# MATERIAL

**Yellow Brass** – Standard material. Lively sound, solid tone. (70% copper, 30% zinc)

**Gold Brass** – More red due to higher copper (85%, 15%) content. Creates a warmer sound with greater carrying power.

**Sterling Plus –** 99.9% pure silver. Creates a richer sound with full overtones. More projection.

#### WEIGHT

**Lightweight -** *Lighter, thinner brass. Responds faster to attack. Brighter sound. (no tuning slide brace)* 

**Heavy** - Thicker brass. Restricts the sound more and creates a darker tone. Good for situations involving high dynamic levels without distortion. (2 tuning slide braces)

**Standard** - Falls in-between light and heavy. Good for all around uses. (1 tuning slide brace)

## **BELL FLARE**

(determines the characteristic sound of the instrument)

Fast Taper - Creates a warmer, darker tone (solid line).

Slower Taper - More brilliant sound (dotted line).



BORE SIZE (determined by measuring the inner diameter of second valve slide)

- Medium .453" (11.51mm)
- Med. Large (most popular Bb) = .459" (11.66mm)
- Large (most popular C) = .462" (11.74mm)
- Extra-Large = .468" (11.89mm)
- Vindabona = .453" / .459" (11.51 / 11.66mm)

### **Bb TRUMPET BELLS**

- 37 (Standard ML Bore) Rich, compact sound of great projection.
- 43 (Standard XL Bore) Brighter, more open than 37
- 72 (Standard MLV Bore) Strong, powerful sound, darker than 37.
- 65 Big, dark, Teutonic sound.
- 25 (Standard L Bore) Sharper, slightly tighter, with more focused projection than 37.
- **38** (Standard M Bore) Compact fluid sound.

Available in standard weight, lightweight, heavyweight, gold brass, lightweight gold brass, heavyweight gold brass, and sterling plus (37, 43, 72 only).

## **C TRUMPET BELLS**

- > 239 (Standard C180) Rich, big, dark sound.
- > **229** Tends to be slightly broader than 239.
- **256** Warm, rich sound with excellent intonation.
- 236 Tighter, brighter sound than 239.
- 238 (Vindabona) Dark, rich sound quality with slightly different overtone pattern.

Available in standard weight, lightweight, heavyweight, gold brass, lightweight gold brass, heavyweight gold brass, and sterling plus (37, 43, 72 only).

### **MODEL # CODES**

**180 Series** - Standard weight body & bell, #25 mouthpipe.

**LT180 Series -** *Lightweight body & bell, #25 mouthpipe.* 

**LR180 Series -** *Lightweight body, standard weight bell, reversed #25LR mouthpipe.* 

**Reversed Leadpipe** - Allows the air to move more freely through the horn creating a more open, less-resistant instrument. The reversed construction results in a longer pipe, maintaining constant taper which improves intonation.

## **Bb MOUTHPIPES**

(Non-standard mouthpipes are stamped on the mouthpiece receiver)

Listed in order of popularity:

- 25 (Standard) Some resistance, effective in tying together tone production.
- 25-0 (Standard XL Bore and LT180-72) More open and free-blowing, less restrictive than 25.
- 43 More open feeling with less resistance and more flexibility than 25. Brighter sound.
- 25LR (Standard LR Series) Reversed construction, longer form of 25 with less resistance.
- 43LR Reversed construction, longer form of 43 with less resistance.
- **6** Slightly more restrictive than 25.
- **7** Darker tone, more free-blowing than 25.
- 44 Brighter sounding than 43 for more flexible tone placement (nickel silver tubing).

# **MISCELLANEOUS OPTIONS**

- 1) Silver and Gold Plated Finish
- 2) Engraving 3 Patterns and Initials.
- 3) 1st Valve Trigger (Bb & C).
- 4) 3rd Valve Slide Trigger w/Waterkey (Bb & C).
- 5) 3rd Valve Slide Waterkey (trumpet & cornet).
- 6) Stop rod assembly for quick change to A (Bb only).
- 7) Lyre Holder.
- 8) Left-hand design.
- 9) Heavy Bottom Caps.
- 10) Rounded Main Tuning Slide Crook.

## **BELL MARKINGS**

- Model # = Denotes bell flare (not any diameter or measurement).
- **G** = Gold Brass.
- H = Heavyweight bell section.
- ➤ ★ = Lightweight bell section.
- **GH** = Gold Brass Heavyweight.
- $\succ$  **G**  $\ddagger$  = Gold Brass Lightweight.
- Sterling Silver = Sterling Silver.

## VALVE MARKINGS

- M = Medium Bore (.453")
- ML = Medium Large Bore (.459")
- L = Large Bore (.462")
- XL = X Large Bore (.468")
- MLV = Vindbona (.453" / .459")
- Serial Number = Found on second valve

## C MOUTHPIPES

(Non-standard mouthpipes are stamped on the mouthpiece receiver)

Listed in order of popularity:

- 25H Bigger tone, more free-blowing and flexible than 25C.
- **25A** Longer than 25C.
- 25C (Standard) Some resistance, effective in tying together tone production.
- 25R Reversed construction, longer form of 25C. More open and free-blowing with darker sound. Additional length improves intonation of high register.
- 25S Full length Bb mouthpipe (longer than 25A) with only 3/4" pull on main tuning slide.
- > 7C Darker tone, more free blowing than 25C.
- 7R Reversed construction, longer form of 7C. Less resistant, free-blowing. Additional length improves intonation of high register.
- 6R Reversed construction, longer form of 6. Less resistant, free-blowing.
- 43C More open feeling with less resistance and more flexibility than 25C.
- 43R Reversed construction, longer form of 43C. Less resistant, free blowing. Additional length improves intonation of high register.
- 44C Brighter than 43C with more flexible tone placement (nickel silver tubing).
- 44R Reversed construction, longer form of 44C. Less resistant, free-blowing. Additional length improves intonation of high register.

## **MISCELLANEOUS TERMS**

- Venturi Opening of leadpipe Contributes to the amount of resistance in the horn.
- Plated Pistons Designed for students. Use wider tolerances and require less lapping than Monel. Plating will eventually wear off.
- Monel Pistons Non-corrosive, very hard and durable. Must be lapped to the valve casing and may be fit much tighter than plated pistons. No plating or finish applied. Metal may discolor with the use of different oils or lack of cleaning.

# Common Models

- 180S37: ML, 37 bell, #25 pipe, silver-plated
- > **180S43:** *ML,* 43 *bell,* #25 *pipe, silver-plated*
- LR180S43: ML, 43 bell, #25LR pipe, LW, SP
- C180SL229CC: "Chicago C", .462, 229 (light weight) bell, SP
- C180SL229PC: "Philly C", .462, 229 bell, SP