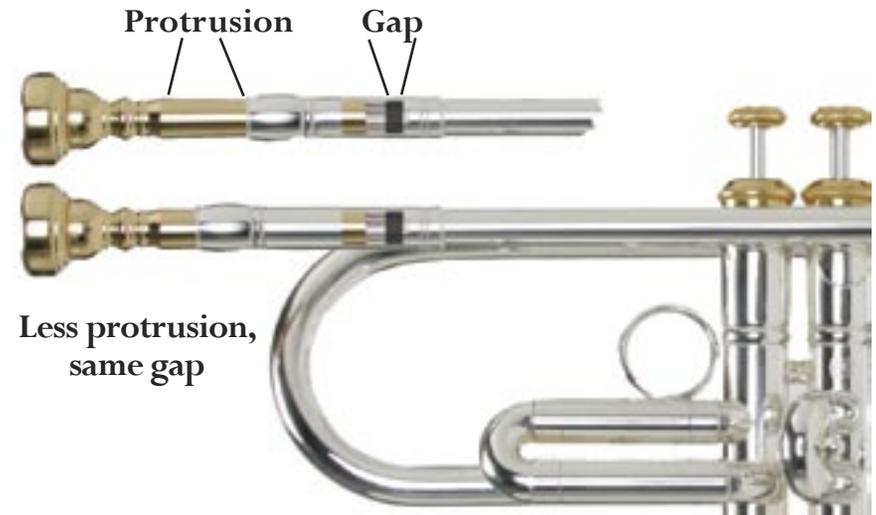


In many instances, decreasing the gap is like compressing the spring; the distance between the modes decreases.

The Gap (continued)

It is easy to confuse the gap with the protrusion from the receiver.

Study the picture below. In both instances the gap is the same, yet the distance the mouthpiece protrudes (or sticks out of the receiver) is considerably different.



Less protrusion, same gap

It is common for a more **efficient mouthpiece** to require a **larger gap**. The higher resonance frequency found in shallower cups, smaller backbores, etc. is often offset by a larger gap, thus balancing the trumpet/mouthpiece system.

*The correct gap is the one that works.
Although some guidelines can be followed,
finding the correct gap
is a process of experimentation.*

Contact us and we'll help you determine the correct gap for you.

Bob Reeves Patented Gap Adjustment

The correct gap is the one that works.

This can only be determined through experimentation as it varies from player to player, mouthpiece to mouthpiece, and instrument to instrument.

Bob Reeves sleeves allow you to “fine tune” the gap.



Bob developed his patented sleeve system in 1973 (US Patent #3,808,835).

The system allows you to “fine tune” the backpressure and /or use one mouthpiece with different horns that require a different gap.

- Virtually any trumpet mouthpiece can be converted to use our sleeves
- Sleeves are available in sizes #1 through #7 in half sizes
- A #1 sleeve gives you the largest gap, and a #7 the smallest

The gap affects the amount of backpressure you feel.

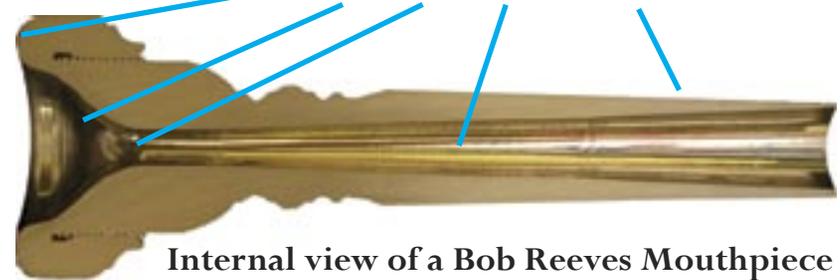
The correct gap puts the notes in the position that is most desirable to you.

Remember: too much gap is bad, but too little is worse.

Bob Reeves Mouthpieces “Cracking the Code”

Here is an example of a
Bob Reeves Mouthpiece model number:

42/S 28 692s 5



Internal view of a Bob Reeves Mouthpiece

- The “42” refers to the rim - in this case, 42/64" in diameter (see pages 6-7)
- The “/” means it is a screw rim model (only in printed literature, not stamped on the mouthpiece)
- The “S” refers to the cup - in this case, an “S” or shallow cup (see page 8)
- The “28” refers to the bore size - this is only stamped if it is a non-standard bore size (our bore sizes vary by cup depth in order to maintain the proper balance, or resonance frequency)
- The “692s” refers to the backbore - in this case, a 692s backbore (if there is no backbore designation, it is our standard #2 backbore) (see page 9)
- The “5” refers to the shank size - in this case, a #5 shank (if there is no shank designation, it is our standard, #4 shank); if designated “c/s” it means the mouthpiece has been converted to accept Reeves sleeves (see pages 10-12)

Consultation

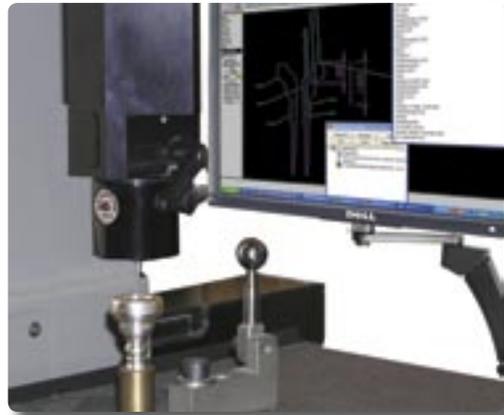
We are always available for consultation by phone, email, or in person to help you find what you are looking for. Please make an advance appointment for shop visits.

If you have any questions about our products or services, don't hesitate to contact us.

800-837-0980
info@bobreeves.com

Custom Work

- Custom rims
- Custom underparts
- Rim alterations
- Cup alterations
- Backbore alterations
- Shank alterations
- Gap adjustments
- Backbore threading
- Rim threading (any thread)
- Underpart threading (any thread)
- Virtually anything except flying around the room



Coordinate Measuring Machine
(verifying "specs")

The Cutting Edge

For those wanting to join the growing numbers of highly efficient commercial players:

Small diameters
Very shallow cups
Small bores
Efficient backbores



Bigger sound
Easier upper register
Increased endurance

They don't get shallower than this!*

Model Number	Rim Diameter	Bore	Cup	Backbore
39/EX 30 HV	39/64"	30	Extremely Shallow	High Velocity
39/EX 29 HV	39/64"	29	Extremely Shallow	High Velocity
39/EX 30 BA	39/64"	30	Extremely Shallow	Bazooka
39/EX 29 BA	39/64"	29	Extremely Shallow	Bazooka
39/XV 30 HV	39/64"	30	Extremely Shallow V	High Velocity
39/XV 29 HV	39/64"	29	Extremely Shallow V	High Velocity
39/XV 30 BA	39/64"	30	Extremely Shallow V	Bazooka
39/XV 29 BA	39/64"	29	Extremely Shallow V	Bazooka

Other rim sizes are available.
Contact us for more information.

* Not an actual model

Dynamic Mass Mouthpieces

(Available with any Reeves or Purviance rim)

Dynamic Mass Mouthpieces are built using a formula that ensures a constant balance of cup to bore to backbore to overall length, etc.



Dynamic Mass Mouthpieces behave differently than conventional mouthpieces. Our experience has shown that players often find it desirable to play Dynamic Mass Mouthpieces that are somewhat deeper than their usual mouthpieces. Contact us for details.

- **Not a heavy mouthpiece**
The mass varies from model to model as part of the balance
- **Increased dynamic range**
Most players can play significantly softer on a Dynamic Mass Mouthpiece
- **Improved scale**
A scale that is more in tune than even our conventional mouthpieces
- **Constant timbre**
No timbre change playing from soft to loud
- **Clearer sound**
Produces a pure, focused trumpet sound

Cornet Mouthpieces

(Available with any Reeves or Purviance rim)

Cup	Description
ES	Extra shallow bowl
SV	Very shallow conical V
S	Shallow bowl
M	Medium bowl
D	Medium deep, conical bowl
C	Medium deep bowl (like Bach 3C)
B	Deep cylindrical bowl European Brass Band Sound
V	Deep conical bowl

_____ The now infamous letter from Clarke to Benge _____



My dear Mr. Benge: -

Replying to yours of the 19th just received, would not advise you to change from Cornet to Trumpet, as the latter instrument is only a foreign fad for the time present, and is only used properly in large orchestras of 60 or more, for dynamic effects, and was never intended as a solo instrument.

I never heard of a real soloist playing before the public on a Trumpet. One cannot play a decent song even, properly, on it, and it has sprung up in the last few years like "jaz" music, which is the nearest Hell, or the Devil, in music. It polutes the art of Music.

Am pleased that you are making improvements in your playing. Keep it up, and become a great Cornet Player. You have an equal chance with all the rest, but you must work for it yourself.

Wishing you all the best of success, I remain.

Sincerely yours,

Flugelhorn Mouthpieces

(Available with any Reeves or Purviance rim)

Please specify standard or French Taper shank when ordering.

Underpart	Description
F	All around, easy to play flugelhorn mouthpiece
DF	Deep Flugel - European Brass Band flugelhorn sound
FE	Essential - Big and focused flugelhorn sound
HF	Huge Flugel - Warmest, darkest flugelhorn sound available (not recommended for extended upper register playing)

*Too cheap to buy a flugelhorn?
Look below.*

C2J Trumpet and Cornet Mouthpieces

Ideal for:

- Making the trumpet or cornet sound flugel-like
- **Orchestral passages**
Mahler 3, Leonore, Pines of Rome, etc.
- **Jazz solos**
- **Pianissimo sections**
- **Ballads**
- **Jazz backgrounds**



Piccolo Mouthpieces

(Available with any Reeves or Purviance rim)

Balanced short shank designed specifically for piccolos. Please specify cornet or trumpet shank when ordering.

Cup	Description
ES	Extra shallow bowl (Brandenburg)
SV	Very shallow conical V (Brandenburg)
S	Shallow bowl (Brandenburg)
M	Medium bowl (wedding)
D	Medium deep, conical bowl (wedding)
C	Medium deep bowl (like Bach 3C)
B	Deep cylindrical bowl (like Bach 7B)
V	Deep conical bowl

Bob Reeves Brass Mouthpieces

25574 Rye Canyon Road, Suite D
Valencia, CA 91355
800-837-0980



*We didn't have a good picture of a piccolo,
so here's a view of
Earth from space instead.*

Purviance Mouthpieces

Available as a screw rim model on a Bob Reeves blank or a one piece model on the original Purviance blank.



Purviance Vintage Trumpet Mouthpieces

Bob Reeves inherited all of the tooling from Carroll Purviance upon his death in 1969, and has continued to make Purviance mouthpieces with the original specifications to this day.

Bob worked with Carroll Purviance for over 10 years, which is why Bob's shop is the only place where authentic Purviance mouthpieces are made.

Bob Reeves Brass Mouthpieces obtained the United States and international trademarks for the Purviance name in 1973.



Carroll Purviance

In an effort to simplify Purviance's numbering system, Bob Reeves classified and re-numbered the Purviance mouthpieces from smallest diameter to largest diameter.

Bob Reeves Model Number	Purviance Model Number
RP1	4*2
RP2	4*D1
RP3	4*7
RP4	4*D4
RP5	4*D4W
RP6	6C3
RP6A	7C3
RP7	6C6
RP8	4*K4
RP8A	5*K4
RP9	4*3
RP9A	5*3
RP10	6*3

Purviance Vintage Trumpet Mouthpieces

Original Number	Diameter	Rim Width	Cup Depth	Description	Original Number	Diameter	Rim Width	Cup Depth	Description
4*2	40/64"	Medium Narrow	Shallow	Brilliant tone and a good high register	6C6	41.5/64"	Narrow	Medium	Larger diameter but not a deep cup
4*D1	40.5/64"	Medium Cushion	Shallow	Ideal for all around work	4*K4	42/64"	Medium	Medium Shallow	Ideal for all around work
4*7	41/64"	Medium	Shallow	Brilliant tone and a good high register	5*K4	42/64"	Medium	Medium Deep	Larger diameter but not a deep cup
4*D4	41/64"	Medium	Shallow	Ideal for all around work	4*3	43/64"	Medium	Medium Shallow	Ideal for all around work
4*D4W	41.5/64"	Medium	Shallow	Larger diameter but not a deep cup	5*3	43/64"	Medium	Deep	Larger diameter deep cup
6C3	41.5/64"	Medium	Medium	Larger diameter but not a deep cup	6*3	43/64"	Narrow	Extra Shallow	Brilliant tone, very shallow bowl cup
7C3	41.5/64"	Medium	Medium Deep	Larger diameter but not a deep cup	All Purviance Vintage mouthpieces are also available with a "B" shank. This decreases the gap between the end of the mouthpiece and the start of the leadpipe (see pages 10-11).				

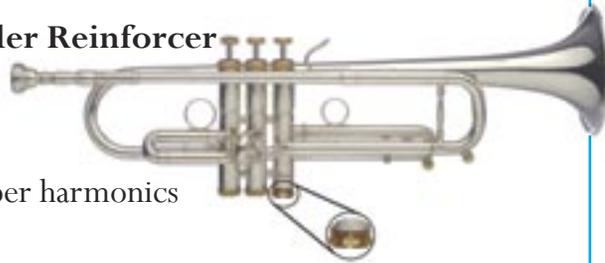
Purviance mouthpiece descriptions taken from Carroll Purviance's original notes

- Solid One Piece • Original Exterior Shape • Original Tooling
- Original Designs • Original Numbering System

Accessories

Bob Reeves Cylinder Reinforcer

- Better centering
- Better slotting
- Better projection
- Strengthens the upper harmonics
- Not a heavy cap



Mouthpiece Pouches

- All leather
- Well padded
- Velcro closure



Quad Pouch



Double Pouch



Quindesimal Pouch

Accessories (continued)

“A” Adapter (for piccolo trumpet requiring a cornet shank mouthpiece)

- Play in the key of “A” using the “Bb” pipe
- Better intonation
- Comfortable, even feel



Cornet to Trumpet Adapter

- Use a cornet mouthpiece in a trumpet
- Play softer, easier

Flugelhorn to Trumpet Adapter

- Use a flugelhorn mouthpiece in a trumpet
- Good for opera playing where a very dark, broad tone is desired

Bob Reeves Receiver Ring for Bach and Getzen Trumpets

- Better centering
- Better slotting
- Better projection
- Strengthens the upper harmonics



Bob Reeves Lead Pipe Swab

- Prevents corrosion
- Maintains consistency
- Helps prevent red rot
- Prevents hygiene lecture from Bob Reeves





Bob Reeves Patented Valve Alignment

(US Patent # 3,990,342-Nov 9, 1976)

Valve alignment is the process of ensuring that the holes in the pistons line up properly with the corresponding holes in the valve casings.

All horns are designed with proper valve alignment in mind. It is through accumulated tolerances, unstable pad material, and speed of manufacture that horns exhibit improper valve alignment.

In general, a Bob Reeves Valve Alignment will improve:

- Pitch
- Range
- Slotting
- Endurance
- Colors in the Sound
- Accuracy and Consistency

Proper valve alignment ensures your horn is giving you the best performance possible.

After a Bob Reeves Valve Alignment you can use a more efficient mouthpiece and get more sound for less work.

**For more information, see our
Valve Alignment manual.**

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