# më·lō by VENNTURE



the mellophone mouthpiece. re-imagined.

You've opened the book - your interest is piqued.



You've always wanted a mello section with a darker tone, better intonation, more volume...

What if we told you all that is possible? Read on to find out.

## Intro to mě·lō - The Concept

Here's a crazy question: what is a mellophone supposed to sound like? We all have heard lots of different artists play trumpets, flugelhorns, and French horns. We probably have an idea how we would want to sound on those instruments. But what about mellophone? What is YOUR sound concept?

How mellow? How brilliant? How warm? How dark? Is it supposed to sound so stuffy? We don't think so. But how will you know if you don't lose that re-purposed French horn mouthpiece in that janky adapter, Chester?

It's also not a trumpet. It shouldn't sound so trumpet-y. It's a conical-bore instrument. But if you play a trumpet mouthpiece with a tiny throat, you're going to sound like a (weak-ass) trumpet. What you need is a mellophone mouthpiece. Not a cornet cup and a flugelhorn backbore jammed in a trumpet-sized blank. The literature gets more and more technical. The other brass and percussion get louder and louder. You need more sound, bigger sound,

more flexibility, and more agility. What's your next move? Lucky for you, we invented **mě·lō**. It is the mellophone mouthpiece, re-imagined. The rims are comfortable and familiar, so your chops will stand up to the pounding of marching and the rigors of blasting for hours on end. The cups and throat sizes are efficient and acoustically optimized to help you discover the sound concept you didn't even know you were looking for - big and bold and beautiful.

Your instrument may be the red-headed stepchild of the brass world, but your mouthpiece doesn't have to be.

mě·lō is the product of a unique collaboration between Orlando-based mellophonist and mechanical engineer Jared Webber and Vennture lead engineer Doug McVey. Designed from the ground up in Vennture's VennCAD™ mouthpiece design package, mě·lō unlocks the full artistic and technical capabilities of the instrument.



# Meet the Designers



**Jared Webber** is a graduate of the University of Central Florida, having received his B.S. in Mechanical Engineering in 2017. He has worked in the modeling and simulation industry since graduation, developing both live and virtual training system product lines. Jared has extensive knowledge of additive manufacturing and 3D scanning techniques.

Jared often rotates between playing trumpet, flugelhorn, French horn, and mellophone on any given day. Jared marched four years of lead mellophone with three world class drum corps - Teal Sound, Glassmen, and Troopers - with solo and featured work throughout those years.



**Doug McVey** is the founder of Vennture Mouthpieces and developer of its revolutionary VennCAD™ mouthpiece design software package. A graduate of Amherst College and Cornell University, he founded KDY Automation Solutions, a design-and-build firm for heavily engineered test and measurement machines. Since founding Vennture, he has worked to advance the art of mouthpiece design and manufacturing. Vennture possesses the most efficient and integrated suite of hardware and software tools for scanning, designing, and manufacturing brass instrument mouthpieces in existence.

# the mě·lō line-up

There are 8 stock models to choose from, with a variety of rim sizes, rim styles, and cup depths.

Model	Tangent Diameter	Inner Diameter	Cup Depth	Rim Style	Outer Diameter	Throat	Cup Volume
M1	0.822	0.702	Standard	trumpet (standard)	1.079	0.173	0.117
M5	0.802	0.669		trumpet (standard)	1.065	0.173	0.111
M5-F	0.822	0.687		French horn	0.964	0.173	0.112
M6	0.814	0.675		trumpet (comfort)	1.056	0.173	0.110
M1D	0.822	0.703	Deep	trumpet (standard)	1.079	0.180	0.132
M5D	0.802	0.668		trumpet (standard)	1.065	0.180	0.128
M5D-F	0.822	0.686		French horn	0.964	0.180	0.129
M6D	0.814	0.675		trumpet (comfort)	1.056	0.180	0.128

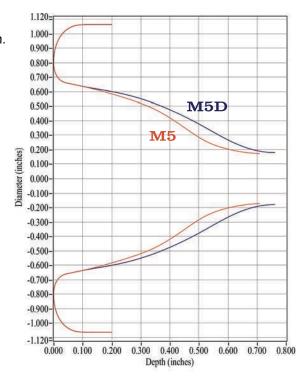
# Cup Depths-Standard vs. Deep

Each **mě·lō** rim size and configuration can be paired with either a standard or deep cup design. The graph shows the M5, which could perhaps be considered the "center" of the **mě·lō** family, alongside the M5D. Note the rim sizes and contours are identical - but the M5D offers a deeper cup for enhanced volume and emphasis on lower partials. The deep cups are paired with a wider throat and a backbore optimized for the larger cup volume.

The M1D - the biggest in the family - offers a massive 0.132 in<sup>3</sup> of cup volume. According to one early tester,

"The M1D is \*SPECTACULAR\*.

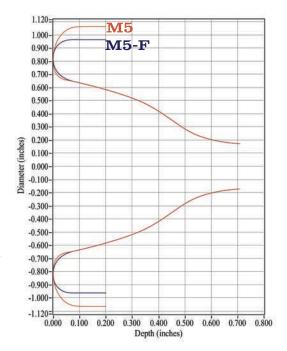
Massive body of sound. Clarity is achievable with a good player, the intenation is dead-on...Wow!"



## The -F Rim Style

The mouthpiece's rim is there for one reason: to set your chops up in their ideal buzzing position.

Mellophone players typically come to the instrument from one of two paths: via trumpet or via French horn. If you're coming from French horn, the trumpet-style mouthpieces commonly used feel flatter than what you're used to, and may inhibit flexibility and precision. Your embouchure has been honed to expect the more delicate French horn rim, with a wide tangent diameter, gentle inner bite, sharp outer bite, and tiny outer diameter. Don't remake your embouchure; lose the janky adapter and treat yourself to a





## The -F Blank

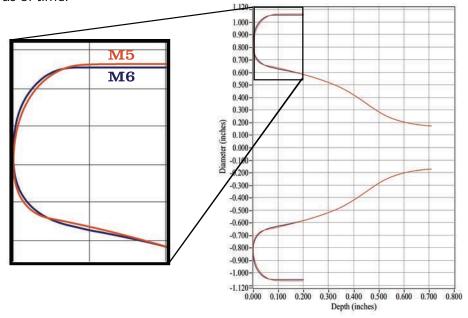
The M5-F and M5D-F are the acoustic equivalents of the M5 and M5D, so you will sound good. The -F rim will be super familiar, so you will feel good. But we didn't stop there. Oh no. You're a French horn player when you're not marching, so wear it proudly! The -F rim models use Vennture's svelte French hornstyle blank. The flowy, conical lines scream "French horn," right up until they blend artfully into the true mellophone shank, containing a mellophone-optimized cup and backbore the whole way. You get the best of both worlds.

### 5 vs. 6 Rim Size

The 5 and 6 rim sizes are very subtly different. If we again consider the M5 as the center of the **mě·lō** family, we see that the M5 has a slightly sharper rim, and the M6 has a slightly more rounded rim. Both are trumpet-style, but the M5 is more Bach and the M6 is more Yamaha/Schilke.

It comes down to a matter of personal preference. The graph below and to the right shows that the two designs merge as they go down into the cup. Thus, the M5 and M6 are acoustically virtually equivalent, as are the M5D and M6D.

Some players may find the M5 enhances flexibility and crispness of attacks, whereas the M6 offers better comfort and stability to absorb the punishment of marching and playing at high volume levels for extended periods of time.



## **Helping You Choose**

Ultimately, choosing the right mouthpiece is a personal decision, but the **mě·lō** line from Vennture gives you unparalleled choice and a new standard in performance in affordably-priced stock models. Of course, Vennture also specializes in custom work, so if you or your team need something special - a French horn rim on a different size, an adjustment to cup or backbore, custom logo or lettering for your school or team, or a design completely from scratch - Vennture is here to help. Below is a (rough) equivalency chart to get you started in finding the **mě·lō** piece that is right for you.

Model	Comparable Rim Sizes		
M1, M1D	Schilke 20 (trumpet), Bach 1C (trumpet)		
M5, M5D	Bach 3C (Trumpet), Hammond 5MP (mellophone)		
M5-F, M5D-F	Holton Farkas MDC (French horn)		
M6, M6D	Yamaha MP14F4 (mellophone), Hammond 6MP (mellophone)		



## **More About Vennture**

There is a LOT more to Vennture than mellophone mouthpieces. We are a relatively new company, and we do mouthpieces in a very new way. Software powers everything we do, and at Vennture we developed three software packages from the ground up to power our design and fabrication processes.

We designed and built our own mouthpiece scanner from scratch and wrote VennSCAN to power it. It is faster and more precise at recreating mouthpiece geometries than anything else out there. It takes less than 5 minutes to get a physical mouthpiece scanned and into VennCAD™ - the second software platform we built. It is software for designing mouthpieces. Compare existing models, sketch a new one from scratch, tweak a cup, rim, or backbore. Even digitally copy a rim from one design onto a cup from another design in under 30 seconds. The final piece of the puzzle is VennCAM, the third piece of software we developed. It takes a VennCAD™ design, turns it into CNC machining paths, and transmits it to our high speed lathes in under 5 seconds. This allows us to offer custom work at prices many vendors charge for stock models. So if you want a unique mellophone, trumpet, cornet, flugelhorn, French horn, trombone, or tuba design for yourself, your team, or your school - give us a call. Or, better yet...

### The Best Part

You know that VennCAD™ software we were just talking about? You can download that for free from our website and check it out. Browse the hundreds of models included in the software to inspire your new design. Or have us scan yours so you can import it and make tweaks. When you are ready, we will make your design. It's as easy as that.





spot-on intonation. crisp attacks.

warm.

never stuffy.

for more, visit www.vennture.mp/melo

