

# CL2000 Rotor System



FEATURED ON THE  
C.G. Conn 88H Series  
Trombones



*C.G. Conn*®

# CL2000 Rotor System\*: A unique marriage of minds and materials

With an ear attuned to every musical nuance, Christian Lindberg was constantly irritated by the inevitable “pop” when he engaged or disengaged the rotor on his trombone and by the difference in sound between the F and B $\flat$  sides on all trombone rotors.

Lindberg’s father-in-law, Bela Tarrodi, is an exceptionally good machinist and instrument maker. In 1995 Lindberg sketched for him the requirements for the perfect F valve. Over time they developed what Lindberg knew was a winning design. “What a revelation,” Lindberg recalls. “No flop! No pop! The F



Christian Lindberg

side of the horn sounded and felt like a straight tenor.” They had created a valve with a balanced feel in either the engaged and disengaged position. Additionally, the throw of the valve was more than 40 percent less than that of the standard rotor. Lindberg immediately went on tour with the new rotor, and other artists became enthused about it.

Using its sophisticated technology and engineering ingenuity, UMI made Tarrodi’s prototype into a production model. This version of the CL2000 was a hit with many musicians; however, some felt that the rotor was too heavy for such a short throw. As soon as the rotor was put in motion, the movement was complete. They wanted a rotor that was more “touch responsive.”

To make the solid brass rotor lighter would alter the the sound of the horn. Then, UMI’s engineering staff suggested trying a special material for the rotor, an anodized aircraft aluminum. Together with Lindberg and Tarrodi, they came up with three changes to make the new material work: add an extra brace just above

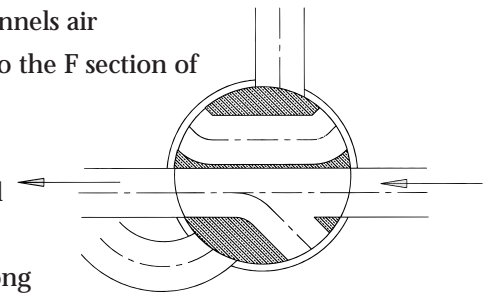


the rotor to stabilize the instrument both acoustically and structurally; compensate for the reduced weight of the rotor by increasing the weight of the valve cap; and utilize UMI’s technology to create new standards in precision rotor fitting. The result is the shortest throw available combined with incredibly fast action, and a choice of heavy or light rotor caps for personal control of sound and response.

## How it works

The CL2000 rotor is a single moving part, a tapered cylinder that rotates on a fixed axis. Inside the cylinder are two airways side by side. The air channels are formed by one straight tube gently curved at each end adjacent to a second straight tube that features a Y branch to divert the air column.

When closed, the straight section of the Y tube lets air flow directly from the handslide to the bell while the other tube is shut off from the F section. When engaged, the Y tube funnels air from the handslide into the F section of tubing. The air then flows through the second passageway and into the bell section.



Trombonists have long wanted an instrument with matching performance characteristics with or without the valve engaged. The new CL2000 not only allows the instrument to have similar response, sound, and feel on both the B $\flat$  and F sides of the instrument, but the innovative design provides for a smooth transition by acting as a *diverting* valve rather than as a simple *change* valve. The effect: no pop, no flop, and a unique improvement in trombone performance from the most respected name in trombones, C.G. Conn.

The CL2000 Rotor System is available  
on all C.G. Conn 88H Series Trombones



88H-CL  
*(Rose Brass Bell)*



88HY-CL  
*(Yellow Brass Bell)*



88HT-CL  
*(Thinwall Rose Brass Bell)*



88H-SGX-CL  
*(Sterling Silver Bell with 24K Gold Trim)*

**STANDARD FEATURES:** .547" SLIDE, ADJUSTABLE THUMB VALVE LEVER, ROSE BRASS OUTER SLIDES, NICKEL SILVER TRIM  
**OPTIONS:** .525"/.547" DUAL BORE SLIDE, .547"/.562" DUAL BORE SLIDE, .562" SLIDE, INTERCHANGEABLE LEADPIPES

## Features and Options

	88H-CL	88HT-CL	88HY-CL	88H-SGX-CL
8-1/2" (216mm) rose brass bell	•			
8-1/2" (216mm) thinwall rose brass bell		•		
8-1/2" (216mm) yellow brass bell			•	
8-1/2" (216mm) sterling silver bell w/ 24K gold trim				•
Open wrap	•	•	•	•
Rose brass outer slides	•	•	•	•
Tapered rotor and bearings	•	•	•	•
CL2000 valve system (Patent Pending)	•	•	•	•
Standard .547" (13.89mm) straight bore hand slide	•	•	•	•
Optional .525"/.547" (13.33/13.89mm) dual bore hand slide	•	•	•	•
Optional .547"/.562" (13.89/14.27mm) dual bore hand slide	•	•	•	•
Optional .562" (14.27mm) straight bore hand slide	•	•	•	•
Adjustable thumb lever	•	•	•	•
Mechanical stainless ball linkage	•	•	•	•
Optional interchangeable leadpipes	•	•	•	•
Heavyweight Rotor Cap	•	•	•	•
Lightweight Rotor Cap	•	•	•	•



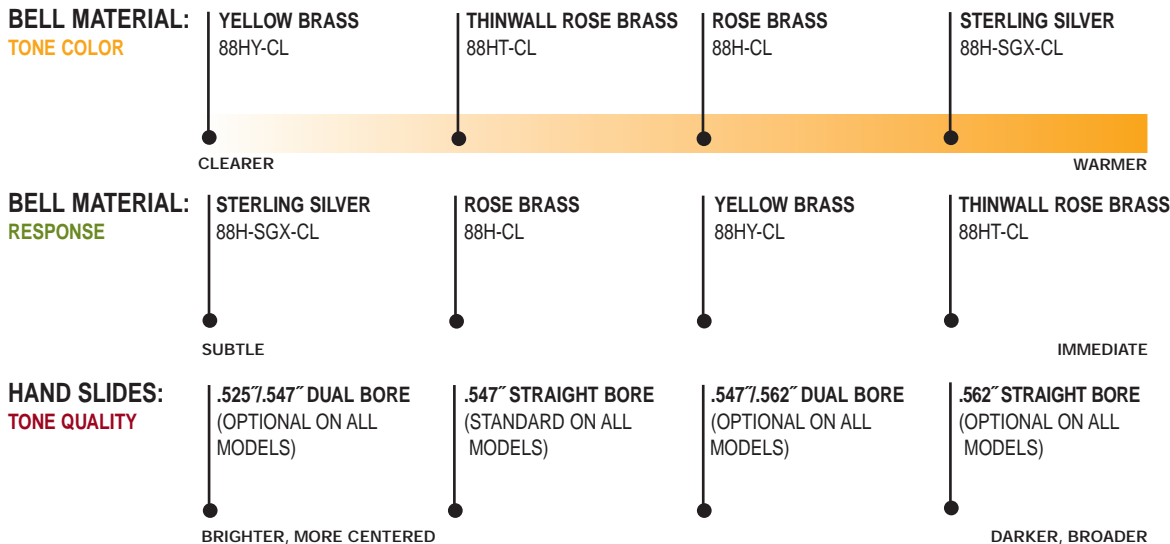
Christian Lindberg is well-known as an internationally touring trombone soloist. During his long career, he has insisted on the exceptional performance characteristics of 88H Series trombones from C.G. Conn.

The recent development of the CL2000 Rotor System is a culmination of the performance expertise of Christian Lindberg combined with the advanced technology inherent in every C.G. Conn instrument.

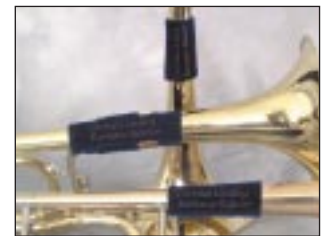
## Choosing your own C.G. Conn 88H with CL2000 Rotor System

Today's 88H GEN2 trombones are the most flexible trombones in the history of C.G. Conn. The CL2000 rotor system, available with both lightweight (2.1 oz) and heavyweight (4.5 oz) caps, gives the performer more control over sound and response. The lightweight cap allows a lively, more focused sound with brighter tones; the heavyweight cap adds stability for a darker, broader tonal quality.

The CL2000 Rotor System is only one of the options available. Choosing the 88H that is just right for you depends on the kind of playing and literature you encounter. While it is impossible to generalize, the section below provides additional information you can use to make a more informed decision in choosing your C.G. Conn 88H instrument.



Carefully designed for optimal acoustic balance, Lindberg mouthpieces increase flexibility and facilitate articulation.



Lindberg Resistance Balancers allow you to adjust your sound to any performance environment. Lindberg mouthpieces and resistance balancers are available from your local C.G. Conn dealer.



Made in U.S.A.  
Y-C133 7/99

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