

225 JAHRE



1782 - 2007

COMPLETE CATALOG

GEBR. ALEXANDER
Rhein Musikinstrumentenfabrik GmbH

Bahnhofstrasse 9
55116 Mainz 9 · Germany

Telephone +49 (0) 6131/288080
Fax +49 (0) 6131/224248

www.Gebr-Alexander.de

225 JAHRE



1782 - 2007

*Germany's Oldest
Brass Instrument
Workshop
Established in 1782*



225 Years of Gebr. Alexander

Seven generations of crafting musical instruments has been handed down from father to son since the founding of the business in 1782, entirely within a single family. The name Gebr. Alexander has always stood for instruments of the highest and most innovative workmanship, and it has been the instrument makers themselves, from apprentice to master, whose skilled handiwork, years of experience and personal dedication have given the instruments of Gebr. Alexander their own distinctive character.



CONTENTS

SEVEN GENERATIONS OF THE ALEXANDER FAMILY	4
SINGLE HORNS	6
DOUBLE HORNS	8
DESCANT HORNS	10
TRIPLE HORNS	12
NATURAL HORNS	14
WAGNER TUBAS	16
TENOR HORNS & BARITONES	18
TUBAS	20
TRUMPETS & FLUEGELHORNS	22
TECHNICAL SPECIFICATIONS	24
MOUTHPIECES	28



GEBR. ALEXANDER
Rhein Musikinstrumentenfabrik GmbH

Bahnhofstrasse 9
55116 Mainz · Germany

Telephone +49 (0) 6131/288080
Fax +49 (0) 6131/224248

www.Gebr-Alexander.de
mail@Gebr-Alexander.de

Copyright by Gebr. Alexander
Rhein. Musikinstrumentenfabrik GmbH
1st Edition · March 2007

Printed in Germany

*The eight hornists of the
Berlin Philharmonic
with their Alexander horns*

1782 - 2007

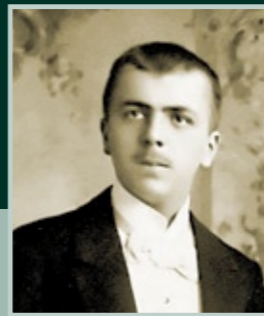
SEVEN GENERATIONS OF THE ALEXANDER FAMILY



Philipp
(1787-1864)



Franz Anton
(1838-1926)



Georg Philipp II
(1879-1916)



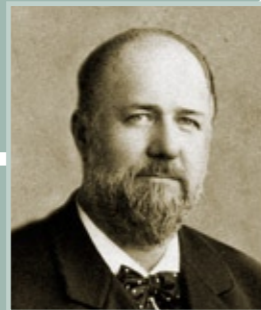
Hans-Peter
(1948-2005)



Franz Ambros
(1753-1802)



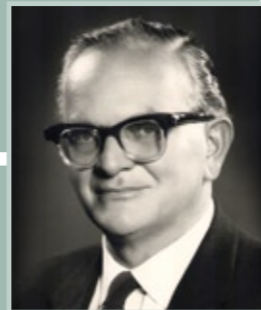
Kaspar Anton
(1803-1872)



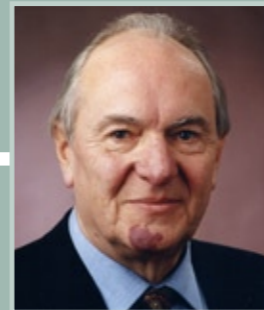
Georg Philipp I
(1843-1897)



Friedrich Sebastian Anton
(1873-1913)



Philipp Johann Christoph
(1904-1971)



Anton Julius
(*1935)



Georg Philipp III
(*1969)

1st Generation

Franz Ambros Alexander

Franz Ambros Alexander came from an old French Huguenot family. In 1782 he relocated from Miltenberg am Main to Mainz, where he was accepted into the Craftsmen's Guild and established a small workshop for the making of musical instruments.

2nd Generation

Philipp & Kaspar Anton

After the death of Franz Ambros, his widow and her sons Claudius, Martin and Philipp took over the business. In 1826 the trained woodwind builder Kaspar Anton Alexander returned to the firm. In this period the manufacture of woodwind instruments took on particular importance as a shop for the sale of Alexander's own products was also opened.

3rd Generation

Franz Anton & Georg Philipp

Beginning in 1864 Franz Anton, an excellent technician and musician, began work for the firm at which he would be a major and enduring influence. The younger Georg Philipp spent 5 years in Saxony, Vienna and Prague learning the art of brass instrument making. The production of brass instruments took on great importance at this time.

Richard Wagner, while on the quest for his Wagner tubas, sought out Alexander in Mainz in 1862.

In 1872 Georg Philipp joined the firm alongside his brother and business boomed, stimulated largely by the manufacture of brass instruments.

4th Generation

Friedrich Sebastian Anton, Georg Philipp jr. & Franz Anton

1909 marked an important milestone in firm history with the development of Alexander's first full double horn, the Model 103. This patent marked the beginning of rapid development in horn design. In 1913 Friedrich Sebastian Anton died. Georg Philipp Jr. fell at Verdun in 1916. Their widows and the aged Franz Anton piloted the business through the First World War and the difficult years that followed.

5th Generation

Philipp Johann Christoph

took over the firm in 1925. Years of worldwide financial catastrophe lay in the future. With great personal commitment he survived these as well as the following world war. The Second World War destroyed everything that the previous five generations had built. The business acumen of Philipp Johann Christoph, together with the determination of the employees who had survived the war and returned from detention, enabled the firm to swiftly recover its former significance.

6th Generation

Anton Julius & Hans Peter Alexander

After the death of his father in 1971, Anton Julius became director of the now internationally respected firm. The brass instrument master craftsman acquired experience in travels across the globe and new knowledge through personal contact with leading performers. He and his first-rate team of specialists further improved the workmanship in the production process, enhancing the quality of the finished instruments.

7th Generation

Georg Philipp Alexander

In 1992 the son of Anton Julius Alexander joined the business. In 1999 he became its director, leading the now 225-year-old firm into the 21st century. New technologies and their potential in the development and design of brass instruments are currently shaping the 3rd century of the firm's history.

1782
The workshop is located at Klarastraße 29



1

1790
Gebrüder Alexander (Alexander Bros.) moves to



2

1909
Gebr. Alexander moves to Bahnhofstraße 9



3

1945
The music shop and workshop are destroyed during the 2nd World War



1952
Assembly at the Bahnhofstraße locale after the 2nd World War



1973
The building was still being shared with a travel agency



2007
After renovations in 2002 the music shop gleams with new luster



SINGLE HORNS

F Horn 93

- 3 valves
- Eb crook

Bb Horn 97

- Thumb valve in A
- Stopping extension
- 5th valve (2nd thumb valve) for F horn extension (open harmonics)

Eb Alto Horn 141

- French horn form
- Available in models for left or right hand fingering



Viennese F Horn 92

- Traditional Viennese construction
- Three Viennese “pumpen” valves
- Terminal crook in F

Bb Horn 88

- Three valves

Bb Horn 90

- Thumb valve in A
- Stopping extension

F Horns

Most hornists today continue to recommend that their pupils begin learning the horn on a single F instrument. The reason behind this is that the F horn gives the most authentic horn sound, which is the best possible start for learning proper horn technique.

Of course, this is also possible to achieve by playing on the F side of the F/Bb double horn. However, there are two good reasons that a single F horn is preferable for a young beginner: it weighs much less than a double horn, and the lighter weight makes articulation easier.

Bb Horns

The single Bb horn has much the same advantage of lightness that the single F horn offers. Single Bb horns are highly prized by “high” hornists because they can make strenuous challenges in opera or concert that much easier. Typically, single Bb horns will be found in chamber music and solo situations (see Model 90).

The sound of Bb horns is lean and supple. The notes in the low register below low Bb can be successfully played with a fourth extension replacing the stopping extension, or better yet—as with Model 97—with a separate extra fourth extension.

Models 89 and 90 can also be ordered with an extra set of 3 valve slides and main slide that convert the instrument into an F horn.

DOUBLE HORNS



F/Bb Double Horn 103

- The world famous Alexander model, unequalled in tone quality and intonation
- Fully independent Bb and F valve slides

F/Bb Double Horn 403S

- F/Bb change valve located in middle of reverse side of horn
- Very long leadpipe
- Mellow sound and easy articulation



F/Bb Double Horn 1103

- K Model
- Fully independent Bb and F valve slides



F/Bb Double Horn 503

- Winner of the German Musical Instrument Prize, 1995 & 2005
- Similar to Model 1103
- F/Bb change valve set at 90°
- Fully independent Bb and F valve slides
- Available only in yellow brass
- A "complete" instrument designed to satisfy professional demands



F/Bb Double Horn 200

- Anniversary Model
- Similar to Model 1103
- Engraved nickel silver garland on bell flare



F/Bb Double Horn 102St

- compensating
- second thumb lever for A- and stopping extension



F/Bb Double Horn 1104

- K Model
- Fully independent Bb and F valve slides



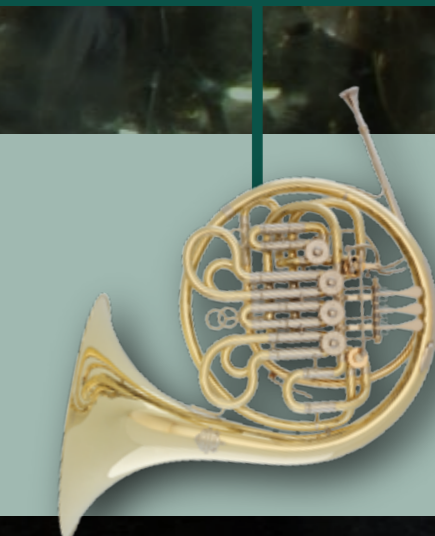
F/Bb Double Horn 104

- Similar to Model 103
- With extra valve in E and A
- Stopping extension for Bb and F sides
- Two thumb valves



F/Bb Double Horn 203St

- Fully independent Bb and F valve slides
- Third ascending valve (French system)
- With valve in A and stopping valve
- Two thumb valves



Double Horns

The double horn has established itself as the orchestral instrument of choice. The combination of full Bb and F horns offers the musician great flexibility in intonation and tone. There is also a definite correlation between mass and tonal projection.

With full double horns the thumb valve serves to change to either the shorter Bb horn or longer F horn. Gebr. Alexander furnishes some of its double horn models with an extra thumb valve in E/A, that with the addition of an extension can be used as a stopping valve (for example, Model 104 or 1104).

Some double horns are built according to the French "ascending" system, in which the third valve raises the pitch (in F as well as Bb) by a whole tone.

DESCANT HORNS

High Bb Descant Horn 99

- 3 valves
- Small bell

High F Descant Horn 105

- Thumb valve optional (2 1/2 Semitones, or as preferred)
- Alternately available in G with F extension

Bb/High F Double Descant Horn 107

- Fully independent Bb and F valve slides
- Tuning bit in mouthpiece receiver
- With additional thumb valve in A and stopping valve
- Two thumb valves



Bb/High F Double Descant Horn 107X

The Alexander Bb/High F Model 107X is based on the innovative design of the Model 301 triple horn which was introduced with great success in 2003. This has enabled the achievement of our goal: to construct a descant horn that provides articulation and tone similar to that of a F/Bb double horn. The elimination of the tuning bit in the mouthpiece receiver and the employment of separate leadpipes and bell branches allows independent tuning of each side of the horn. The articulation and sound of the high F horn is also more homogenous. The long leadpipe gives the Bb horn a fuller sound. The Model 107X also allows the possibility of adding an F extension to the A valve in order to play the natural harmonics of the low F horn. With this instrument Gebr. Alexander given horn players a new tool that makes the change from a full double horn to the descant horn a comfortable one.



Descant Horns

Every hornist who deals with Baroque music is confronted with challenges that cannot be ideally met with standard orchestral instruments. Firstly the parts are written very high, and secondly the desired tone is not the mellow Romantic sound, but bright and lustrous—emphasizing the relationship to the Baroque hunting horn.

For such special challenges Gebr. Alexander developed the descant horns Model 99 in high Bb, Model 105 in high F and Model 105 in high G with F extension. These instruments can be furnished in models with either 3 or 4 valves. They are made exclusively with a narrow bore.

Double Descant Horns

Today, when technical perfection has raised the level of all things, increasing numbers of hornists demand instruments that offer more security while still providing the ideal Romantic sound. The challenge here is to successfully combine the rich tone of the Bb horn with the increased security of the high F horn. Gebr. Alexander has worked on this problem for many years, and the latest result is the Bb/high F double descant horn Model 107X.

TRIPLE HORNS



F/Bb/High F Triple Horn 301

The completely newly developed full triple horn Model 301 in F/Bb/high F fills an important need for professional horn players. Many hornists have been searching for a full triple horn with the sound characteristics of the famous Alexander model 103. This was achieved only with a solution that was as brilliant as it was complex. The placement of a valve where the leadpipe meets the bell branch allowed a high F horn to be incorporated into the basic design of the Model 103. In this way the desirable characteristics of the Model 103 were not altered. The original dimensions were kept and the F/Bb change valve remained in its former location. The high F horn received a separate bell branch and through this could be optimized further. The use of different bores was consciously avoided in order to retain evenness of sound and articulation. In the end, the musician receives a reliable double horn with the option of shifting to the high F horn for especially difficult passages, and the transition from double horn to triple horn is made an effortless one.

F/Bb/High F Triple Horn 303

- In F/Bb/high F or Bb/F/high F
- Fully independent valve slides
- Tuning bit in mouthpiece receiver

F/Bb/High F Triple Horn 309

- With compensating low F side

F/Bb/High F Triple Horn 310

- Thumb valves customizable to stand in preferred key (specify with order)
- Fully independent valve slides
- Easy to use 3-way thumb valve



NATURAL HORNS

Parforce Horn in Bb/Eb 1177

- Normal horn bore
- Especially precise key change valve with feathered mechanism for easy response
- 2 water keys
- Brilliantly polished finish
- Without leather wrap
- Body Ø 435 mm

Parforce Horn in Eb 1179

- Normal horn bore
- Tubing double wrapped
- Brilliantly polished finish
- Without leather wrap
- Body Ø 435 mm



290

Historical Natural Horn in C

- "Halari" Model
- Bore 11.3 mm
- Bell flare Ø 280 mm
- Yellow brass garland
- Terminal crooks insert at leadpipe
- Made in yellow brass
- Terminal crooks:
Bb, A, G, F, E, Eb, D, C, Bb-basso

Crooks for less common keys are available by special order



194

Natural Horn in F

- Normal horn bore
- Nickel silver appointments and slide sleeves
- Combinable crooks:
E, Eb, D, C, Bb-basso

Combinable crooks are joined to attain the desired key. This system has the advantage of being space-saving: the horn and all its crooks will fit into a normal horn case.



WAGNER TUBAS



Wagner Tuba in Bb 108

- Original “Ring” type
- 4 valves, left-handed fingering

Wagner Tuba in F 111

- Original “Ring” type
- 4 valves, left-handed fingering

Double Wagner Tuba in F/Bb 110

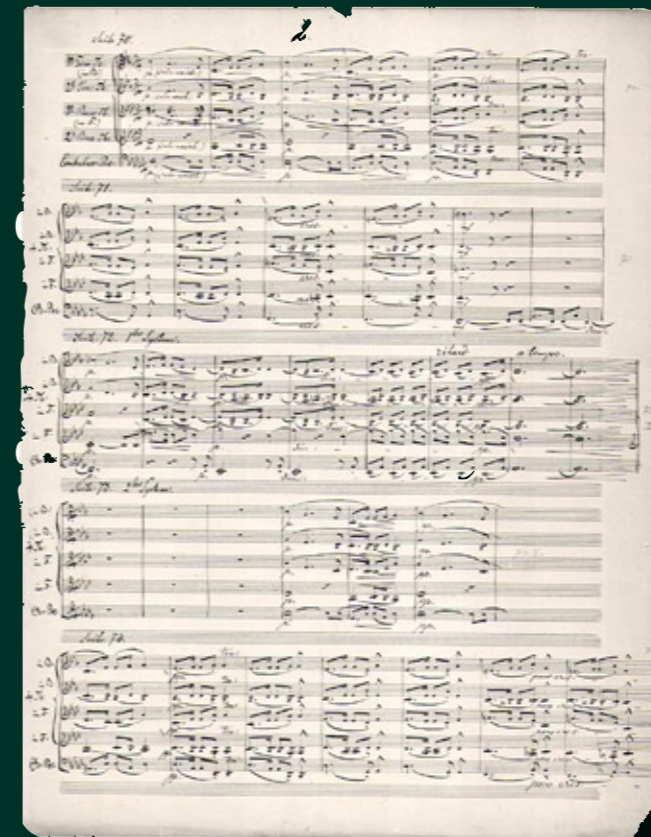
- Double Wagner tuba
- 3 Valves plus thumb valve
- Full double
- Fully independent valve slides



Wagner Tubas

In 1862 Richard Wagner was residing in Biebrich, across the Rhine from Mainz, while composing *Die Meistersinger von Nürnberg*. At the same time he was searching for a new tone color for *Der Ring des Nibelungen*, one that the known instruments of the time could not provide. In cooperation with the firm of Gebr. Alexander he was able to refine his conception of an instrument whose tone lay between the horn and the baritone. The Wagner tuba has been continuously improved over the passage of time to meet the exacting standards of orchestral use. Today Wagner tubas made by Gebr. Alexander are played in leading orchestras around the world. In addition to the typical Bb and F tubas, Alexander offers a Bb/F full double Wagner tuba. The typical Wagner tuba section is comprised of two F and two Bb Wagner tubas—but double tubas can replace these as desired.

Richard Wagner
Festspielhaus Bayreuth



Authorized by Richard Wagner, this manuscript of Wagner tuba excerpts from *Das Rheingold* is in the possession of the Alexander family.

TENOR HORNS AND BARITONES



Bb Tenor Horn 145

- 3 rotary valves
- Bore 13.5 mm
- Bell flare Ø 250 mm



Bb Baritone Tuba 150

- Broad oval form
- 4 rotary valves
- Nickel silver appointments
- Bore 15.5 mm
- Bell flare Ø 270 mm
- Nickel silver garland on bell flare



Bb Baritone Tuba 151

- 4 rotary valves
- Upright form
- Nickel silver appointments
- Bore 15.5 mm
- Bell flare Ø 310 mm
- Nickel silver garland on bell flare

Pictured with optional auxiliary valve

Tenor Horns and Baritones

Alexander tenor horns and baritones are characterized by their broadly proportioned but light construction. The body is bent in one piece, and the entire series is furnished with nickel silver appointments on the main bugel. The series is complemented by a 4 valve tenor horn (Model 146) that Alexander can produce by special order. The large bore of the instruments yields a full, characteristic sound in all registers. The baritone tuba (Spanish baritone) Model 151 was originally the preference of Spanish Banda musicians. Since then the baritone tuba has proven itself a worthwhile substitute for the euphonium. The bore of the tubing is taken from the baritone, but the expansion of bell branch and bell is much more pronounced. If desired, the instrument can be furnished with an auxiliary valve.



TUBAS



Bb Tuba 164

- “Kaiser” tuba
- 4 rotary valves
- Nickel silver appointments
- Bore 21.5 mm
- Bell flare Ø 450 mm
- Height 1060 mm



Bb Tuba 163

- Alternative to C tuba
- Broad form
- 4 rotary valves
- Nickel silver appointments
- Bore 20.5 mm
- Bell flare Ø 450 mm
- Height 1030 mm



C Tuba 173

- 5 rotary valves
- Thumb valve for right hand (2 whole tones)
- Nickel silver garland on bell flare
- Bore 19.5 mm
- Bell flare Ø 450 mm
- Height 1030 mm



F Tuba 157

- Broad form
- 4 rotary valves for right hand
- 2 auxiliary valves for left hand
- Valve length to custom order
- Nickel silver garland on bell flare
- Bore 18.5 mm
- Bell flare Ø 380 mm
- Height 970 mm



F Tuba 155

- Broad form
- 4 rotary valves
- Auxiliary valve for left hand or thumb valve for right hand
- 5/4 tone or length as specified
- Nickel silver garland on bell flare
- Bore 18.5 mm
- Bell flare Ø 380 mm
- Height 970 mm

TRUMPETS AND FLUEGELHORNS



Bb Trumpet 1018

- 3 precision piston valves made of stainless steel
- Bore 11.5 mm
- Bell flare Ø 130 mm



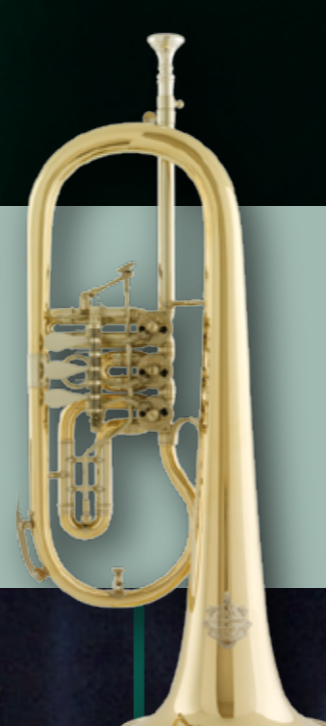
Bb Concert Trumpet 6

- 3 rotary valves
- Bore 11.0 mm
- Bell flare Ø 135 mm



C Bass Trumpet 19

- If desired also in Bb
- 4 rotary valves
- Bore 12.5 mm
- Bell flare Ø 160 mm



Bb Fluegelhorn 70

- 3 rotary valves
- Tuning bit in mouthpiece receiver
- Bore 11.0 mm
- Bell flare Ø 150 mm



Bb Fluegelhorn 1070

- 3 precision piston valves made of stainless steel
- Tuning bit in mouthpiece receiver
- Bore 11.30 mm
- Bell flare Ø 150 mm



Natural Trumpet in Eb 36

- Patterned after historical models
- Engraved bell with garland on flare
- Tuning bit in mouthpiece receiver
- Bore 12.1 mm
- Bell flare Ø 140 mm

TECHNICAL SPECIFICATIONS

- Please inquire about special requests and the custom alterations that are available .
- For a surcharge, all horn models can be constructed for right-handed fingering.
- Surface finish: lacquer, silver plating, gold plating, or partial lacquer, silver plating and gold plating are all available according to customer preference.
- The valve slides of all instruments are made from hardened precision nickel silver tubing (historically constructed instruments excepted).
- Horns are regularly delivered with a complete set of accessories, which consists of Alexander valve oil, Alexander Unibal oil, Alexander storage oil, Alexander slide grease, pencil with special holder, leather hand guard, maintenance manual and mouthpiece.
- All other instruments come with instrument-specific accessories, such as: Alexander valve oil, Alexander Unibal oil, Alexander storage oil, Alexander slide grease, maintenance manual and mouthpiece.
- Further extras, individual options and accessories are listed in the current price list.

Model	Single Horns						Double Horns						Compensating Horns		Descant Horns				Triple Horns							
	92	93	88	90	97	141	503	403S	101	103	104	1103	1104	200	203St	102	102St	99	105	107	107X	303	309	310	301	
Key	F	F	Bb	Bb	Bb	Eb alto	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F	F/Bb or Bb/F compensating	F/Bb or Bb/F compensating	high Bb	high F	Bb/high F	Bb/high F	F/Bb/high F	F/Bb/high F compensating	F/Bb/high F	F/Bb/high F	
Bore	11.0 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	12.1 mm	
Bell Flare Diameter	290 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	290 mm	290 mm	310 mm	310 mm	310 mm	310 mm	310 mm	310 mm	
Bell Throat	Small	Medium large	Medium large	Medium	Medium	Medium	Medium large	Medium	Large	Medium	Medium	Medium large	Medium large	Medium	Medium large	Medium large	Medium large	X-small	Small	Medium	Medium	Medium	Medium	Medium	Medium	
Body Size	Large	Large	Large	Medium	Medium	Large	Large	Large	Large	Medium	Medium	Large	Large	Large	Large	Large	Large	Small	Small	Medium	Medium	Medium	Medium	Medium	Medium	
Metal Type	Yellow brass	Yellow brass, Gold brass	Yellow brass, Gold brass	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	Yellow brass, Gold brass, Nickel silver	
Valve Arrangement	Inline	Inline	Inline	Inline	Inline	Inline	Inline	Offset, reverse (Alexander Type)	Offset (Alexander Type)	Offset (Alexander Type)	Offset (Alexander Type)	Inline	Inline	Inline	Inline	Inline	Offset	Inline	Inline	Offset	Inline, in leadpipe at bell branch	Offset	Offset	Offset	Offset, in leadpipe at bell branch (Alexander Type)	
Number of Valves	3	3	3	4	5	3	4	4	4	4	5	4	5	4	5	4	5	3	3	6	5	6	6	5	5	
Number of Thumb Valves	/	/	/	1	2	/	1	1	1	1	2	1	2	1	2	1	2	/	/	2	2	2	2	2	2	
Finger Valve Action	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal, Simple construction	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	
Thumb Valve Action	/	/		Minibal	Minibal	/	Minibal, Simple construction	Minibal	Minibal	Minibal	Minibal	String action	String action	String action	Minibal	Minibal	Minibal	/	/	Minibal	String action	Minibal	Minibal	String action	Minibal/String action	
Recommended Mouthpiece	8L	8L	8M	8M	8M	8M	8M	8M	8L	8M	8M	8M	8M	8M	8M	8M	8M	5	5	8FM	8FM	8FM	8FM	8FM	8M	
Supplied With	With F terminal crook	With Eb crook		With thumb valve in A and stopping extension	With thumb valve in A and stopping extension, with 5th valve as thumb valve for natural F horn harmonics	French horn form, left or right hand fingering					E/A thumb valve and stopping extension for F and Bb horn		E/A thumb valve and stopping extension for F and Bb horn	Nickel silver garland on bell flare with engraved Alexander logo	Ascending 3rd valve, thumb valve in A and stopping extension		Thumb valve in A and stopping extension			Thumb valve in A and stopping extension, Tuning bit in mouthpiece receiver	Thumb valve in A and stopping extension, double leadpipe and bell branch, separate tuning slides	Tuning bit in mouthpiece receiver, adaptable pinkie hook and flipper	Low F horn side enabled by extension slides (compensating), adaptable pinkie hook and flipper	Tuning bit in mouthpiece receiver, 3-way change valve, adaptable pinkie hook and flipper	Independent high F horn through double leadpipe and bell branch, Separate tuning slides, adaptable pinkie hook and flipper	
Special Features	Traditional Viennese construction with 3 "pumpen" valves						Winner of the German Musical Instrument Prize, 1995 & 2005	F/Bb change valve located in middle of reverse side of horn, making for better balance, Valves rotate with the air stream, which creates less extraneous noise	Similar to Model 103 Large-throated bell	The world famous Alexander model, unequalled in tone quality and intonation	Similar to Model 103	K Model	Similar to Model 1103	Anniversary Model for the firm's 200th birthday	French system (ascending 3rd valve)	compensating	compensating			Also available in G with F extension			B/F/high F combination also possible	compensating, B/F/high F combination also possible	Thumb valves customizable to stand in preferred key (please specify with order)	Similar to Model 103 Thumb valves customizable to stand in preferred key
Options			Set of slides to alter key to F	Set of slides to alter key to F, F extension															Optional thumb valve (length as specified, or the standard 2 1/2 semitones)	F extension	F extension					

TECHNICAL SPECIFICATIONS

- Please inquire about special requests and the custom alterations that are available .
- For a surcharge, all horn models can be constructed for right-handed fingering.
- Surface finish: lacquer, silver plating, gold plating, or partial lacquer, silver plating and gold plating are all available according to customer preference.
- The valve slides of all instruments are made from hardened precision nickel silver tubing (historically constructed instruments excepted).
- Horns are regularly delivered with a complete set of accessories, which consists of Alexander valve oil, Alexander Unibal oil, Alexander storage oil, Alexander slide grease, pencil with special holder, leather hand guard, maintenance manual and mouthpiece.
- All other instruments come with instrument-specific accessories, such as: Alexander valve oil, Alexander Unibal oil, Alexander storage oil, Alexander slide grease, maintenance manual and mouthpiece.
- Further extras, individual options and accessories are listed in the current price list.

Instrument Type	Natural Horns		Wagner Tubas			Parforce Horns		Trumpets & Fluegelhorns					Tenor Horns & Baritones			Tubas						
Model	194	290	108	111	110	1177	1179	1018	6	19	70	1070	36	145	150	151	164	163	173	157	155	
Key	F	C alto	Bb	F	F/Bb or Bb/F	Bb/Eb or Eb/Bb	Eb	Bb	Bb	C	Bb	Bb	Eb	Bb	Bb	Bb	Bb	Bb or C	C	F	F	
Bore	12.1 mm	11.3 mm	12.5 mm	13.5 mm	13.5 mm	12.1 mm	12.1 mm	11.5 mm	11.0 mm	12.5 mm	11.0 mm	11.0 mm	12.1 mm	13.5 mm	14.5 mm	15.5 mm	21.5 mm	20.5 mm	19.5 mm	18.5 mm	18.5 mm	
Bell Flare Diameter	310 mm	280 mm	230 mm	250 mm	250 mm	310 mm	310 mm	130 mm	135 mm	160 mm	150 mm	150 mm	140 mm	250 mm	270 mm	310 mm	450 mm	450 mm	450 mm	380 mm	380 mm	
Bell Throat	Medium	Medium small	Medium	Large	Large	Medium	Medium	Medium/ML	Medium	Medium	Medium	Medium	Medium	Large	Large	Large	Extra Large	Large	Large	Large	Large	
Body Size	Large	Medium																				
Metal Type	Yellow Brass	Yellow Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	Yellow Brass, Gold Brass	
Valve Arrangement	/	/	Inline	Inline	Rectangular	/	/	Inline	Inline	Inline	Inline	Inline	/	Inline	Inline	Inline	Inline	Inline	Inline	Inline	Inline	
Number of Valves	/	/	4	4	4	1	/	3	3	4	3	3	/	3	4	4 (5)	4 (5)	4 (5)	5	6	5	
Number of Thumb Valves	/	/	/	/	1	1	/	/	/	/	/	/	/	/	/	(1)	(1)	(1)	1	/	(1)	
Finger Valve Action	/	/	Minibal	Minibal	Minibal	/	/	/	Minibal	Minibal	Minibal	/	/	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	Minibal	
Thumb Valve Action	/	/	/	/	Minibal	Minibal	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Recommended Mouthpiece	8M	8M	MY15	MY15	MY15	MY15	MY15	7C	7C	JK P15C	JK FL3C	JK FL3C	7C	JK P15C	JK P6CL	JK P6CL	JK T1A	JK T3A	JK T3A	JK T7A	JK T7A	
Supplied With	Normal horn bore, nickel silver appointments and slide sleeves	Yellow brass garland on bell flare with engraved Alexander logo, Historical copy of the "Halari" model, Terminal crook in leadpipe	Left-handed fingering	Left-handed fingering	Left-handed fingering	Hunting horn bore, 2 water keys, brilliantly polished finish, Body size Ø 435 mm	Hunting horn bore, double wrapped, brilliantly polished finish, Body size Ø 435 mm	Precision stainless steel Perinet valves, 3rd valve "glissando" slide	Rotary valves	Rotary valves, "Glissando" on main tuning slide	Rotary valves	Precision stainless steel Perinet valves, Tuning bit in mouthpiece receiver	Yellow brass garland on bell flare with engraved Alexander logo, Tuning bit in mouthpiece receiver		Broad oval construction, Nickel silver garland on bell flare with engraved Alexander logo	Upright form	"Kaiser" tuba, Height 1060 mm, Nickel silver garland on bell flare with engraved Alexander logo	Broad construction, Height 1030 mm, Nickel silver garland on bell flare with engraved Alexander logo	Thumb valve placed to right (2 whole tones), Height 1030 mm, Nickel silver garland on bell flare with engraved Alexander logo	Broad construction, Height 970 mm, 4 valves for right hand, 2 auxiliary valves for left hand, Length as specified, Nickel silver garland on bell flare with engraved Alexander logo	Broad construction, Height 970 mm, Auxiliary valve for left hand or thumb of right hand, 5/4 tone or length as specified, Nickel silver garland on bell flare with engraved Alexander logo	Broad construction, Height 970 mm, Auxiliary valve for left hand or thumb of right hand, 5/4 tone or length as specified, Nickel silver garland on bell flare with engraved Alexander logo
Special Features		Intonation A=440 Hz			Rectangular valve arrangement					Also available in Bb			Copied from historical models					Also available in C				
Options	Combinable crooks, which fit into a normal horn case	Terminal crooks in all keys, matching historical wood case for horn and 8 crooks available				Leather wrap optional	Leather wrap optional		3rd valve "glissando" slide optional		3rd valve "glissando" slide optional			Also available as Model 146 with 4th valve (2 1/2 whole tones)		Auxiliary valve for left hand or right hand optional, length as specified	Auxiliary valve optional, length as specified	Auxiliary valve optional			Additional valve available for lowering pitch by a perfect fifth	

HORN MOUTHPIECES (measurements in mm)

Exclusive Line

In this elaborate mouthpiece series Gebr. Alexander presents mouthpieces that cover the range between 17 mm and 18 mm in degrees of 0.125 mm. Two different cup depths and two different bores are offered. These are complemented by three distinctly formed rims, gold plated or silver plated as desired.

Standard Model	4	4½	4¾	4¾	5	5½	5¾	5¾	6
Inner Rim Ø (mm)	17.00	17.125	17.250	17.375	17.50	17.625	17.75	17.875	18.00
Cup Depth	Cup taper slightly steep								
Bore	4.6 mm with standard bore								

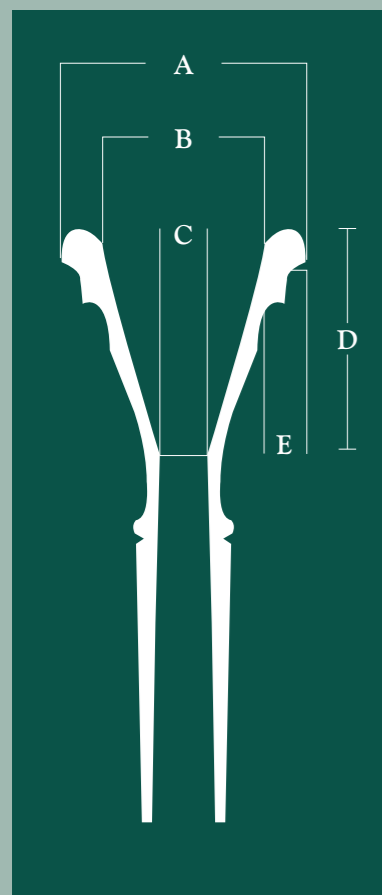
S Model	4S	4½S	4¾S	4¾S	5S	5½S	5¾S	5¾S	6S
Inner Rim Ø (mm)	17.00	17.125	17.250	17.375	17.50	17.625	17.75	17.875	18.00
Cup Depth	Cup taper rounded								
Bore	4.4 mm with cylindrical bore								

Exchangeable Rims

Three separate rims with contrasting shapes are available for every mouthpiece, gold plated or silver plated as desired.

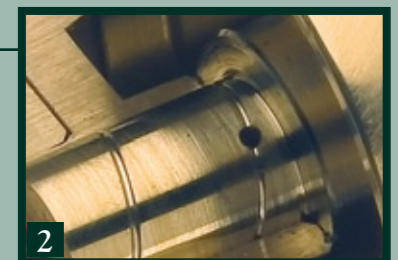
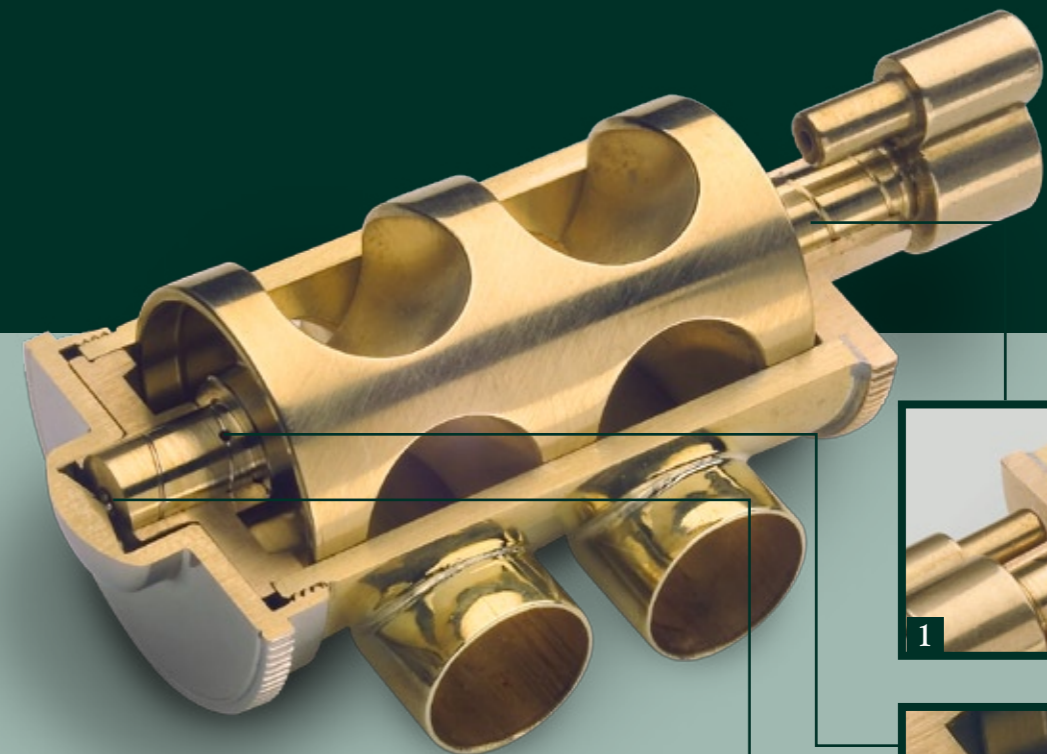
Rims	O	R	W
Shape	Lightly rounded	Flat	Rounded
Rim Width (mm)	4.05	4.10	4.32

Basic Line



No.	A	B	C	D	E
	Ø Outer Rim	Ø Inner Rim	Ø Throat Bore	Cup Depth	Rim Width
4	24.5	16.5	3.7	18.0	4.00
5	24.8	16.8	3.7	26.0	4.00
6	25.0	17.0	3.7	29.0	4.00
7	25.5	17.5	3.7	19.0	4.00
8	25.5	17.5	3.7	28.0	4.00
8F	25.5	17.5	3.7	24.0	4.00
8FM	25.5	17.5	4.0	24.0	4.00
8M	25.5	17.5	4.0	28.0	4.00
8L	25.5	17.5	4.2	28.0	4.00
9F	25.0	17.0	3.7	29.0	4.00
9	25.5	17.5	3.7	31.0	4.00
10	27.5	18.0	4.3	18.0	4.75
11	27.5	18.0	4.3	26.0	4.75
12	27.0	17.5	4.3	30.0	4.75
MY13	24.5	17.0	4.8	31.0	3.75
MY15	25.0	17.5	4.5	32.0	3.75
MY9	25.0	17.5	5.1	31.0	3.75
21	25.0	17.5	4.0	26.0	4.00
22	25.0	17.5	4.0	28.0	4.00
23	25.0	17.5	4.0	31.0	4.00
31	26.5	18.0	4.2	27.0	4.25
32	26.5	18.0	4.2	28.0	4.25
33	26.5	18.0	4.2	33.0	4.25
41	28.0	18.5	4.2	26.0	4.75
42	28.0	18.5	4.2	28.0	4.75
43	28.0	18.5	4.2	29.0	4.75

VALVES WITH THE LUBRICATION CHANNEL



1. Lubrication grooves at top of spindle
2. Oil exit point in lubrication channel
3. Oil application point through axial bore hole

The patented solution for easily maintained and wear-resistant rotary valves in new instruments from Gebr. Alexander.

For oiling, the valve cap is simply removed and oil then applied to the exposed spindle surface. The self-cleaning effect of the lubrication channels makes upkeep a very easy chore. As the instrument is played the new lubrication system will be evident in the smoother movement of the valves. This is caused by the evenly spread film of oil which forms between the sliding surfaces.

The oil enters the valve by means of a spiral groove which runs from top (Picture 1) to bottom of the spindle. At the bottom of the spindle the oil is applied through an axial bore hole (Picture 3). Oil reaches the lubrication channels through a radial bore hole (Picture 3). At the top of the spindle the oil is directed to the lubrication channel. The movement of the valve distributes the oil evenly between the sliding surfaces. The oil that remains in the axial bore hole serves as a reservoir to guarantee ample lubrication. This also ensures that the application of too much oil is avoided.

Picture Captions

1	4	6	7	6	9
2	3	5	8	8	

- 1 License for the establishment of the firm, 1782
- 2 Certificate naming Alexander as purveyor to the court of Ernst Ludwig von Hessen, 1808
- 3 Certificate naming Alexander as purveyor to the court of Friedrich von Anhalt, 1806
- 4 The firm's 100-year anniversary, 1882
- 5 Original patent for the Model 103, 1909
- 6 Environment Award from the state of Rhineland-Palatinate, 2001
- 7 Recognition of craftsmanship given to Carl Carstons, 1984
- 8 Reception of the German Musical Instrument Prize, 2005
- 9 Rezzo Schlauch with Georg Philipp Alexander
- 10 Concert marking the renovations in 2003, featuring the hornists Sarah Willis, Claudia Strenkert, Sibylle Brigitta Mahni and Karen Schade

